Usenet Newsgroup Archive: rec.radio.amateur.homebrew

1999-01 - 1999-05

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Date span: 1999-01-01 through 1999-05-31

Source text: rec.radio.amateur.homebrew.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,553

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. WATKINS-JOHNSON INFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: ERNIE <etco@trojen.freeserve.co.uk>
Message-ID: <76ievm$2af$1@news8.svr.pol.co.uk>
Source record: 75264
Cross-posted to:
alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.homebrew,uk.radio.amateur

I NEED CIRCUIT DIAGRAM / MANUAL FOR WATKINS-JOHNSON
UHF RECEIVER MODEL W-J 8730A. EXPENSES WILL BE MET. THANKS

2. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: "George J. Molnar" <George@Molnar.com>
Message-ID: <368CCAF7.532D4C89@Molnar.com>
Source record: 75265

In most power supplies, the available current is determined by the physical characteristics (wire size and number of turns, core size) of the transformer used. To increase the available current, you'll need a larger transformer to start. To use the extra current, you will probably have to increase the rating on the regulator - this is where 2n3055-type transistors come into play. Additional heat sink material (fins, fans, etc) will also be necessary.

The best bet in your scenario is probably to build a new power supply and keep the 5A unit for something else - otherwise, you will wind up replacing everything inside, and probably won't have room in the box for the new components, anyway.

Good luck in '99...

FREE EAST TIMOR wrote:
>
> I have a 5 amp power supply and I would like to increase the power output to
> approx. 30 amps. I believe this is done using the 3055 power transistors,
> could some-one please draw me a circuit or explain where I can find a
> circuit to allow me to build this thing
> Laurens

--
George J. Molnar (KF2T)
Lebanon, New Hampshire
http://George.Molnar.com
Instant Messenger: G Molnar

3. Re: WTB hv cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <76img1$c99$1@camel18.mindspring.com>
Source record: 75266

I have a .0001 Mfd:) You don't specify the capacity needed..... Sparks

James Skalski wrote in message <368C349C.F3CF39CC@buffnet.net>...
>
>I am looking for a high voltage cap.
>5kv or 6kv oil filled non pcb--
>
>Or
>
>1000mfd/450v computer grade caps to make a similar bank to 5 or 6kv
>
>
> 73,
>
> Jim N2go

4. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <368CEAB7.6817CAEF@one.net>
Source record: 75267

Carl Bauman wrote:
>
< snip previous posting >
>
> Since r.m.s. is a power function, I can see why you get upset when someone
> mentions "r.m.s. power". It's like saying "power power", which is
> redundant. However, the books I have at hand indicate that the average
> power *is proportional* to the r.m.s. value, which is what I did say.
>
> and a Happy New Year to you too!
> Carl WB6YFZ

You've lost me with the "power function" statement.

However, I'm pretty sure that average power is *not* proportional to the
RMS value in the general case.

Prms = SQRT((1/T) * Integral0->T(P^2 dt))

Pave = (1/T) * Integral0->T(P dt)

where Integral0->T means the integral from zero to time T.

Prms and Pave are proportional in a few cases, but not in many typical
cases.

Rich W2RG

5. Re: Help with SSB RF Sensing

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: kc5gyd@aol.com
Message-ID: <19990101112855.13974.00003230@ng110.aol.com>
Source record: 75268

Hi Glen, I had a very simular problem with an old 6JE6C tube amp that I use on 6M.The panel switch that switches from AM to SSB switched in an extra electrolytic capacitor to help hold the relay in,but the relay was still eratic. I found I had a bad ground connection between the extra electrolytic and chassis. Hope this helps,Happy New Year Bill K

6. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: phat phreddie <pyrojim@tyler.net>
Message-ID: <368D157E.759F@tyler.net>
Source record: 75269

> The best bet in your scenario is probably to build a new power supply
> and keep the 5A unit for something else - otherwise, you will wind up
> replacing everything inside, and probably won't have room in the box for
> the new components, anyway.

So where can we find schematics and pcb layouts for this kind of thing.
I have done dozens of web searches and come up only with a million
different manufacturers. I found this newsgroup a while back and
subscribed and went through 1400 old messages collecting links and
hitting anything that even came near saying anything about circuits and
HOMEBREW, I have since started exploring these pages and have come up
with zilch. Most people advertise that they have a web page full of
circuits, schematics, and sometimes pcb layouts, but in reality they
have never actually posted them, or they are esoteric circuits, or
mainly just theoretical. Never been tested. Everybody keeps saying
"buy the book", I have ordered it and it won't be here for another
couple of weeks. And I know this is not the one single source of
information in this universe. And it can't be that complete.

So, that said, can anyone please tell me where I can find a schematic
and preferably a pcb layout of a high current power supply, and maybe
even a decent little 2M power amp??
I found good instructions on the net for a really good antenna, I know
there has to be some power supplies and maybe some amplifiers out there
too.
jh

7. Small Antenna Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Av8tor@flash.net
Message-ID: <QW6j2.77$756.22@news.flash.net>
Source record: 75270

Hello All,
I have an R71a and MFJ-1020B Active Antenna. But I want to improve my 20 meter reception as there are some Ham in Florida I wanna hear. I can hear them now, but very week. I live in a townhouse and hiding something outside is a problem. I might beable to hide a 20meter dipole, but will the dipole do better than the Active Antenna???
Thanks,
George
--
****
* UFO Memorabilia Area 51 Top Secret Memorabilia *
* Get Your UFO Drivers Licenses HERE, Area 51 Pass *
* Manufacuter of Fine GAG Drivers LIcenses *
* http://www.flash.net/~av8tor/infosource *
****

8. Re: WTB hv cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <368D0946.5BA671F9@buffnet.net>
Source record: 75271

James Skalski wrote:
>
> I am looking for a high voltage cap.
> 5kv or 6kv oil filled non pcb--
>
> Or
>
> 1000mfd/450v computer grade caps to make a similar bank to 5 or 6kv
>
> 73,
>
> Jim N2go
Inadvertently left off the capacity...
I need 32mfd or better.
Other combinations considered also, such as a pair of 2500vdc75mfd oil filled caps would also work in series. Several 5000 or better caps to parallel up to the capacity would be OK.
I have a 4500vdc cap and I don't want to damage it with my variac set at higher than the rated capacity.

While I am at the keyboard....I could also use some 3A/1000v diodes to make up a high voltage diode stacks..bridge configuration ..so I need a bunch..
--
73,

Jim N-2-Go

9. 6 meter amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990101132117.08199.00005533@ng-fb1.aol.com>
Source record: 75272

```
>For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
> Power input 25 to 75 watts
> Power output 250 to 650 watts
> AC Power 115 volts / 15 amps
> RF Deck 19"X10.5"X14" 60 lbs.
> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
> Internal Relay & Low Pass Filter
> RF Deck can be seen at (inetport.com/~arl)
> Under - items for sale - RF Amplifiers
> Price $600.00 + Shipping
>
```

10. need info on programming languages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Douglas Cole <dcole@ior.com>
Message-ID: <368D1D43.6327144B@ior.com>
Source record: 75273

Hi to the group, I have seen some pretty sharp cookies on this
news group and was wondering if there are any programmers out
there who could give a budding programmer some advice.
I am interested as a hobbyist/experiment to learn and then write
a win/NT or Xwindows program to control a Yaesu FT847 via
computer and also via soundblaster input via a remote radio (ie
Handheld DTMF) anyone out there do any hacking and can point me
in the right direction?
Am I biting off more than I can chew?

As background I did do some fortran/cobol programming in
highschool so I have a small idea of what is going on, but I have
not done anything else.......
please reply to my email not the list.
Any input would be sincerely appreciated !

Doulgas Cole
N7BFS
AMSAT#26182
dcole@ior.com

11. ++++FS:TWO MFJ TNC's, BOTH WITH MODEMS++++

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19990101143226.11626.00005382@ng99.aol.com>
Source record: 75274

Hi All,

I have 1 MFJ 1270B and 1 MFJ 1274, both with modems, I believe 1200 baud,
and an operators manual and power cubes for each. Looking for $150.00 OBO for
the both of them, plus shipping.
Please E-Mail if interested.

Thanx
Mike

12. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <368D2730.2DDA6020@netdoor.com>
Source record: 75275

The ARRL Handbook will tell all. Patience grasshopper.
Butch KF5DE

phat phreddie wrote:

> > The best bet in your scenario is probably to build a new power supply
> > and keep the 5A unit for something else - otherwise, you will wind up
> > replacing everything inside, and probably won't have room in the box for
> > the new components, anyway.
>
> So where can we find schematics and pcb layouts for this kind of thing.
> I have done dozens of web searches and come up only with a million
> different manufacturers. I found this newsgroup a while back and
> subscribed and went through 1400 old messages collecting links and
> hitting anything that even came near saying anything about circuits and
> HOMEBREW, I have since started exploring these pages and have come up
> with zilch. Most people advertise that they have a web page full of
> circuits, schematics, and sometimes pcb layouts, but in reality they
> have never actually posted them, or they are esoteric circuits, or
> mainly just theoretical. Never been tested. Everybody keeps saying
> "buy the book", I have ordered it and it won't be here for another
> couple of weeks. And I know this is not the one single source of
> information in this universe. And it can't be that complete.
>
> So, that said, can anyone please tell me where I can find a schematic
> and preferably a pcb layout of a high current power supply, and maybe
> even a decent little 2M power amp??
> I found good instructions on the net for a really good antenna, I know
> there has to be some power supplies and maybe some amplifiers out there
> too.
> jh

13. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <368D3A22.F233F1FB@hevanet.com>
Source record: 75276

phat phreddie wrote:
>
> > The best bet in your scenario is probably to build a new power supply
> > and keep the 5A unit for something else - otherwise, you will wind up
> > replacing everything inside, and probably won't have room in the box for
> > the new components, anyway.
>
> So where can we find schematics and pcb layouts for this kind of thing.
> I have done dozens of web searches and come up only with a million
> different manufacturers. I found this newsgroup a while back and
> subscribed and went through 1400 old messages collecting links and
> hitting anything that even came near saying anything about circuits and
> HOMEBREW, I have since started exploring these pages and have come up
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> circuits, schematics, and sometimes pcb layouts, but in reality they
> have never actually posted them, or they are esoteric circuits, or
> mainly just theoretical. Never been tested. Everybody keeps saying
> "buy the book", I have ordered it and it won't be here for another
> couple of weeks. And I know this is not the one single source of
> information in this universe. And it can't be that complete.
>
> So, that said, can anyone please tell me where I can find a schematic
> and preferably a pcb layout of a high current power supply, and maybe
> even a decent little 2M power amp??
> I found good instructions on the net for a really good antenna, I know
> there has to be some power supplies and maybe some amplifiers out there
> too.
> jh

You probably can't build either of these cheaper than you can find
a used one.

For the power supply, the hardest thing to find will be the power
transformer. You then design the supply around the transformer
you can get. Small changes in output voltage can make a big difference
in how many transistors, capacitor size, and how much heat sink you
need.
Power supplies are NOT trivial to design. Even people who work for
power supply design companies don't often know what they're doing.
I've had to redesign more than one commercial supply to remove
OBVIOUS design flaws and make them reliable. There's a lot more to
it than meets the eye, or shows up on the component spec sheets.

Most people don't have the equipment needed to test their design.

A power supply is also a high risk item. You save a couple of bucks on a supply then hook it to a $2000 radio. If the supply shorts and over voltages. You just smoked your $2000 radio.

If you're insistent on building a supply, go read everything you can find on "Safe Operating Area" of transistors before you start.
Learn about current balancing in paralled transistors.
Use this info to analyze any design you find in a magazine before you build it. Reject any design (and author) that connects the regulator transistors directly in parallel.
There are a few subtleties in the PCB layout, but the big ones are in the wiring that hooks up all the high current stuff.

In case you haven't noticed, crummy power suppply designs is a major HOT BUTTON for me.
Good Luck,
miker
--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

14. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368D3C03.F0C8EEC3@mwci.net>
Source record: 75277

Tom Bruhns wrote:

> OK, what if instead of modeling the coil loss as a shunt resistance, we
> model it as a series resistance, and say that
>
> Q = wL/Rs
>
> Now if something causes the reactance of the coil+stray capacitance to
> increase, the Q apparently increases...

Not true, and there is a simple way to see this. And above all I
would suggest keep everything simple
and not get into a quagmire of electromagnetics and energy/power
arguments. Circuit analysis is all
that is needed for this problem. Q implies an energy relation and
it is only necessary to think in
terms of Q in the circuit analysis.

If the coil is a series Rs and Xs, and if the coil Q is, say 10 or
more, then the coil, considered
"all by itself" (ignore for the moment Cs) can be converted into a
parallel Rp and and a parallel Xp
whose values are very nearly given by the following:

Rp = wL * wL/Rs = wL * Q

Xp = wL

We now have virtually the same situation that I described
previously and the addition of stray
capacity Cs reduces the Q in the same way as before.

> : An AC circuit analysis of the parallel RLCs circuit leads to the following formula:
>
> : Q' = Q (1 - w^2 LCs)
>
> : For a fixed w and L, Q' decreases as Cs increases. Cs is assumed to be lossless.

> Yes, to get the true (coil) Q, I think we must know just how much
> energy is lost in the coil (and its parasitics).

To get the true coil Q we must find the stray capacity Cs. One way
to do this is to get the coil's
self resonant frequency using a grid dip meter. Then, knowing a
value of low-frequency (say at w/4)
inductance from the Q meter we can calculate a "good enough"
estimate of Cs. We then get true Q at

frequency w by solving my simple formula for Q, using Q' as
measured on the Boonton at the desired
operating frequency w.

Bill W0IYH

15. Re: Absolute Beginners Dream of Valve Radios...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: PAULAROBO@AOL.COM
Message-ID: <76jl91$g58$1@nnrp1.dejanews.com>
Source record: 75278

In article <libbycross-3112981044130001@nas2-53.thefree.net>,
"" <libbycross@yahoo.com> wrote:
> Apologies if this is sent to the wrong newsgroup but I wondered if you could
> give me some pointers on where to find circuit diagrams for building a valve
> radio? Web sites would be particularly useful or library/book resources in
> the UK. Any info would be most appreciated.
>
> Regards
>
> Libby Cross
> (Cheshire, UK)

>Try this site, Libby.
http://hem2.passagen.se/sm0vpo/

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

16. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368D4C67.E86B884C@teleport.com>
Source record: 75279

Alas, all the world's information isn't yet on the Web. Sometimes it's necessary to look in a {shudder} library. The December 1998 issue of QST magazine has an article titled "A 13.8-V, 40-A Switching Power Supply". This issue is probably gone from the newsstands now, but should be available either directly or by loan from any library. It's a 2-part article, with the second part appearing in the January issue, which you can probably still get. The author is Manfred Mornhinweg, XQ2FOD. The December part is on pages 37-41, and the January part on pp. 41-44.

Roy Lewallen, W7EL

phat phreddie wrote:
>
> > The best bet in your scenario is probably to build a new power supply
> > and keep the 5A unit for something else - otherwise, you will wind up
> > replacing everything inside, and probably won't have room in the box for
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> too.
> jh

17. Re: need info on programming languages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: "Carl D. Walker" <cwalker@icmp.com>
Message-ID: <368D55E3.67EF5399@icmp.com>
Source record: 75280

Douglas Cole wrote:
>
> Hi to the group, I have seen some pretty sharp cookies on this
> news group and was wondering if there are any programmers out
> there who could give a budding programmer some advice.
> I am interested as a hobbyist/experiment to learn and then write
> a win/NT or Xwindows program to control a Yaesu FT847 via
> computer and also via soundblaster input via a remote radio (ie
> Handheld DTMF) anyone out there do any hacking and can point me
> in the right direction?
> Am I biting off more than I can chew?
>
> As background I did do some fortran/cobol programming in
> highschool so I have a small idea of what is going on, but I have
> not done anything else.......
> please reply to my email not the list.
> Any input would be sincerely appreciated !
>
> Doulgas Cole
> N7BFS
> AMSAT#26182
> dcole@ior.com

I think that it depends on what you prefer for the controller target
platform.
Are you a Linux (or any *NIX) user (you mention Xwindows), or do you
want to
stick to the Windows world?

My preferred way of playing around with a GUI for a project like this is
to
use a scripting language like Tcl, or Perl, with the Tk extensions. It
will
let you prototype things quickly, and it has the advantage of being
based
on a easy to learn interpreted language. To become 'productive' in
either
Tcl or Perl can take as little as a week or two, but, like any language,
I am
still learning things about them years later. You can always get
something
going using one of these methods, but if the program grows very large,
you may
find that performance becomes a problem, as you will have the overhead
of the

interpreter running on the host system (not all that big a problem with modern
fast machines).

If you want to stick with Windows, and want to put the effort into learning
some C++, I would recommend something like Borland (Inprise) C++Builder. It's
only about $99 for the standard version in just about any local chain computer
store. This is a pretty good way to quickly build GUIs for Windows, and I like
it somewhat better than the Microsoft offering (Visual C++).

Either way, you may want to pick up a book on 'C' and start going through some
of it. I think that you will find that background a big help when picking
up another language, even if you don't want to do the final project in C or
C++. However, please note that I am not a Fortran or Cobol programmer, so I
can't really judge how well that background will help in learning the other
languages. I was an old assembly programmer for mostly Intel processors, and
started picking up other languages before I even knew anything about C.
In retrospect, after learning to program in C, many things in other languages
have become much easier for me to pick up with the C background.

As for biting off more than you can chew, well, I do that all the time :-)
It's a very good way to learn, and drive yourself to pick up new things as
you go. Just try not to get too frustrated as you bump into those 'brick walls'
along the way. Ask someone when you get really stumped. There's plenty of
help out there, only a dial up connection away.

Do a quick 'net search on some (or all) of these languages and read some
of the information that you find. It may become an easier choice after you
see what is out there.

--Regards,

Carl
WA1RAJ

18. WTB TV Button HV Caps/chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Paul Cooper <pcooper@primenet.com>
Message-ID: <368D7685.E29A4DB3@primenet.com>
Source record: 75281

```
WTB 6 .001/10KV TV type button capacitors
WTB 2 chokes, National R-60, 4 mhy.
WTB 8 .01/6KV ceramic disc caps with leads

Paul, K6PY
--
Paul Cooper - - - - - - - - - -- - -pcooper@primenet.com

818.341.3499 Voice
818.772.8863 FAX
```

19. TEKRONIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: xray <xray@sprintmail.com>
Message-ID: <368D75EE.8E0@sprintmail.com>
Source record: 75282

FOR SALE FOR SALE FOR SALE FOR SALE

FOLLOWING TEKTRONIX OSCILLOSCOPE PROBES - NEW - UNUSED

QTY DESCRIPTION PRICE

1. 2. P6109B 100 MHZ X10 10M OHM EACH $25.00

2. 1. P6121 X10 10M OHM " $25.00

3. 1. P6105 100 MHZ X10 10M OHM " $25.00

4. 1. P6149 50 MHZ X10 10M OHM " $25.00

PROBES WILL BE SHIPPED GROUND UPS UNLESS SPECIFIED OTHERWISE

REPLY TO: DAVE
XRAY@SPRINTMAIL.COM

20. TEKTRONIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: xray <xray@sprintmail.com>
Message-ID: <368D7964.4DD@sprintmail.com>
Source record: 75283

```
MESSAGE BACK FOR LIST OF TEKTRONIX OSCILLOSCOPE PROBES FOR SALE
NEW - UNUSED
CANTACT: DAVE
XRAY@SPRINTMAIL.COM
```

21. F.S. HV Plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: The Calhoun Printers <calprint@gnat.net>
Message-ID: <368D84D2.3ABD9013@gnat.net>
Source record: 75284

Hypersil type plate transformer wt. 23 lbs. Primaries dual 110 volt (
connect in series for 220V operation)
primary fusing should be 20A slo-blow
Tapped HV secondary for 1850V or 2850Volt output in voltage doubling
bridge circuit at 1100mils max.
6.3 volt filiment winding at 15 AMPS CT. Also 12 volt winding. This
transformer was removed from
a Dentron Clipperton L HF AMP and was used to an amp that runs 4
t-160/572Btriodes at 1500 watts
out.

I want $50.oo for the transformer, shipped CONUS

73,
Vince N4BWD

22. WANTED: bakelite or phenolic stock

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: ns22ley@snowhill.com
Message-ID: <368DB6D6.4FD3@snowhill.com>
Source record: 75285

I am looking for a piece of bakelite or phenolic (or any other insulating material that can be sawn, filed, etc and withstand high temp) that measures at least 5/16" thick by 1/2" X 1" (anything bigger O.K. as long as the smallest dimension is at least 5/16"). NOTE: Please REPLACE the "ns22" with "wor" to spell "worley" in my email or call 334-347-5281.

23. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <76k3aa$5sc$1@camel15.mindspring.com>
Source record: 75286

Gheeeezzzz..... Just look in any ARRL hand book from the last few years.
Loaded with PS stuff <Grin> 73 Sparks W4EAS

phat phreddie wrote in message <368D157E.759F@tyler.net>...
>> The best bet in your scenario is probably to build a new power supply
>> and keep the 5A unit for something else - otherwise, you will wind up
>> replacing everything inside, and probably won't have room in the box for
>> the new components, anyway.
>
>So where can we find schematics and pcb layouts for this kind of thing.
>I have done dozens of web searches and come up only with a million
>different manufacturers. I found this newsgroup a while back and
>subscribed and went through 1400 old messages collecting links and
>hitting anything that even came near saying anything about circuits and
>HOMEBREW, I have since started exploring these pages and have come up
>with zilch. Most people advertise that they have a web page full of
>circuits, schematics, and sometimes pcb layouts, but in reality they
>have never actually posted them, or they are esoteric circuits, or
>mainly just theoretical. Never been tested. Everybody keeps saying
>"buy the book", I have ordered it and it won't be here for another
>couple of weeks. And I know this is not the one single source of
>information in this universe. And it can't be that complete.
>
>So, that said, can anyone please tell me where I can find a schematic
>and preferably a pcb layout of a high current power supply, and maybe
>even a decent little 2M power amp??
>I found good instructions on the net for a really good antenna, I know
>there has to be some power supplies and maybe some amplifiers out there
>too.
>jh

24. Re: Grid Dip Meter Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Russ Nixon <rcnixon@mindspring.com>
Message-ID: <368D940B.5B82@mindspring.com>
Source record: 75287

I've gotten a Heath GD-1B from Ebay (for only $26.00 shipped!) and I
need a manual and operating instructions for it. I also need the specs
for the highest coil (the hairpin one). I plugged it in and it seems to
work, but I need some help.

--
Russ Nixon - KF4WXD
The clock of life is wound but once and no man has the power
to say just when the hands will stop, nor at what day and hour.

Carl Bauman wrote:
>
> 8877@my-dejanews.com <8877@my-dejanews.com> wrote in message
> <76caah$uv0$1@nnrp1.dejanews.com>...
> |In article <768aib$ne4$1@nnrp1.dejanews.com>,
> | littlejohn_1@hotmail.com wrote:
> |> Greetings,
> |>
> |> Can anyone suggest a good grid dip meter? What should I look for? I know
> of
> |> a Kenwood DM-81 for sale, is this a good meter?
> |
> |If you can find an ooooold MEASUREMENTS, tube type true DIP meter, you
> v'got
> |it made. All others are toys. In a previus question on how to cut coils,
>
> ... snip ...
>
> And If you can find a Measurements model 59, make sure the serial numbers on
> the coil set match the number on the RF head (the round one) or the dial
> calibration can be *way* off.
>
> Carl WB6YFZ

25. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368D9D66.DAEBD31F@teleport.com>
Source record: 75288
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Artech House's _Microwave Engineers' Handbook_, Vol. 2, shows "Epoxy, polyester, or silicone fiberglass laminate (120 lbs/cubic foot)" to have a dissipation factor of about 0.007 at "microwave frequencies", defined as 1 - 30 GHz (with a caution that values will vary with frequency). The value is sure to vary a lot with formulation as well as frequency.

Reference Data for Radio Engineers gives about 0.02 - 0.03 for epoxy resin at 3 GHz.

I recently designed a 6 GHz oscillator on the stuff with no problem, but the design would be quite tolerant of loss, and I made no effort to determine just how much there was.

Roy Lewallen, W7EL

Bert Douglas wrote:
>
> Hi net folks,
>
> FR4 is only specified at 1 MHZ.
> I am wondering if anyone can give me a ball park estimate of its dissipation
> factor (loss tangent) at 2.5 GHZ ?
>
> Thanks,
> Bert Douglas

26. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368D9D9F.8E32A41A@teleport.com>
Source record: 75289

Carl Bauman wrote:
> . . .
> Thus, while the average power out of the transmitter is a function of the
> r.m.s. value of the modulation envelope, the PEP value is effectively the
> power output at the *instant* of maximum output for the waveform being used
> for modulation. . .

What you say is correct if "modulation envelope" is taken to mean the voltage or current waveform describing the envelope, but not if you mean the RMS value of envelope power. RMS and average power are different values for most waveforms, and as I pointed out in an earlier posting, the RMS power has no useful meaning, at least not for this application (or any other I know of).

Roy Lewallen, W7EL

27. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368DC873.4C0A6DFB@teleport.com>
Source record: 75290

In my experience, silver micas have a higher temperature coefficient
than good-quality NPOs, and the temperature coefficient varies from
one silver mica capacitor to another. I say "good-quality" because
I've heard from people who have found some bargain ones to have a poor
temperature coefficient. Any that you purchase from a reliable source
should be fine. I use only NPOs where good temperature stability is
important.

Roy Lewallen, W7EL

cd wrote:
>
> I am building a dip meter, from the Handbook, it calls for silver Micas,
> they are a bit hard to find, are NPO ceramics as stable as Silver Micas.
>
> Thanks

28. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Carl Bauman <cbauman@impulse.net>
Message-ID: <368dd04b$0$214@sienna.impulse.net>
Source record: 75291

Rich Griffiths wrote in message <368CEAB7.6817CAEF@one.net>...
|Carl Bauman wrote:
|>
|< snip previous posting >
|>
|> Since r.m.s. is a power function, I can see why you get upset when
someone
|> mentions "r.m.s. power". It's like saying "power power", which is
|> redundant. However, the books I have at hand indicate that the average
|> power *is proportional* to the r.m.s. value, which is what I did say.
|>
|> and a Happy New Year to you too!
|> Carl WB6YFZ
|
|You've lost me with the "power function" statement.
|
|However, I'm pretty sure that average power is *not* proportional to the
|RMS value in the general case.
|
|Prms = SQRT((1/T) * Integral0->T(P^2 dt))
|
|Pave = (1/T) * Integral0->T(P dt)
|
|where Integral0->T means the integral from zero to time T.
|
|Prms and Pave are proportional in a few cases, but not in many typical
|cases.

I wasn't talking in the general case. For any waveform, Pave = K*Prms for
that waveform. K will likely be different for different waveforms, but when
talking generally about power, what happens to one, happens to the other.
BTW, when referring to power, r.m.s. also describes a physical property, not
just a statistical one.

73,
Carl WB6YFZ

29. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Carl Bauman <cbauman@impulse.net>
Message-ID: <368dd04c$0$214@sienna.impulse.net>
Source record: 75292

Ian White, G3SEK wrote in message ...
|Carl Bauman wrote:
|>
|>g0mjw.freeserve.co.uk wrote in message
<76fvhl$f9k$1@news4.svr.pol.co.uk>...
|>... snip...
|>|I thought PEP was defined (in the regs) as the r.m.s power (calculated
over
|>|one cycle) at the peak (crest) of the modulation envelope.
|>|
|>... snip ...
|>
|>actually, FCC part 97.3(b)(6) defines PEP as:
|>"The average power supplied to the antenna transmission line by a
|>transmitter during one RF cycle at the crest of the modulation envelope
|>taken under normal operating conditions."
|>
|G0MJW was writing about the British regulations, but in fact that
|definition is identical to the one used by the FCC (except that it says
|"power supplied to the antenna", which means that Gs can allow for
|transmission line losses).

I did see that he was in G-land, but I was sure that the regs would be
similar to keep the technical definitions consistent internationally. As it
was, he only omitted that it was over an 'RF' cycle.

>>>> rest of post snipped due to acute embarrassment <<<<

I know what I wanted to say, but it was so far off of what was actually
posted that it probably is a lost cause to try to correct it. I was so tired
that I was in bed within a half hour (7:30pm on New Year's Eve!) after I
finished and I'm afraid it showed up as pure drivel in the post. I
apologize for wasting your time with the rest of it.

73,
Carl WB6YFZ

30. Re: FA:Tektronix Oscilliscope Model 503 LAST DAY!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: ebayhater@juno.com
Message-ID: <CC82806B6C8B4871.86ABD72D5B7A93DD.1DE0F0119CDF331D@library-proxy.airnews.net>
Source record: 75405
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.cb,sci.electronics.equipment

we got the message!!!!!!all 5 posts

On Sat, 26 Dec 1998 00:43:30 -0500, Wolf <#bigbadwolf1@earthlink.net>
wrote:

>FA: http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=51396264
>
>LAST DAY!!
>
>Thank You!
>
>-ERIC
>

31. EBAY-(2)HYTRON HY-51Z Tubes!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19981231215947.08529.00002583@ng34.aol.com>
Source record: 75406

Hi Guys;
You just might need these! Please check 'em out. With PIC! Costs nothing to look!
URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=52797540

Happy New Years 1999.....!
Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

32. Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <7EXi2.1147$Zk.436769@news3.mia>
Source record: 75407
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Hi net folks,

FR4 is only specified at 1 MHZ.
I am wondering if anyone can give me a ball park estimate of its dissipation factor (loss tangent) at 2.5 GHZ ?

Thanks,
Bert Douglas

33. Warning: could not send message for past 12 hours

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: MAILER-DAEMON@mail-backup.pacbell.NET
Message-ID: <199901010434.TBL21370@mail-backup.pacbell.net>
Source record: 75408

```
**********************************************
** THIS IS A WARNING MESSAGE ONLY **
** YOU DO NOT NEED TO RESEND YOUR MESSAGE **
**********************************************

The original message was received at Thu, 31 Dec 1998 07:46:13 -0800 (PST)
from email.globewireless.com [207.214.103.3]

***Help Understanding Common Mail Problems***
A problem has been encountered in attempting to deliver your
email message. The system generated error message appears below
this informational section. A few common problems are described
here to help you resolve your mail problems.

Problem Cause
============= ============================================================
User Unknown: The user ID you sent email to does not exist at the host
or mail domain you specified. You may have mispelled the
user ID or that user's account may have been closed.

Host Unknown: The host or domain name does not exist. You may have
mistyped it or been given incorrect information.

Note: [The user ID is the part of the email address to the left
===== of the '@'. The host (computer system) or mail domain is
the part of the address to the right of the '@'.]
***

----- The following addresses had transient non-fatal errors -----
<rory.davis@www.globewireless.com>

----- Transcript of session follows -----
<rory.davis@www.globewireless.com>... Deferred: Connection refused by
www.globewireless.com.
Warning: message still undelivered after 12 hours
Will keep trying until message is 5 days old

----- Original message follows -----

Return-Path: Ham-Homebrew@ucsd.edu
Received: from globewireless.com (email.globewireless.com [207.214.103.3]) by
mail-backup.pacbell.net (8.8.8/8.7.1+antispam) with SMTP id HAA07331 for
<rory.davis@www.globewireless.com>; Thu, 31 Dec 1998 07:46:13 -0800 (PST)
From: Ham-Homebrew@ucsd.edu
Received: from POP3 Client by globewireless.com (ccMail Link to SMTP R8.20.00.25)
id AA915119958; Thu, 31 Dec 1998 15:59:21 GMT
Message-Id: <9812319151.AA915119958@globewireless.com>
```

X-Mailer: ccMail Link to SMTP R8.20.00.25
Date: Thu, 31 Dec 1998 04:30:41 GMT
To: <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V98 #683
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: Quoted-Printable
Content-Description: "cc:Mail Note Part"

Ham-Homebrew Digest Thu=2C 31 Dec 98 Volume 98 : Issue 6=
83

Today's Topics=3A
Amp power inputs
FS (9=29 MTW23N25E motorola FETS 240V 23 Amps 0=2E11 ohms
FS KENWOOD TS-440AT CHEAP
Info about QE08=2F200HTubes=3F
Question about high Q inductor
SOME INFO ON 5F23A TUBES
TS 515 CW filter
Want=3A DSP 'Starter kit'

Send Replies or notes for publication to=3A <Ham-Homebrew=40UCSD=2EEdu=3E=

Send subscription requests to=3A <Ham-Homebrew-REQUEST=40UCSD=2EEdu=3E
Problems you can't solve otherwise to brian=40ucsd=2Eedu=2E

Archives of past issues of the Ham-Homebrew Digest are available=20
=28by FTP only=29 from ftp=2EUCSD=2EEdu in directory "mailarchives=2Fha=
m-homebrew=22=2E

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the officia=
l
policies or positions of any party=2E Your mileage may vary=2E So the=
re=2E
Loop-Detect=3A Ham-Homebrew=3A98=2F683

Date=3A Thu=2C 31 Dec 1998 04=3A43=3A55 GMT
From=3A "Ed=22 <edzeb=40unix=2Easb=2Ecom=3E
Subject=3A Amp power inputs

I am hoping to build an amp for 6 meters using a 4cx250 tube that will =
be
grid driven=2E Every schematic I have calls for feedthru caps on all p=
ower
leads=2E However I have been unable to locate feed thrus to use on the=
B+
line=2E Any suggestions=3F=3F=3F=3F
Thanks for your input=2E
Ed
N2KAQ

edzeb=40unix=2Easb=2Ecom

=2E

Date=3A Wed=2C 30 Dec 1998 18=3A10=3A04 -0500
From=3A "Pitje=22 <nntp=40ibelings=2Ecom=3E
Subject=3A FS (9=29 MTW23N25E motorola FETS 240V 23 Amps 0=2E11 ohms

I have 9 motorola MTW23N25E tmos fets for switching supplies etc=2E

Some of the specs are=3A

on resistance 0=2E11 ohm
240 volts
23 amps

check out the specs at mot=2Ecom

price is $50 shipped for all=2E

Pieter

=2E

Date=3A Wed=2C 30 Dec 1998 19=3A07=3A16 -0500
From=3A "Gabriel G melo=22 <n1hhf=40110=2Enet=3E
Subject=3A FS KENWOOD TS-440AT CHEAP

n1hhf=40110=2Enet

=2E

Date=3A Thu=2C 31 Dec 1998 09=3A21=3A57 GMT
From=3A claude=40netwman=2ERZ=2EUniBw-Muenchen=2Ede (Claude Frantz=29
Subject=3A Info about QE08=2F200HTubes=3F

Another code for this tube is 7836=2E

Allow me go give you the short typical data here=2E

Vf =3D 26=2E5 V=2C If =3D .85 A=2C oxide coated cathode=2C indirectly h=
eated=2E
Base is 5 pin Giant=2E

Va =3D 750 V=2C Vg2 =3D 250 V=2C Ia =3D 100 mA=2C S =3D 9 mS=2E

At 30 MHz=3A
Class C CW Wout =3D 200 W @ Va =3D 750 V
Class C fone (anode modulation=29 Wout =3D 130 W @ Va =3D 600 V
Class B SSB Wo =3D 220 W @ Va =3D 750 V

Class B modulator Wo =3D 300 W @ Va =3D 750 V

Claude Frantz
=2E

Date=3A Wed=2C 30 Dec 1998 19=3A08=3A00 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A Question about high Q inductor

I think Tom's definition of Q is a good one=2C but it'll take me=2C at
least=2C a bit of head-scratching to decide how to translate this into
quantities I can easily measure=2E

Again=2C a fundamental problem is that while the Q of an ideal L-R
combination is well-defined and easy to measure=2C a real inductor has
this shunt capacitance involved=2E The Boonton procedure seems kind of
ridiculous to me=2C because determining the distributed capacitance of
the inductor would be quite a job in itself=2C requiring some sort of
measurement at at least two frequencies and some ugly algebra=2E Lookin=
g
again at the model of a series RL=2C with C across the combination=2C t=
he
C shouldn't affect the Q of the LR "inductor=22 combination=2E The Q of=

the LR combination itself (which is apparently what the Boonton
correction is referring to=29 will be different than the Q of the
three-component model (which may be what it's measuring=29=2E Terman's
definition would be for the three-component model=2C where an "effectiv=
e
inductance=22 (the equation for which was in my last posting=29 or
reactance is compared with the "effective resistance=22 to find the Q=2E=

Even if no energy is lost in the capacitor=2C its presence does increas=
e
the current in the inductor=2C which would reasonably lead to higher
loss=2E

So the first thing to determine is whether we're measuring the Q of
the LR portion only (as the "corrected=22 Boonton measurement seems to
be doing=29=2C or the Q of the whole LRC circuit (which seems to be wha=
t
Terman defines as inductor Q=29=2E Then=2C how to define it=2E Tom's ce=
rtainly
is fundamental=2C but how do we translate it to measurable quantities=2C=

and how do we use it in practice=3F Incidentally=2C it looks like my
method of measuring bandwidth and center frequency may be measuring
the Q of the LR combination only=2E But so far I haven't succeeded in
deriving it=2E

I've seen inductor Q used as a parameter in the design of sharp
bandpass filters=2E Here=2C what I'd do is use Terman's definition and =

an
=22equivalent=22 L and R=2E Even though the "equivalent=22 L is influen=
ced by
both the R and C=2C I'd expect the real component to behave pretty much=

like a series RL of the "equivalent=22 values over a narrow frequency
range (assuming the component is well below self-resonance=29=2E In thi=
s
case=2C Terman's definition leads to a value which is useful in a real
application=2E Would the more fundamental one based on energy be as
useful=2C especially if we didn't know in advance how much of the
apparent inductance is due to shunt C=3F

Roy Lewallen=2C W7EL

-- I apologize for double postings=2E My ISP's news server isn't
always telling me when a message has been successfully posted=2E

Tom Bruhns wrote=3A
=3E=20
=3E Lyle Koehler (lyle=40mlecmn=2Enet=29 wrote=3A
=3E : After making all my convincing arguments about inductor Q=2C I fi=
nally did what I should
=3E : have done in the first place -- grab a handbook and look up the d=
efinition of Q=2E My old
=3E : (4th edition=29 of Reference Data for Radio Engineers describes t=
he method for Q
=3E : measurement=2C and it is electrically equivalent to what Roy has =
been using=2E The handbook
=3E : also shows the circuit for the Boonton 160A Q meter=2C a predeces=
sor of the model I have=2E
=3E : To get the "true Q=22 as defined in terms of bandwidth=2C it is n=
ecessary to correct the
=3E : readings from the Boonton Q meter=2E The correction is given by=3A=

=3E=20
=3E : Q=28true=29 =3D Q * (C + Co=29=2FC
=3E=20
=3E : where Q is the indication on the Boonton meter=2C Co is the distr=
ibuted capacitance of the
=3E : coil=2C and C is the capacitance reading of the Q meter=2E A proc=
edure is described for
=3E : plotting C versus 1=2Ff^2 to determine the Co of the coil=2E
=3E=20
=3E : I had assumed that the readings on the Q meter were gospel=2C and=
that the Q obtained from
=3E : bandwidth measurements was an approximation=2E Apparently it's th=
e other way around=2E Since
=3E : I'm primarily interested in high-Q inductors as loading coils for=
electrically short
=3E : antennas=2C the Q meter measurements are a good indication of coi=
l "quality=22 for my

=3E : application=2E But they are only an approximation of the actual i=
nductor Q according to the
=3E : handbook definition=2E
=3E=20
=3E Thanks for the followup=2C Lyle=2E I was intending to ask you abou=
t that=2C with
=3E respect to accounting correctly for the capacitance shunt across th=
e coil=2C
=3E because it seemed like the true Q and the apparent Q would be diffe=
rent=2E
=3E In fact=2C my reason for posting this is to try to get us back to a=
very
=3E basic definition of Q which should be applicable to any single reso=
nance=2C
=3E be it lumped LC=2C distributed line=2C cavity resonator=2C pendulum=
=2C air mass
=3E in a bottle=2C .=2E=2E
=3E=20
=3E Q =3D energy stored=2Fenergy lost per radian
=3E=20
=3E Note that this really only works for a resonator=2C and that when w=
e talk
=3E about Q of an inductor=2C we're extrapolating=3A we're saying that=
IF the
=3E inductor is used in a resonator at the specifice frequency=2C the i=
nductor
=3E itself (not counting the losses in the capacitor which is also part=
of
=3E the resonator=29 will loose a certain amount of energy per radian=2E=

=3E=20
=3E With that definition=2C we _should=5F be able to relate the effects=
of
=3E parasitic capacitance to Q=2E=2E=2Eto energy loss=2E If the capaci=
tance itself
=3E is not lossy=2C we have to look for ways that that capacitance has =
done
=3E something like increase the effective resistance of the wire in the=

=3E inductor=2C or caused some other loss somewhere else=2E For me=2C =
this is
=3E one of those "I'll know what I'm looking for when I see it=2C=22 bu=
t I'm
=3E not good enough at fields to see the answer clearly yet=2E Perhaps=
Kevin
=3E will join us=2E
=3E=20
=3E (Is it important that the capacitance is mainly between adjacent
=3E turns and NOT really like an external capacitor shunt across the
=3E inductor=3F What if anything is the significance of trying to
=3E wind air-core solenoid coils with wire spaced about a 2-wire-

=3E diameter pitch for use at HF and above=2C but generally using
=3E close-wound coils at MF and below=3F=29
=3E=20
=3E (It's really disappointing to me that Grover's book on inductance
=3E calcs seems to completely ignore the issue of losses or Q!=29
=3E=20
=3E --
=3E Cheers=2C
=3E Tom
=3E tom=5Fbruhns=40hp=2Ecom
=2E

Date=3A Tue=2C 29 Dec 1998 13=3A50=3A55 +0200
From=3A "Orion=22 <orion=40otenet=2Egr=3E
Subject=3A SOME INFO ON 5F23A TUBES

Orion wrote in message .=2E=2E
=3EI GOT 2 JRC 5F23A TUBES (MADE IN JAPAN=29 WHICH I WANT TO REPLACE WI=
TH
SIMILAR
=3EEIMAC TYPE=2C THE TUBES SEEM SIMILAR WITH 4-400 BUT WITH HUGE PLATE=2E=

=3EANY INFO WOULD BE GREATELY APPRECIATED=2C OR AT LEAST THEIR SPECIFIC=
ATIONS=2E
=3E
=3ETHANKS IN ADVANCE
=3E
=3E

=2E

Date=3A Thu=2C 31 Dec 1998 11=3A30=3A06 +0100
From=3A "Roger Willems=22 <cacao=40xs4all=2Enl=3E
Subject=3A TS 515 CW filter

I am looking for a 500 hz CW filter for my old Kenwood TS 515 tranceive=
r=2E

The part number is : YF-3395 C-1

Smiles across the wires=2C

Roger

=2E

Date=3A Thu=2C 31 Dec 1998 03=3A52=3A08 GMT
From=3A xhduff=40ica=2Enet (Hugh Duff=29
Subject=3A Want=3A DSP 'Starter kit'

I'm eager to experiment with DSP's=2E
Looking for a Starter Kit similar to
the Motorola DSP56002EVM or
the Texas Instruments TMS320Fxx
or ?=3F

Anyone ?
Thanks=2C Hugh VA3TO

Please DO NOT AUTOreply
Remove the 'x' in my address to reply=2E

=2E

End of Ham-Homebrew Digest V98 #683
****

=

34. Re: Need Two ECG333 or comparable Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <368C717C.6DF2@powerup.com.au>
Source record: 75409

Dear 8877 (no ID - a pirate?)

1. Do you always spell it 'allways'?
2. Do you already know how to spell 'allready' correctly?
3. Are you a policeman?
4. Do you demand an answer?

These and other pointless questions in the New Year. Sigh.

448877@my-dejanews.com wrote:
>
> In article <01be3473$6df97160$e6d0a0cd@kovar.inav.net>,
> "kovar" <kovar@ia.net> wrote:
> >
> > I have a Ten-Tec Triton with two bad RF transistors.
> > Original part number is PT9784, which crosses to a ECG333.
> >
> > If you have Two in need of a new home, please let me know How much you
> > would like for them.
> >
> > OOOPS!
> > "My two year old switched it to transmit mode with no antenna."
> > By the time I figured out what happened, Radio had shorted RF
> > transistors.
>
> Is Your two year old licensed?
> Is Your two year old allways transmiting unsupervised?
> Is your two year old allready been infected (by you?)
> Does your two year old know the rules?
> Does your two year old know he-she diserves to burn any
> unattented radios.
> 73

****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

35. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: Carl Bauman <cbauman@impulse.net>
Message-ID: <368cb023$0$212@sienna.impulse.net>
Source record: 75410

Roy Lewallen wrote in message <368C4E81.578AB369@teleport.com>...
|Carl Bauman wrote:
|> . . .
|> Thus, while the average power out of the transmitter is a function of the
|> r.m.s. value of the modulation envelope, the PEP value is effectively the
|> power output at the *instant* of maximum output for the waveform being
used
|> for modulation. . .
|
|What you say is correct if "modulation envelope" is taken to mean the
|voltage or current waveform describing the envelope, but not if you
|mean the RMS value of envelope power. RMS and average power are
|different values for most waveforms, and as I pointed out in an
|earlier posting, the RMS power has no useful meaning, at least not for
|this application (or any other I know of).
|

Since r.m.s. is a power function, I can see why you get upset when someone
mentions "r.m.s. power". It's like saying "power power", which is
redundant. However, the books I have at hand indicate that the average
power *is proportional* to the r.m.s. value, which is what I did say.

and a Happy New Year to you too!
Carl WB6YFZ

36. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <A+fPaKAOrHj2Ewr1@ifwtech.demon.co.uk>
Source record: 75411

Carl Bauman wrote:
>
>g0mjw.freeserve.co.uk wrote in message <76fvhl$f9k$1@news4.svr.pol.co.uk>...
>... snip...
>|I thought PEP was defined (in the regs) as the r.m.s power (calculated over
>|one cycle) at the peak (crest) of the modulation envelope.
>|
>... snip ...
>
>actually, FCC part 97.3(b)(6) defines PEP as:
>"The average power supplied to the antenna transmission line by a
>transmitter during one RF cycle at the crest of the modulation envelope
>taken under normal operating conditions."
>
G0MJW was writing about the British regulations, but in fact that
definition is identical to the one used by the FCC (except that it says
"power supplied to the antenna", which means that Gs can allow for
transmission line losses).

>Thus, while the average power out of the transmitter is a function of the
>r.m.s. value of the modulation envelope, the PEP value is effectively the
>power output at the *instant* of maximum output for the waveform being used
>for modulation.

The existing definition of PEP really doesn't need any further
interpretation - especially not one that leaves us wondering exactly
what the word "instant" means.

>You can get an "average" PEP by adding a number of
>"instances" and then dividing by that number.

Once again, it's better to leave well-enough alone. "Average PEP" has no
physically useful meaning - it's merely a contrived statistic.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

37. POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-01 00:00:00 UTC
From: FREE EAST TIMOR <titania@ats.com.au>
Message-ID: <915192073.135389@dns2.ats.com.au>
Source record: 75412

I have a 5 amp power supply and I would like to increase the power output to approx. 30 amps. I believe this is done using the 3055 power transistors, could some-one please draw me a circuit or explain where I can find a circuit to allow me to build this thing
Laurens

38. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368E4C1F.52CCCDE3@mwci.net>
Source record: 75214

J. Fred Riley wrote:

> It is the peak output power (within
> the linear range, that is) capability that defines the amplifier's
> power rating.

This is often true, but there is a caveat. Some low-budget transmitters have a certain PEP rating for linear output, but the tubes and the power supply may overheat if the average power becomes too large. When using speech processing we have to check this out.

Bill W0IYH

39. CushCraft Antenna Huge Disappointment

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be3612$2e2a7c00$30eee6ce@kovar.inav.net>
Source record: 75215

--
CUSHCRAFT ANTENNA COMPANY A HUGE DISAPPOINTMENT!

I have been Attempting to repair a ARX270N antenna from Cushcraft
for almost TWO YEARS.

I am serious!

After SEVEN attempts to get Cushcraft parts/service department to send me
"Capacitors" it is still stored in the my rafters waiting on
their Capacitors. I even cornered them at the Dayton Hamfest hoping to
shame them into the correct parts solution.

MY last attempt was to send Cushcraft the antenna and have them repair it
They sent it back with the base riveted back together and left the
top with the bad capacitors. I have no idea if they did any repairs
on the base capacitors.

Still my $300 antenna seems to be disposable item in CUSHCRAFT policy.
After two years of bumbling mistakes I am at the end of my rope.

I do not need the mistaken fastening Couplers they sent me!
I do not need the mistaken Base section they sent me!
I do not need any of the intended misunderstandings
I Just need the CAPACITORS THAT were DAMAGED Two weeks
after I purchased it new.

I have been very understanding and patient for TWO YEARS!

Now if you see a gentleman at the Dayton Hamfest with a 18' Cushcraft
antenna on his backpack Labeled:
"CUSH-CRAP SERVICE DEPARTMENT, I need my DAMN Capacitors to fix this".

I HOPE YOU WILL UNDERSTAND.

If I have to carry this antenna from Iowa to Dayton to get their attention
I am going to make sure my point is made!

THIS MAKES ME SO DAMN MAD, I just felt an obligation to express Cushcraft
not be the antenna manufacture of choice if you need parts or Service
support.

If you share my concerns Email me.

Jack Kovar
k0var
Iowa

40. Re: Grid Dip Meter Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <368e5e6a.8091825@news.nemaine.com>
Source record: 75216

They do have a website....http://www.hi-manuals.com/HomePage.htm

Ken

On Sat, 02 Jan 1999 10:35:00 -0600, Richard Earl <w9juc@juno.com>
wrote:

>Hi Russ,
>
>Hi-Manuals
>P.O. BOX 802
>COUNCIL BLUFFS , IA 51502-0802
>
>They lisst a manual for the GD1B for $15.80
>
>They have no phone number or web site.
>
>GL es 73
>
>Rich
>
>W9JUC
>

41. Re: Best heat sink compound?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: manox@aol.com
Message-ID: <19990102134043.06601.00006132@ng08.aol.com>
Source record: 75217
Cross-posted to: sci.electronics.repair,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.optics

I have some experience of reducing the heat emitted form incandescent bulbs - I do not think that U will have much joy applying a heatsink compound directly to the bulb envelop and base - although if U find a suitable compound I would be interested to hear about it.

The solution I have used in the past is to build a metal frame around the bulb and cover the apperture where the light is to be emitted using a heat absorbing glass - Schott KG series glass are suitable.

If the optical transmission characteristics are critical then it may be possible to use a clear borosilicate glass with a interference filter, blocking in the NIR region.

Good Luck

Cheers

Andy

42. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368E5B86.D615C0D4@mwci.net>
Source record: 75218

William E. Sabin wrote:

> J. Fred Riley wrote:
>
> > It is the peak output power (within
> > the linear range, that is) capability that defines the amplifier's
> > power rating.
>
> This is often true, but there is a caveat. Some low-budget transmitters
> have a certain PEP rating for linear output, but the tubes and the power
> supply may overheat if the average power becomes too large. When using
> speech processing we have to check this out.
>
> Bill W0IYH

I would like to make a further input on this subject.

Consider an audio amplifier with a sine wave output whose voltage is:

v(t) = V cos(th) where th = angle theta and V is the peak value. Assume a resistance of 1 ohm (the actual value is not important).

The average power over a full cycle is

Pav = (V^2)/2

The instantaneous power within the cycle is

p(t) = (V^2)/2 * (1+cos(2 th))

Now find the rms power in 1 cycle by integrating the square of this equation:

(Prms)^2 = (1/2 pi) * int(0 to 2 pi) [(V^2)/2 * (1+cos(2 th))^2) d(th)]

(equations are confusing to read in this format)

This has the value

Prms = V^2 * sqrt(3/8)

The ratio of rms power to average power is

Prms/Pav = sqrt(3/8) *2 =1.22 which is 0.88 dB

Radiotron Designer's Handbook refers (somewhat vaguely) to rms power as a measure of "loudness", and audio systems often use the term "RMS Watts" in this context. The specs of peak linear power and RMS power define the amplifier pretty well, according to the audio folks.

Bill W0IYH

43. Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Stuart Baynes <sbaynes@iafrica.com>
Message-ID: <76lsbj$2rt$1@nnrp01.iafrica.com>
Source record: 75219

Looking to make a simple FM tranceiver for the 6m band, frequency steps of either 2.5, 10 or 12.5.
Has any body seen any chips that can do this, that are self contained and that don't need an on board computer to program it? Look forward to any replies.
Stuart ZS6OUN @ ZS0DLD

44. Moto HT1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: nospamhere@anywhere.NET
Message-ID: <368E86F7.4315@anywhere.net>
Source record: 75220

Have any of you ever built or know the details of the programming interface for the HT1000 that will allow a pc to program frequencies into the radio? I am looking for information that describes the electrical interface and protocol so that I can duplicate what motorola is very proud of.

Thanks.

Lou, kk5yo

45. FS: Transformers, 22 volt 2.4 amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: ns22ley@snowhill.com
Message-ID: <368EB4DE.4B71@snowhill.com>
Source record: 75221
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

FS: 22 volt 2.4 amp transformers in plastic case, with jack for computer type ac cord (120V 60Hz input). About 4" cubed, 3.5 lbs. each, unused mint condition, $3.75 each or 4/$14 plus UPS. 36330 zip.(Alabama) Can be used with a rectifier and appropriate sized cap to power 28 V filaments, or as is for 21 V or 24 V sweep tube filaments. Also good for 24 V power supply. NOTE: Please REPLACE the "ns22" with "wor" to make "worley" or call 334-347-5281 day/eve/wknd.

46. cc:Mail Link to SMTP Undeliverable Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: administrator@globewireless.COM
Message-ID: <9901029153.AA915314084@globewireless.com>
Source record: 75222

```
--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Message is undeliverable.
Reason: Unable to access cc:Mail Post office.
Please retry later.
Original text follows:
---------------------

--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Received: from mail-backup.pacbell.net [206.13.28.30] by globewireless.com (ccMail Link to
SMTP R8.20.00.25)
; Sat, 02 Jan 1999 21:54:39 GMT
Return-Path: <Ham-Homebrew@ucsd.edu>
Received: from globewireless.com (email.globewireless.com [207.214.103.3]) by
mail-backup.pacbell.net (8.8.8/8.7.1+antispam) with SMTP id FAA16648 for
<rory.davis@www.globewireless.com>; Fri, 1 Jan 1999 05:08:00 -0800 (PST)
From: Ham-Homebrew@ucsd.edu
Received: from POP3 Client by globewireless.com (ccMail Link to SMTP R8.20.00.25)
id AA915196867; Fri, 01 Jan 1999 13:21:09 GMT
Message-Id: <9901019151.AA915196867@globewireless.com>
X-Mailer: ccMail Link to SMTP R8.20.00.25
Date: Fri, 01 Jan 1999 04:30:36 GMT
To: <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V98 #685
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: Quoted-Printable
Content-Description: "cc:Mail Note Part"

Ham-Homebrew Digest Fri=2C 1 Jan 99 Volume 98 : Issue 6=
85

Today's Topics=3A
6 meter Amplifier FS
cmsg cancel <76hr42$okr=40news=2Evoyager=2Enet=3E
Dissipation factor of FR4 at 2=2E5GHZ ? (2 msgs=29
EBAY-=282=29HYTRON HY-51Z Tubes!
Help with SSB RF Sensing
Need Two ECG333 or comparable Transistors
PEP vs RMS
Ultimate Web Site!
```

Send Replies or notes for publication to=3A <Ham-Homebrew=40UCSD=2EEdu=3E=

Send subscription requests to=3A <Ham-Homebrew-REQUEST=40UCSD=2EEdu=3E
Problems you can't solve otherwise to brian=40ucsd=2Eedu=2E

Archives of past issues of the Ham-Homebrew Digest are available=20
=28by FTP only=29 from ftp=2EUCSD=2EEdu in directory "mailarchives=2Fha=
m-homebrew=22=2E

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the officia=
l
policies or positions of any party=2E Your mileage may vary=2E So the=
re=2E
Loop-Detect=3A Ham-Homebrew=3A98=2F685

Date=3A Thu=2C 31 Dec 1998 11=3A43=3A27 -0500
From=3A "Rexford T=2E Hound=22 <*****=40ix=2Enetcom=2Ecom=3E
Subject=3A 6 meter Amplifier FS

=3E=3EThank you=2C your doing both of us a favor=2E You get to keep yo=
ur amp
forever
=3E=3Eand I get to laugh at you every time you spam the newsgroups=2E
=3E
=3EYou should take off your blinkers=2E $600 is only =A3360=2E Now that=
is a little
=3Eexpensive=2C but not excessively so over here=2E Perhaps you forget =
the world
=3Eis not just the USA=2E
=3E

I didn't forget the world is just the USA=2E With that being said=2C I=
'm sure
his price isn't that unreasonable if you decide on the price of the
additional shipping to get it from the USA to the UK=2C or just a few s=
tates
over=2C and the high asking price to begin with=3F

I'm just factoring all the risk of buying a home built amp with a tube =
of
unknown quality and questionable building techniques (Since it would be=

bought sight unseen without any warranty or any other like it to base i=
t's
quality by=2E=29 I'm not saying it's poorly built=2C but=2C it's a big=
unknown=2E

=3EFor your information=2E A commercial 6m amplifier here using a 3-500=
z runs
=3Eto around =A3800 - thats $1300=2E
=3E

This doesn't sound unreasonable to me=2E Plus you have a baseline to j=
udge
quality and price by=2E You also have a baseline for what the price sh=
ould be
for any given condition=2E

Like anything else=2C you have to put things in perspective=2C it's rea=
lly worth
what someone is "willing=22 to pay for it=2E

It doesn't bother me that he doesn't want to negotiate a fair price for=
both
parties concerned=2C he already stated=2C "He wouldn't sell it to me at=
any
price=22=2C which is fine by me=2E What I find totally pointless is sp=
amming the
newsgroups with an add that he has demonstrated that he has no intentio=
ns of
selling the merchandise in the first place=2E

I guess his logic is spamm the hell out of us and someone will buy his =
amp
at an overinflated price to stop him from posting constantly=2E As I =
said=2C I
wish him the best of luck selling it=2E

=2E

Date=3A 01 Jan 1999 08=3A51=3A48 GMT
From=3A Cosmo Roadkill <cosmo=2Eroadkill%bofh=2Eint=40rauug=2Emil=2Ewi=2E=
us=3E
Subject=3A cmsg cancel <76hr42$okr=40news=2Evoyager=2Enet=3E

Article cancelled as EMP=2FECP=2C exceeding a BI of 20=2E

The "Current Usenet spam thresholds and guidelines=22 FAQ is available=
at
http=3A=2F=2Fwww=2Euiuc=2Eedu=2Fph=2Fwww=2Ftskirvin=2Ffaqs=2Fspam=2Eht=
ml

Please include the X-CosmoTraq header of this message in any correspond=
ence
specific to this spam=2E

Sick-O-Spam=2C Spam-B-Gon!
=2E

Date=3A Fri=2C 01 Jan 1999 03=3A52=3A35 GMT
From=3A "Bert Douglas=22 <bertdNOSPAM=40dibbs=2Enet=3E
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

Hi net folks=2C

FR4 is only specified at 1 MHZ=2E
I am wondering if anyone can give me a ball park estimate of its dissip=
ation
factor (loss tangent=29 at 2=2E5 GHZ ?

Thanks=2C
Bert Douglas

=2E

Date=3A Thu=2C 31 Dec 1998 20=3A47=3A40 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

Artech House's _Microwave Engineers' Handbook=5F=2C Vol=2E 2=2C shows "=
Epoxy=2C
polyester=2C or silicone fiberglass laminate (120 lbs=2Fcubic foot=29=22=
to
have a dissipation factor of about 0=2E007 at "microwave frequencies=22=
=2C
defined as 1 - 30 GHz (with a caution that values will vary with
frequency=29=2E The value is sure to vary a lot with formulation as wel=
l
as frequency=2E

=5FReference Data for Radio Engineers=5F gives about 0=2E02 - 0=2E03 fo=
r epoxy
resin at 3 GHz=2E

I recently designed a 6 GHz oscillator on the stuff with no problem=2C
but the design would be quite tolerant of loss=2C and I made no effort
to determine just how much there was=2E

Roy Lewallen=2C W7EL

Bert Douglas wrote=3A
=3E=20
=3E Hi net folks=2C
=3E=20
=3E FR4 is only specified at 1 MHZ=2E
=3E I am wondering if anyone can give me a ball park estimate of its di=
ssipation
=3E factor (loss tangent=29 at 2=2E5 GHZ ?
=3E=20
=3E Thanks=2C
=3E Bert Douglas
=2E

Date=3A 1 Jan 1999 02=3A59=3A47 GMT
From=3A rlucch2098=40aol=2Ecom (RLucch2098=29
Subject=3A EBAY-=282=29HYTRON HY-51Z Tubes!

Hi Guys=3B
You just might need these! Please check 'em out=2E With PIC! Costs noth=
ing to
look!
URL=3E=3E
http=3A=2F=2Fcgi=2Eebay=2Ecom=2Faw-cgi=2FeBayISAPI=2Edll=3FViewItem&ite=
m=3D52797540

Happy New Years 1999=2E=2E=2E=2E=2E!
Thanks es 73=2E=2E=2E=2ERich WA2RQY (1961=29
WA2RQY's "confusion Radio=22 Web-Page
Http=3A=2F=2Fmembers=2Eaol=2Ecom=2Frlucch2098=2Findex=2Ehtml
RLUCCH2098=40aol=2Ecom
=22Keep those heaters on=22
=2E

Date=3A Tue=2C 29 Dec 1998 22=3A25=3A43 GMT
From=3A ve6inm=40my-dejanews=2Ecom
Subject=3A Help with SSB RF Sensing

During this festive holiday season=2C I have been working on an RF sens=
ing
circuit for use with my homebrew 6mx linear=2E For some reason=2C I can=
't seem to
get the sensing circuit to work well with a SSB signal=2E The FM=2C CW =
and AM are
okay=2C but SSB is hit and miss=2E I am coupling low level (7watts=29 R=
F thru a 7pf
cap and into a 2 diode clipping=2Frectifier circuit=2E This is fed to t=
he
non-inverting input of an LM-358 op-amp=2E Also from the non-inverting =
input=2C I
have a 10k resistor to grd=2E The output of the op-amp is tied back to=
the
inverting input via a 100k pot to control the gain=2E Also from the inv=
erting
input is a 10k resistor to grd=2E From the output=2C the DC is fed thru=
a 1k
resistor into the base of a 2N2222 that has the emitter grded and the
collector tied to the negative lead of a 12vdc relay=2E The other side =
of the
relay is tied to Vcc of 13=2E6vdc=2E I have bypassed the circuit with l=
ots of .01
and .1 mfd caps=2E

The circuit works great and switches just fine with all continuous carr=
ier

modes (FM=2C CW=2C etc=29 but when I try to set the gain for SSB input=2C=
the circuit
either does not switch on or else it causes the relay to "chatter=22 on=
and
off=2E A continuous whistle or "hhellllllooooo=22 switches it OK=2C but=
the setting
is too damn finicky to trust=2E If I set the gain a bit higher=2C the c=
ircuit
stays held even after the RF is removed from the input=2E

Any ideas on what I may be able to use to solve the problem=2E I do hav=
e the
'standby' system of using the PTT lead from the rig=2C but this seems s=
o simple
and reduces the wire count=2E=2E=2E=2E=2E=2E=2E=3F=3F

Merry Xmas and all the best is 1999=2E
73 de VE6INM (Glenn=29

-----------=3D=3D Posted via Deja News=2C The Discussion Network =3D=3D=
----
http=3A=2F=2Fwww=2Edejanews=2Ecom=2F Search=2C Read=2C Discuss=2C=
or Start Your Own =20
=2E

Date=3A Fri=2C 01 Jan 1999 16=3A55=3A56 +1000
From=3A Murray Kelly <mkelly=40powerup=2Ecom=2Eau=3E
Subject=3A Need Two ECG333 or comparable Transistors

Dear 8877 (no ID - a pirate=3F=29

1=2E Do you always spell it 'allways'=3F
2=2E Do you already know how to spell 'allready' correctly=3F
3=2E Are you a policeman=3F
4=2E Do you demand an answer=3F

These and other pointless questions in the New Year=2E Sigh=2E

448877=40my-dejanews=2Ecom wrote=3A
=3E=20
=3E In article <01be3473$6df97160$e6d0a0cd=40kovar=2Einav=2Enet=3E=2C
=3E "kovar=22 <kovar=40ia=2Enet=3E wrote=3A
=3E >
=3E > I have a Ten-Tec Triton with two bad RF transistors=2E
=3E > Original part number is PT9784=2C which crosses to a ECG333=
=2E
=3E >
=3E > If you have Two in need of a new home=2C please let me kno=
w How much you
=3E > would like for them=2E
=3E >

=3E > OOOPS!
=3E > "My two year old switched it to transmit mode with no anten=
na=2E=22
=3E > By the time I figured out what happened=2C Radio had short=
ed RF
=3E > transistors=2E
=3E=20
=3E Is Your two year old licensed=3F
=3E Is Your two year old allways transmiting unsupervised=3F
=3E Is your two year old allready been infected (by you=3F=29
=3E Does your two year old know the rules=3F
=3E Does your two year old know he-she diserves to burn any
=3E unattented radios=2E
=3E 73

****
* Murray Kelly vk4aok mkelly=40powerup=2Ecom=2Eau =
*
* 29 Molonga Ter=2E / Graceville=2F QLD=2E 4075=2F Australia =
*
* ph=2Ffax Intl+ 61 7 3379 3307 *
****
=2E

Date=3A Thu=2C 31 Dec 1998 20=3A26=3A41 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A PEP vs RMS

Carl Bauman wrote=3A
=3E . . .
=3E Thus=2C while the average power out of the transmitter is a functio=
n of the
=3E r=2Em=2Es=2E value of the modulation envelope=2C the PEP value is e=
ffectively the
=3E power output at the *instant* of maximum output for the waveform be=
ing used
=3E for modulation=2E . .

What you say is correct if "modulation envelope=22 is taken to mean the=

voltage or current waveform describing the envelope=2C but not if you
mean the RMS value of envelope power=2E RMS and average power are
different values for most waveforms=2C and as I pointed out in an
earlier posting=2C the RMS power has no useful meaning=2C at least not =
for
this application (or any other I know of=29=2E

Roy Lewallen=2C W7EL
=2E

Date=3A Fri=2C 01 Jan 1999 01=3A49=3A55 -0500
From=3A "J=2E Ervin Bates=2C W8ERV=22 <kb8tnq=40voyager=2Enet=3E
Subject=3A Ultimate Web Site!

Hi Gang and Happy New Year!

Since so many of you have commented on the Site=2C I thought I would le=
t
you know we've moved=2E The address is=3A http=3A=2F=2Fwww=2Eqsl=2Ene=
t=2Fw8erv and
this is your invitation to give it another look=2E

Great information for Amateurs and those interested in the Hobby=2E gi=
ve
it a look=2E

7-3=2C
Erv W8ERV

=2E

End of Ham-Homebrew Digest V98 #685
****

=

--simple boundary--

47. cc:Mail Link to SMTP Undeliverable Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: administrator@globewireless.COM
Message-ID: <9901029153.AA915314082@globewireless.com>
Source record: 75223

```
--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Message is undeliverable.
Reason: User "rory.davis@globewireless.com" is not found in the cc:Mail Directory.
Original text follows:
---------------------

--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Received: from mail-backup.pacbell.net [206.13.28.30] by globewireless.com (ccMail Link to
SMTP R8.20.00.25)
; Sat, 02 Jan 1999 21:54:39 GMT
Return-Path: <Ham-Homebrew@ucsd.edu>
Received: from globewireless.com (email.globewireless.com [207.214.103.3]) by
mail-backup.pacbell.net (8.8.8/8.7.1+antispam) with SMTP id FAA16648 for
<rory.davis@www.globewireless.com>; Fri, 1 Jan 1999 05:08:00 -0800 (PST)
From: Ham-Homebrew@ucsd.edu
Received: from POP3 Client by globewireless.com (ccMail Link to SMTP R8.20.00.25)
id AA915196867; Fri, 01 Jan 1999 13:21:09 GMT
Message-Id: <9901019151.AA915196867@globewireless.com>
X-Mailer: ccMail Link to SMTP R8.20.00.25
Date: Fri, 01 Jan 1999 04:30:36 GMT
To: <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V98 #685
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: Quoted-Printable
Content-Description: "cc:Mail Note Part"

Ham-Homebrew Digest Fri=2C 1 Jan 99 Volume 98 : Issue 6=
85

Today's Topics=3A
6 meter Amplifier FS
cmsg cancel <76hr42$okr=40news=2Evoyager=2Enet=3E
Dissipation factor of FR4 at 2=2E5GHZ ? (2 msgs=29
EBAY-=282=29HYTRON HY-51Z Tubes!
Help with SSB RF Sensing
Need Two ECG333 or comparable Transistors
PEP vs RMS
Ultimate Web Site!
```

Send Replies or notes for publication to=3A <Ham-Homebrew=40UCSD=2EEdu=3E=

Send subscription requests to=3A <Ham-Homebrew-REQUEST=40UCSD=2EEdu=3E
Problems you can't solve otherwise to brian=40ucsd=2Eedu=2E

Archives of past issues of the Ham-Homebrew Digest are available=20
=28by FTP only=29 from ftp=2EUCSD=2EEdu in directory "mailarchives=2Fha=
m-homebrew=22=2E

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the officia=
l
policies or positions of any party=2E Your mileage may vary=2E So the=
re=2E
Loop-Detect=3A Ham-Homebrew=3A98=2F685

Date=3A Thu=2C 31 Dec 1998 11=3A43=3A27 -0500
From=3A "Rexford T=2E Hound=22 <*****=40ix=2Enetcom=2Ecom=3E
Subject=3A 6 meter Amplifier FS

=3E=3EThank you=2C your doing both of us a favor=2E You get to keep yo=
ur amp
forever
=3E=3Eand I get to laugh at you every time you spam the newsgroups=2E
=3E
=3EYou should take off your blinkers=2E $600 is only =A3360=2E Now that=
is a little
=3Eexpensive=2C but not excessively so over here=2E Perhaps you forget =
the world
=3Eis not just the USA=2E
=3E

I didn't forget the world is just the USA=2E With that being said=2C I=
'm sure
his price isn't that unreasonable if you decide on the price of the
additional shipping to get it from the USA to the UK=2C or just a few s=
tates
over=2C and the high asking price to begin with=3F

I'm just factoring all the risk of buying a home built amp with a tube =
of
unknown quality and questionable building techniques (Since it would be=

bought sight unseen without any warranty or any other like it to base i=
t's
quality by=2E=29 I'm not saying it's poorly built=2C but=2C it's a big=
unknown=2E

=3EFor your information=2E A commercial 6m amplifier here using a 3-500=
z runs
=3Eto around =A3800 - thats $1300=2E
=3E

This doesn't sound unreasonable to me=2E Plus you have a baseline to j=
udge
quality and price by=2E You also have a baseline for what the price sh=
ould be
for any given condition=2E

Like anything else=2C you have to put things in perspective=2C it's rea=
lly worth
what someone is "willing=22 to pay for it=2E

It doesn't bother me that he doesn't want to negotiate a fair price for=
both
parties concerned=2C he already stated=2C "He wouldn't sell it to me at=
any
price=22=2C which is fine by me=2E What I find totally pointless is sp=
amming the
newsgroups with an add that he has demonstrated that he has no intentio=
ns of
selling the merchandise in the first place=2E

I guess his logic is spamm the hell out of us and someone will buy his =
amp
at an overinflated price to stop him from posting constantly=2E As I =
said=2C I
wish him the best of luck selling it=2E

=2E

Date=3A 01 Jan 1999 08=3A51=3A48 GMT
From=3A Cosmo Roadkill <cosmo=2Eroadkill%bofh=2Eint=40rauug=2Emil=2Ewi=2E=
us=3E
Subject=3A cmsg cancel <76hr42$okr=40news=2Evoyager=2Enet=3E

Article cancelled as EMP=2FECP=2C exceeding a BI of 20=2E

The "Current Usenet spam thresholds and guidelines=22 FAQ is available=
at
http=3A=2F=2Fwww=2Euiuc=2Eedu=2Fph=2Fwww=2Ftskirvin=2Ffaqs=2Fspam=2Eht=
ml

Please include the X-CosmoTraq header of this message in any correspond=
ence
specific to this spam=2E

Sick-O-Spam=2C Spam-B-Gon!
=2E

Date=3A Fri=2C 01 Jan 1999 03=3A52=3A35 GMT
From=3A "Bert Douglas=22 <bertdNOSPAM=40dibbs=2Enet=3E
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

Hi net folks=2C

FR4 is only specified at 1 MHZ=2E
I am wondering if anyone can give me a ball park estimate of its dissip=
ation
factor (loss tangent=29 at 2=2E5 GHZ ?

Thanks=2C
Bert Douglas

=2E

Date=3A Thu=2C 31 Dec 1998 20=3A47=3A40 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

Artech House's _Microwave Engineers' Handbook=5F=2C Vol=2E 2=2C shows "=
Epoxy=2C
polyester=2C or silicone fiberglass laminate (120 lbs=2Fcubic foot=29=22=
to
have a dissipation factor of about 0=2E007 at "microwave frequencies=22=
=2C
defined as 1 - 30 GHz (with a caution that values will vary with
frequency=29=2E The value is sure to vary a lot with formulation as wel=
l
as frequency=2E

=5FReference Data for Radio Engineers=5F gives about 0=2E02 - 0=2E03 fo=
r epoxy
resin at 3 GHz=2E

I recently designed a 6 GHz oscillator on the stuff with no problem=2C
but the design would be quite tolerant of loss=2C and I made no effort
to determine just how much there was=2E

Roy Lewallen=2C W7EL

Bert Douglas wrote=3A
=3E=20
=3E Hi net folks=2C
=3E=20
=3E FR4 is only specified at 1 MHZ=2E
=3E I am wondering if anyone can give me a ball park estimate of its di=
ssipation
=3E factor (loss tangent=29 at 2=2E5 GHZ ?
=3E=20
=3E Thanks=2C
=3E Bert Douglas
=2E

Date=3A 1 Jan 1999 02=3A59=3A47 GMT
From=3A rlucch2098=40aol=2Ecom (RLucch2098=29
Subject=3A EBAY-=282=29HYTRON HY-51Z Tubes!

Hi Guys=3B
You just might need these! Please check 'em out=2E With PIC! Costs noth=
ing to
look!
URL=3E=3E
http=3A=2F=2Fcgi=2Eebay=2Ecom=2Faw-cgi=2FeBayISAPI=2Edll=3FViewItem&ite=
m=3D52797540

Happy New Years 1999=2E=2E=2E=2E=2E!
Thanks es 73=2E=2E=2E=2ERich WA2RQY (1961=29
WA2RQY's "confusion Radio=22 Web-Page
Http=3A=2F=2Fmembers=2Eaol=2Ecom=2Frlucch2098=2Findex=2Ehtml
RLUCCH2098=40aol=2Ecom
=22Keep those heaters on=22
=2E

Date=3A Tue=2C 29 Dec 1998 22=3A25=3A43 GMT
From=3A ve6inm=40my-dejanews=2Ecom
Subject=3A Help with SSB RF Sensing

During this festive holiday season=2C I have been working on an RF sens=
ing
circuit for use with my homebrew 6mx linear=2E For some reason=2C I can=
't seem to
get the sensing circuit to work well with a SSB signal=2E The FM=2C CW =
and AM are
okay=2C but SSB is hit and miss=2E I am coupling low level (7watts=29 R=
F thru a 7pf
cap and into a 2 diode clipping=2Frectifier circuit=2E This is fed to t=
he
non-inverting input of an LM-358 op-amp=2E Also from the non-inverting =
input=2C I
have a 10k resistor to grd=2E The output of the op-amp is tied back to=
the
inverting input via a 100k pot to control the gain=2E Also from the inv=
erting
input is a 10k resistor to grd=2E From the output=2C the DC is fed thru=
a 1k
resistor into the base of a 2N2222 that has the emitter grded and the
collector tied to the negative lead of a 12vdc relay=2E The other side =
of the
relay is tied to Vcc of 13=2E6vdc=2E I have bypassed the circuit with l=
ots of .01
and .1 mfd caps=2E

The circuit works great and switches just fine with all continuous carr=
ier

modes (FM=2C CW=2C etc=29 but when I try to set the gain for SSB input=2C=
the circuit
either does not switch on or else it causes the relay to "chatter=22 on=
and
off=2E A continuous whistle or "hhellllllooooo=22 switches it OK=2C but=
the setting
is too damn finicky to trust=2E If I set the gain a bit higher=2C the c=
ircuit
stays held even after the RF is removed from the input=2E

Any ideas on what I may be able to use to solve the problem=2E I do hav=
e the
'standby' system of using the PTT lead from the rig=2C but this seems s=
o simple
and reduces the wire count=2E=2E=2E=2E=2E=2E=2E=3F=3F

Merry Xmas and all the best is 1999=2E
73 de VE6INM (Glenn=29

-----------=3D=3D Posted via Deja News=2C The Discussion Network =3D=3D=
----
http=3A=2F=2Fwww=2Edejanews=2Ecom=2F Search=2C Read=2C Discuss=2C=
or Start Your Own =20
=2E

Date=3A Fri=2C 01 Jan 1999 16=3A55=3A56 +1000
From=3A Murray Kelly <mkelly=40powerup=2Ecom=2Eau=3E
Subject=3A Need Two ECG333 or comparable Transistors

Dear 8877 (no ID - a pirate=3F=29

1=2E Do you always spell it 'allways'=3F
2=2E Do you already know how to spell 'allready' correctly=3F
3=2E Are you a policeman=3F
4=2E Do you demand an answer=3F

These and other pointless questions in the New Year=2E Sigh=2E

448877=40my-dejanews=2Ecom wrote=3A
=3E=20
=3E In article <01be3473$6df97160$e6d0a0cd=40kovar=2Einav=2Enet=3E=2C
=3E "kovar=22 <kovar=40ia=2Enet=3E wrote=3A
=3E >
=3E > I have a Ten-Tec Triton with two bad RF transistors=2E
=3E > Original part number is PT9784=2C which crosses to a ECG333=
=2E
=3E >
=3E > If you have Two in need of a new home=2C please let me kno=
w How much you
=3E > would like for them=2E
=3E >

=3E > OOOPS!
=3E > "My two year old switched it to transmit mode with no anten=
na=2E=22
=3E > By the time I figured out what happened=2C Radio had short=
ed RF
=3E > transistors=2E
=3E=20
=3E Is Your two year old licensed=3F
=3E Is Your two year old allways transmiting unsupervised=3F
=3E Is your two year old allready been infected (by you=3F=29
=3E Does your two year old know the rules=3F
=3E Does your two year old know he-she diserves to burn any
=3E unattented radios=2E
=3E 73

****
* Murray Kelly vk4aok mkelly=40powerup=2Ecom=2Eau =
*
* 29 Molonga Ter=2E / Graceville=2F QLD=2E 4075=2F Australia =
*
* ph=2Ffax Intl+ 61 7 3379 3307 *
****
=2E

Date=3A Thu=2C 31 Dec 1998 20=3A26=3A41 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A PEP vs RMS

Carl Bauman wrote=3A
=3E . . .
=3E Thus=2C while the average power out of the transmitter is a functio=
n of the
=3E r=2Em=2Es=2E value of the modulation envelope=2C the PEP value is e=
ffectively the
=3E power output at the *instant* of maximum output for the waveform be=
ing used
=3E for modulation=2E . .

What you say is correct if "modulation envelope=22 is taken to mean the=

voltage or current waveform describing the envelope=2C but not if you
mean the RMS value of envelope power=2E RMS and average power are
different values for most waveforms=2C and as I pointed out in an
earlier posting=2C the RMS power has no useful meaning=2C at least not =
for
this application (or any other I know of=29=2E

Roy Lewallen=2C W7EL
=2E

Date=3A Fri=2C 01 Jan 1999 01=3A49=3A55 -0500
From=3A "J=2E Ervin Bates=2C W8ERV=22 <kb8tnq=40voyager=2Enet=3E
Subject=3A Ultimate Web Site!

Hi Gang and Happy New Year!

Since so many of you have commented on the Site=2C I thought I would le=
t
you know we've moved=2E The address is=3A http=3A=2F=2Fwww=2Eqsl=2Ene=
t=2Fw8erv and
this is your invitation to give it another look=2E

Great information for Amateurs and those interested in the Hobby=2E gi=
ve
it a look=2E

7-3=2C
Erv W8ERV

=2E

End of Ham-Homebrew Digest V98 #685
****

=

--simple boundary--

48. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: phat phreddie <pyrojim@tyler.net>
Message-ID: <368EB97C.2600@tyler.net>
Source record: 75224

> You probably can't build either of these cheaper than you can find
> a used one.

I doubt that I could find a used one. The only way I have seen used ones is for sale on the newsgroups and in the back of magazines and most want you to come pick it up, for obvious reasons. I have never seen one advertised close enough to my area for me to consider. We don't even have a ham radio retailer withing 150 of where I am at. None of the hams around here let go of their equipment once they get their hands on it, it is so hard to come by.

> A power supply is also a high risk item. You save a couple of bucks
> on a supply then hook it to a $2000 radio. If the supply shorts and
> over voltages. You just smoked your $2000 radio.

I won't have to worry about that. I will never own a $2000 radio. If I sold everything I owned right now I might be able to scrape up $2000. Maybe. I plan on buying the cheapest HT I can find and using it double duty. The power supply is for an amplifier I can use on my HT. That is why I want to get a good heavy duty power amp and supply and the cheapest HT I can find. Because I am not rich and cannot even dream of buying a $2000 radio. Or even 1/4 that. My whole outfit is gonna have to cost me less than $500. The antenna is homebrew. I always heard that hams were notoriously cheap, I have obviously been misinformed.

> If you're insistent on building a supply, go read everything you can
> find on "Safe Operating Area" of transistors before you start.

Well I am not that /insistent/ on building, I just didn't want to do it the typical amerikan way and buy my way out of the problem. Arrogance teaches you nothing. I wanted the satisfaction of making this thing with my own two hands. I just find it hard to believe that I can't build one for less than $200. The first power supply I built was exactly like the ones on the market for the application, it was a power supply we needed as electronics students. It would be our supply for all our projects. You could go down and buy one for $50 or you could make it for $10. I was very happy with myself when that power supply fulfilled my needs. I still have it today. I even mounted my breadboard to it.

> In case you haven't noticed, crummy power suppply designs is a major
> HOT BUTTON for me.
> Good Luck,
> miker

I don't want a crummy power supply, I want a decent one. Not medical grade. Just something that will suit my needs. I still find it hard to believe that it cannot be had. At a reasonable price.
jh

49. Printed Circuit Board Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: feedback@pcbmilling.com
Message-ID: <368e9f89.2538319@news.mindspring.com>
Source record: 75225

Printed Circuit Board Tutorial

PCB Milling has a brief tutorial on Gerber and NC Drill files that may be of interest to beginners and first-time users of PCB layout software. This step-by-step overview describes file creation using a freeware CAD package, examination of the results with a freeware viewer program, and analysis of the output data. Links to both programs can be found on the company's web site.

You can view the tutorial at <http://www.pcbmilling.com/tutorial.htm>.

PCB Milling
http://www.pcbmilling.com
feedback@pcbmilling.com
FAX: (703) 818-0071

--
PCB Milling
http://www.pcbmilling.com
FAX: (703) 818-0071
Low cost, precision-made PC boards for electronic hobbyists

50. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: phat phreddie <pyrojim@tyler.net>
Message-ID: <368EBB89.7858@tyler.net>
Source record: 75226

Roy Lewallen wrote:
>
> Alas, all the world's information isn't yet on the Web. Sometimes it's
> necessary to look in a {shudder} library. The December 1998 issue of

You have never been to our library. I have never in my entire life been in a library I didn't enjoy being in until I moved here. They have two book sections. One for the preschoolers and one for the first graders. They never heard of interlibrary loan until I told them about it. And they didn't believe me at first. The second time I asked about getting a book like this it took three months to get it. I have never been back. Besides I don't like wading thru the hollerin little kids to get to the desk. The library is practically on the campus of the elementary school. There are 2000 people in this town and 1500 of them are under the age of 9. I like kids and all, but an angry mob is an angry mob, no matter the age.

> QST magazine has an article titled "A 13.8-V, 40-A Switching Power
> Supply". This issue is probably gone from the newsstands now, but
> should be available either directly or by loan from any library. It's
> a 2-part article, with the second part appearing in the January issue,
> which you can probably still get. The author is Manfred Mornhinweg,
> XQ2FOD. The December part is on pages 37-41, and the January part on
> pp. 41-44.

I have been told about this and still can't find this magazine. The only ham related mag. I have seen is CQ. In reference to the library thing.....
jh

51. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: phat phreddie <pyrojim@tyler.net>
Message-ID: <368EBC4C.514A@tyler.net>
Source record: 75227

sparksw4eas@mindspring.com wrote:
>
> Gheeeezzzz..... Just look in any ARRL hand book from the last few years.
> Loaded with PS stuff <Grin> 73 Sparks W4EAS

Maybe you can't read, or weren't paying attention. In the message you
replied to I already made reference to said book. Once again.....

> phat phreddie wrote in message <368D157E.759F@tyler.net>...

> >mainly just theoretical. Never been tested. Everybody keeps saying
> >"buy the book", I have ordered it and it won't be here for another
> >couple of weeks. And I know this is not the one single source of
> >information in this universe. And it can't be that complete.
> >
> >So, that said, can anyone please tell me where I can find a schematic
> >and preferably a pcb layout of a high current power supply, and maybe
> >even a decent little 2M power amp??
> >I found good instructions on the net for a really good antenna, I know
> >there has to be some power supplies and maybe some amplifiers out there
> >too.
> >jh

52. Re: CushCraft Antenna Huge Disappointment

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Marc Hildebrant <hildebrantfamily@worldnet.att.net>
Message-ID: <76m908$pgi@bgtnsc02.worldnet.att.net>
Source record: 75228

Jack,
Sorry to hear about your troubles. I had the opposite results with Cushcraft with regards to my R7000. I got great help with the customer service people.

Marc

53. Re: TEKRONIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990102183301.00800.00006276@ng-fv1.aol.com>
Source record: 75229

I am interested in one of the 100mhz probes. are they still avail.. thanks
Harold W4PQW

54. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <368EB19A.22D9161D@one.net>
Source record: 75230

William E. Sabin wrote:
>
> > > |Prms = SQRT((1/T) * Integral0->T(P^2 dt))
>
> This is incorrect. The RMS value of "any" function F(t) is
>
> Frms = 1/T int(0 to T) F(t)^2 dt
>
> Bill W0IYH

I stand partially corrected. Thanks. I should have shown P
as a function of time [P(t)].

I slipped up in the notation, but meant the same thing.

However, the SQRT() does belong. Without it, you don't have
a "root" mean square.

Rich W2RG

55. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <368EB268.9D4A82C1@one.net>
Source record: 75231

William E. Sabin wrote:
>
> William E. Sabin wrote:
>
> > > > |Prms = SQRT((1/T) * Integral0->T(P^2 dt))
> >
> > This is incorrect. The RMS value of "any" function F(t) is
> >
> > Frms = 1/T int(0 to T) F(t)^2 dt
> >
> > Bill W0IYH
>
> My correction was incorrect. The original equation is correct after
> all.
>
> Frms = sqrt(1/T int(0 to T) F(t)^2 dt)
>
> Bill W0IYH

Bill,

this reminds me of those instances where you encounter someone in a narrow hallway and you both try to get past each other my going to the same side, and then the other side, and then the other side, ...

I should have read this note before responding to the last one. Oh, well ...

Happy New Year :-)

Rich W2RG

56. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <368EB394.BA0D75EC@one.net>
Source record: 75232

William E. Sabin wrote:
>
> J. Fred Riley wrote:
>
> > It is the peak output power (within
> > the linear range, that is) capability that defines the amplifier's
> > power rating.
>
> This is often true, but there is a caveat. Some low-budget transmitters
> have a certain PEP rating for linear output, but the tubes and the power
> supply may overheat if the average power becomes too large. When using
> speech processing we have to check this out.
>
> Bill W0IYH

This is an interesting point that makes me wonder:

so many new rigs have "protection" circuits with which I'm not entirely
familiar. DO you (or someone else) know if they're protected against
both of these possible failure modes. My last rig didn't have a speech
processor (I just purchased a new one), and I haven't checked out the
cases in which the new one goes into current or power limiting.

In a nutshell, what factors really control the "protection" circuitry?

Rich W2RG

57. Knight KG-650 RF Signal Generator f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <76mdjn$72v$1@news.ispn.net>
Source record: 75233
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

For Sale:

Knight model KG-650 RF Signal Generator. Works fine and is in very nice condition. Manual included.

$25.00 plus shipping.

Ron Ostman, W0NYQ
Mt. Iron, MN

58. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368EB8D3.1A4630EC@teleport.com>
Source record: 75234

Very interesting. Are you saying that the "loudness" of an arbitrary-waveshape sound is proportional to the RMS power of the sound? I have no background in audio work, but was under the impression that perceived loudness was a logarithmic function of the power (but maybe a logarithmic function of the RMS rather than average power?).

The ratio of RMS to average power is of course different for each waveform, so the 0.88 dB difference you calculate wouldn't hold for, say, music or voice waveforms. If perceived loudness is indeed proportional to the RMS rather than average value, then this is indeed a legitimate use for RMS power, the first I've heard of. It would be interesting to learn how this was determined.

Roy Lewallen, W7EL

William E. Sabin wrote:

> I would like to make a further input on this subject.
>
> Consider an audio amplifier with a sine wave output whose voltage is:
>
> v(t) = V cos(th) where th = angle theta and V is the peak value. Assume a
> resistance of 1 ohm (the actual value is not important).
>
> The average power over a full cycle is
>
> Pav = (V^2)/2
>
> The instantaneous power within the cycle is
>
> p(t) = (V^2)/2 * (1+cos(2 th))
>
> Now find the rms power in 1 cycle by integrating the square of this
> equation:
>
> (Prms)^2 = (1/2 pi) * int(0 to 2 pi) [(V^2)/2 * (1+cos(2 th))^2) d(th)]
>
> (equations are confusing to read in this format)
>
> This has the value
>
> Prms = V^2 * sqrt(3/8)
>
> The ratio of rms power to average power is

>
> Prms/Pav = sqrt(3/8) *2 =1.22 which is 0.88 dB
>
> Radiotron Designer's Handbook refers (somewhat vaguely) to rms power as a
> measure of "loudness", and audio systems often use the term "RMS Watts" in
> this context. The specs of peak linear power and RMS power define the
> amplifier pretty well, according to the audio folks.
>
> Bill W0IYH

59. Industrial Tubes f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <76me2u$73l$1@news.ispn.net>
Source record: 75235
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

NL-760P, (4) @ $25.00 ea. plus shipping
NL-716 , (2) @ $20.00 ea. "
NL-1C , (3) @ $10.00 ea. "
710/6011, (2) @ $30.00 ea. "

Will sell as lot for $200.00 plus shipping.

All tubes are N.O.S. in original boxes. I would consider possible trades for tubes more suitable for amateur use.

73,

Ron Ostman, W0NYQ
Mt. Iron, MN

60. Military carbon mic. Handsets f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <76mehv$74v$1@news.ispn.net>
Source record: 75236
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

For sale:

(1) TS-9-AN Handset
(1) TS-9-F Handset

Both are W W 2 Signal Corp handsets as use with EE-8 Field Phones, etc.
Will sell for $10.00 ea. or both for $15.00 (plus shipping).

Thanks,

Ron Ostman, W0NYQ
Mt. Iron, MN

61. 12AX7A tubes f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <76mf1e$769$1@news.ispn.net>
Source record: 75237
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

For Sale:

(4) new-in-box Amperex 12AX7A/ECC 83 tubes.

$7.50 ea. or $28.00 for all 4. (plus shipping)

Thanks,

Ron Ostman, W0NYQ
Mt. Iron, MN

62. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368EBEEE.77162C91@mwci.net>
Source record: 75238

Rich Griffiths wrote:

> William E. Sabin wrote:
> >
> > J. Fred Riley wrote:
> >
> > > It is the peak output power (within
> > > the linear range, that is) capability that defines the amplifier's
> > > power rating.
> >
> > This is often true, but there is a caveat. Some low-budget transmitters
> > have a certain PEP rating for linear output, but the tubes and the power
> > supply may overheat if the average power becomes too large. When using
> > speech processing we have to check this out.
> >
> > Bill W0IYH
>
> In a nutshell, what factors really control the "protection" circuitry?

Limiting forward power with a directional coupler is one way. This can utilize average power or PEP. High forward power can stress broad band transistor PAs even though the actual power (forward minus reflected) is what it should be.

DC current control is another way. I believe some such as Ten-Tec do both of these. I use a regulated supply with current limiting that very quickly turns down the supply volts on excessive peak current demand.

In general, the average long-term heating of tubes, transistors and power supply components would be the thing to look out for, and the protection stuff may not do a good job in that respect if components are marginal. I think most mfrs keep this under control but some rigs, including some homebrew, may not.

A speech processor can easily raise the average power, for a constant PEP, for speech by a factor of four.

Bill W0IYH

>

63. DTMF decoding w/Soundblaster

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "Michael W. Dunham" <kb9mlh@amsat.org>
Message-ID: <368ED1FE.B08C4F79@amsat.org>
Source record: 75239

Does anyone know of any source code in C or Basic that I can get a hold
of which decodes DTMF tones through a Soundblaster.

Please respond to kb9mlh@amsat.org

64. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368EC6B6.EB315239@mwci.net>
Source record: 75240

Roy Lewallen wrote:

> Very interesting. Are you saying that the "loudness" of an
> arbitrary-waveshape sound is proportional to the RMS power of the
> sound? I have no background in audio work, but was under the
> impression that perceived loudness was a logarithmic function of the
> power (but maybe a logarithmic function of the RMS rather than average
> power?).

Yes, I am sure the Fletcher-Munson thing is quite correct, but maybe the audio guys, which I am not, use rms power rather than average power, as you suggest. One thing is for sure, the rms number is bigger and more impressive, and maybe that is the motivation. But I think maybe those folks have a rationale for the rms power idea and I'm not inclined to be cynical about that. The Radiotron Book has some material that you might like to look at.

It may be that rms power is a better measure of the stresses on circuits, power supplies and loudspeakers for complex waveforms that have large dynamic range. I think there is something to that.

> The ratio of RMS to average power is of course different for each
> waveform, so the 0.88 dB difference you calculate wouldn't hold for,
> say, music or voice waveforms.

I didn't claim that, of course, as you mention. The idea was to show one simple example of how average power and rms power are related mathematically. For complex signals, digital signal processing could perform the same calculation very easily, if for some (strange?) reason one wanted to do that.

My Bose catalog mentions an IEC Power Rating System. Maybe someone knows what that is.

Bill W0IYH

65. Re: PEP vs RMS Protection Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Allan H Kaplan <w1ael@tidalwave.net>
Message-ID: <368EE083.B2874694@tidalwave.net>
Source record: 75241

I believe that "Average Power Control (RMS = heating effect)" and "Peak Power Control (~PEP) each have a legitimate place in power amplifier design. The APC protects against over-temperature, and the PPC constrains the signal within the linear operating range. Kudos to all for the helpful tone of the posts! 73 de W1AEL, Allan.

66. Various Types of capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Keith Brigode <brigode@ibm.net>
Message-ID: <368EE461.238082@ibm.net>
Source record: 75242

I'll admit some ignorance. Why are mylar capacitors used sometimes as bypass capacitors instead of ceramic?

When do I use aluminum eletrolytic as apposed to tantalum?

What do I use to replace old paper capacitors in old radios?

Could someone refer me to some good reference on capacitors? I really don't know how I got to this point without knowing the basic differences.

67. Re: PEP vs RMS Protection Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368EEF6E.4B17810B@teleport.com>
Source record: 75243

I'm still a little concerned about the (RMS = heating effect)
following "Average power control". As Bill, I, and others have pointed
out, RMS is not the same as average (except for a few special
waveforms, like DC).

One more time. Average power, not RMS power, determines the heating
effect. One watt of average power of any waveform will cause the same
heating as one watt of DC power. One watt of RMS power is not the same
amount as one watt of average power, so it will cause more or less
heating than that, depending on the waveform.

The reason for the confusion, I think, is that If you multiply RMS
current times resistance, the result is the average (not RMS) power,
which has the equivalent heating property I mentioned. Similarly, the
RMS voltage divided by the resistance equals the average (not RMS)
power. So the useful quantities when calculating heating effect are
RMS voltage, RMS current, and average power. Not RMS power.

Roy Lewallen, W7EL

Allan H Kaplan wrote:
>
> I believe that "Average Power Control (RMS = heating effect)" and "Peak
> Power Control (~PEP) each have a legitimate place in power amplifier
> design. The APC protects against over-temperature, and the PPC
> constrains the signal within the linear operating range. Kudos to all
> for the helpful tone of the posts! 73 de W1AEL, Allan.

68. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368EF02A.4FCCC938@teleport.com>
Source record: 75244

William E. Sabin wrote:

>. . .
>The Radiotron Book has some material that you might like to look at.
>. . .

Indeed it does. Just the other day I mentioned in a posting that it's the best source I've seen for inductance calculation. But it's awfully hard to find a copy. If you or anyone else knows where I can get one, I'd greatly appreciate your letting me know.

Roy Lewallen, W7EL

69. WTB: Crystal Microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Roy Moore <moore@io.com>
Message-ID: <76mrnn$q0p$2@hiram.io.com>
Source record: 75245
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Want a high impedance mike. Please reply to moore@io.com.

Thanks.

70. Re: Moto HT1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Rick Kaumeier <rkaumeier@earthlink.net>
Message-ID: <368EF85A.15F0@earthlink.net>
Source record: 75246

Lou kk5yo wrote:
>
> Have any of you ever built or know the details of the programming
> interface for the HT1000 that will allow a pc to program frequencies
> into the radio? I am looking for information that describes the
> electrical interface and protocol so that I can duplicate what motorola
> is very proud of.

Hi Lou,

Batwing Labs http://www.batlabs.com/ has the RIB (radio interface
box) info you're looking for.

73, Rick Kï¿½VJ

71. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: ed ngai <engai@sprintmail.com>
Message-ID: <368F1925.3B54DE08@sprintmail.com>
Source record: 75247
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

You'd be better off w/ telfon for GHz freq. Since that's whawt used in
feedhorn circuits, phased arrays, etc.

Barry L. Ornitz wrote:
> Roy Lewallen wrote in message <368C536C.978777BC@teleport.com>...
> >Artech House's _Microwave Engineers' Handbook_, Vol. 2, shows "Epoxy,
> >polyester, or silicone fiberglass laminate (120 lbs/cubic foot)" to
> >have a dissipation factor of about 0.007 at "microwave frequencies",
> >defined as 1 - 30 GHz ... snip ...

> >Roy Lewallen, W7EL

> >Bert Douglas wrote:
> >> Hi net folks, FR4 is only specified at 1 MHZ. I am wondering if anyone
> >> can give me a ball park estimate of its dissipation factor (loss tangent)
> >> at 2.5 GHZ ?
> >> Thanks,
> >> Bert Douglas

> Just to add a little to what Roy said, the conventional G-10/FR-4 material
> gets fairly lossy above 1 GHz or so.

... snip ...

72. FS/FT: Collins 51J parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: k6sde@my-dejanews.com
Message-ID: <76jpd6$j52$1@nnrp1.dejanews.com>
Source record: 75293

I have 51J parts for sale or trade. Take a look at the pictures of what I have at:

http://www.geocities.com/Heartland/Ridge/7463/51J/51jparts.html

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

73. ? 833A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Arthur Moe <kb7ww@chatusa.com>
Message-ID: <368DDFCF.502088B1@chatusa.com>
Source record: 75294
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amareur.boatanchors

Seems that my memory has gone. I seem to remember an article somewhere on using a 833A in a low band amplifier, class B, grid driven, but cani¿½t seem to find it. Can someone help?

Thanks
Art

74. Warning: could not send message for past 12 hours

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: MAILER-DAEMON@mail-backup.pacbell.NET
Message-ID: <199901020148.RBG21875@mail-backup.pacbell.net>
Source record: 75295

```
*******************************************
** THIS IS A WARNING MESSAGE ONLY **
** YOU DO NOT NEED TO RESEND YOUR MESSAGE **
*******************************************

The original message was received at Fri, 1 Jan 1999 05:08:00 -0800 (PST)
from email.globewireless.com [207.214.103.3]

***Help Understanding Common Mail Problems***
A problem has been encountered in attempting to deliver your
email message. The system generated error message appears below
this informational section. A few common problems are described
here to help you resolve your mail problems.

Problem Cause
============= ============================================================
User Unknown: The user ID you sent email to does not exist at the host
or mail domain you specified. You may have mispelled the
user ID or that user's account may have been closed.

Host Unknown: The host or domain name does not exist. You may have
mistyped it or been given incorrect information.

Note: [The user ID is the part of the email address to the left
===== of the '@'. The host (computer system) or mail domain is
the part of the address to the right of the '@'.]
***

----- The following addresses had transient non-fatal errors -----
<rory.davis@www.globewireless.com>

----- Transcript of session follows -----
<rory.davis@www.globewireless.com>... Deferred: Connection refused by
www.globewireless.com.
Warning: message still undelivered after 12 hours
Will keep trying until message is 5 days old

----- Original message follows -----

Return-Path: Ham-Homebrew@ucsd.edu
Received: from globewireless.com (email.globewireless.com [207.214.103.3]) by
mail-backup.pacbell.net (8.8.8/8.7.1+antispam) with SMTP id FAA16648 for
<rory.davis@www.globewireless.com>; Fri, 1 Jan 1999 05:08:00 -0800 (PST)
From: Ham-Homebrew@ucsd.edu
Received: from POP3 Client by globewireless.com (ccMail Link to SMTP R8.20.00.25)
id AA915196867; Fri, 01 Jan 1999 13:21:09 GMT
Message-Id: <9901019151.AA915196867@globewireless.com>
```

X-Mailer: ccMail Link to SMTP R8.20.00.25
Date: Fri, 01 Jan 1999 04:30:36 GMT
To: <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V98 #685
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: Quoted-Printable
Content-Description: "cc:Mail Note Part"

Ham-Homebrew Digest Fri=2C 1 Jan 99 Volume 98 : Issue 6=
85

Today's Topics=3A
6 meter Amplifier FS
cmsg cancel <76hr42$okr=40news=2Evoyager=2Enet=3E
Dissipation factor of FR4 at 2=2E5GHZ ? (2 msgs=29
EBAY-=282=29HYTRON HY-51Z Tubes!
Help with SSB RF Sensing
Need Two ECG333 or comparable Transistors
PEP vs RMS
Ultimate Web Site!

Send Replies or notes for publication to=3A <Ham-Homebrew=40UCSD=2EEdu=3E=

Send subscription requests to=3A <Ham-Homebrew-REQUEST=40UCSD=2EEdu=3E
Problems you can't solve otherwise to brian=40ucsd=2Eedu=2E

Archives of past issues of the Ham-Homebrew Digest are available=20
=28by FTP only=29 from ftp=2EUCSD=2EEdu in directory "mailarchives=2Fha=
m-homebrew=22=2E

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the officia=
l
policies or positions of any party=2E Your mileage may vary=2E So the=
re=2E
Loop-Detect=3A Ham-Homebrew=3A98=2F685

Date=3A Thu=2C 31 Dec 1998 11=3A43=3A27 -0500
From=3A "Rexford T=2E Hound=22 <*****=40ix=2Enetcom=2Ecom=3E
Subject=3A 6 meter Amplifier FS

=3E=3EThank you=2C your doing both of us a favor=2E You get to keep yo=
ur amp
forever
=3E=3Eand I get to laugh at you every time you spam the newsgroups=2E
=3E
=3EYou should take off your blinkers=2E $600 is only =A3360=2E Now that=
is a little
=3Eexpensive=2C but not excessively so over here=2E Perhaps you forget =
the world
=3Eis not just the USA=2E

=3E

I didn't forget the world is just the USA=2E With that being said=2C I=
'm sure
his price isn't that unreasonable if you decide on the price of the
additional shipping to get it from the USA to the UK=2C or just a few s=
tates
over=2C and the high asking price to begin with=3F

I'm just factoring all the risk of buying a home built amp with a tube =
of
unknown quality and questionable building techniques (Since it would be=

bought sight unseen without any warranty or any other like it to base i=
t's
quality by=2E=29 I'm not saying it's poorly built=2C but=2C it's a big=
unknown=2E

=3EFor your information=2E A commercial 6m amplifier here using a 3-500=
z runs
=3Eto around =A3800 - thats $1300=2E
=3E

This doesn't sound unreasonable to me=2E Plus you have a baseline to j=
udge
quality and price by=2E You also have a baseline for what the price sh=
ould be
for any given condition=2E

Like anything else=2C you have to put things in perspective=2C it's rea=
lly worth
what someone is "willing=22 to pay for it=2E

It doesn't bother me that he doesn't want to negotiate a fair price for=
both
parties concerned=2C he already stated=2C "He wouldn't sell it to me at=
any
price=22=2C which is fine by me=2E What I find totally pointless is sp=
amming the
newsgroups with an add that he has demonstrated that he has no intentio=
ns of
selling the merchandise in the first place=2E

I guess his logic is spamm the hell out of us and someone will buy his =
amp
at an overinflated price to stop him from posting constantly=2E As I =
said=2C I
wish him the best of luck selling it=2E

=2E

Date=3A 01 Jan 1999 08=3A51=3A48 GMT
From=3A Cosmo Roadkill <cosmo=2Eroadkill%bofh=2Eint=40rauug=2Emil=2Ewi=2E=
us=3E
Subject=3A cmsg cancel <76hr42$okr=40news=2Evoyager=2Enet=3E

Article cancelled as EMP=2FECP=2C exceeding a BI of 20=2E

The "Current Usenet spam thresholds and guidelines=22 FAQ is available=
at
http=3A=2F=2Fwww=2Euiuc=2Eedu=2Fph=2Fwww=2Ftskirvin=2Ffaqs=2Fspam=2Eht=
ml

Please include the X-CosmoTraq header of this message in any correspond=
ence
specific to this spam=2E

Sick-O-Spam=2C Spam-B-Gon!
=2E

Date=3A Fri=2C 01 Jan 1999 03=3A52=3A35 GMT
From=3A "Bert Douglas=22 <bertdNOSPAM=40dibbs=2Enet=3E
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

Hi net folks=2C

FR4 is only specified at 1 MHZ=2E
I am wondering if anyone can give me a ball park estimate of its dissip=
ation
factor (loss tangent=29 at 2=2E5 GHZ ?

Thanks=2C
Bert Douglas

=2E

Date=3A Thu=2C 31 Dec 1998 20=3A47=3A40 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

Artech House's _Microwave Engineers' Handbook=5F=2C Vol=2E 2=2C shows "=
Epoxy=2C
polyester=2C or silicone fiberglass laminate (120 lbs=2Fcubic foot=29=22=
to
have a dissipation factor of about 0=2E007 at "microwave frequencies=22=
=2C
defined as 1 - 30 GHz (with a caution that values will vary with
frequency=29=2E The value is sure to vary a lot with formulation as wel=
l
as frequency=2E

=5FReference Data for Radio Engineers=5F gives about 0=2E02 - 0=2E03 fo=
r epoxy

resin at 3 GHz=2E

I recently designed a 6 GHz oscillator on the stuff with no problem=2C
but the design would be quite tolerant of loss=2C and I made no effort
to determine just how much there was=2E

Roy Lewallen=2C W7EL

Bert Douglas wrote=3A
=3E=20
=3E Hi net folks=2C
=3E=20
=3E FR4 is only specified at 1 MHZ=2E
=3E I am wondering if anyone can give me a ball park estimate of its di=
ssipation
=3E factor (loss tangent=29 at 2=2E5 GHZ ?
=3E=20
=3E Thanks=2C
=3E Bert Douglas
=2E

Date=3A 1 Jan 1999 02=3A59=3A47 GMT
From=3A rlucch2098=40aol=2Ecom (RLucch2098=29
Subject=3A EBAY-=282=29HYTRON HY-51Z Tubes!

Hi Guys=3B
You just might need these! Please check 'em out=2E With PIC! Costs noth=
ing to
look!
URL=3E=3E
http=3A=2F=2Fcgi=2Eebay=2Ecom=2Faw-cgi=2FeBayISAPI=2Edll=3FViewItem&ite=
m=3D52797540

Happy New Years 1999=2E=2E=2E=2E=2E!
Thanks es 73=2E=2E=2E=2ERich WA2RQY (1961=29
WA2RQY's "confusion Radio=22 Web-Page
Http=3A=2F=2Fmembers=2Eaol=2Ecom=2Frlucch2098=2Findex=2Ehtml
RLUCCH2098=40aol=2Ecom
=22Keep those heaters on=22
=2E

Date=3A Tue=2C 29 Dec 1998 22=3A25=3A43 GMT
From=3A ve6inm=40my-dejanews=2Ecom
Subject=3A Help with SSB RF Sensing

During this festive holiday season=2C I have been working on an RF sens=
ing
circuit for use with my homebrew 6mx linear=2E For some reason=2C I can=
't seem to

get the sensing circuit to work well with a SSB signal=2E The FM=2C CW =
and AM are
okay=2C but SSB is hit and miss=2E I am coupling low level (7watts=29 R=
F thru a 7pf
cap and into a 2 diode clipping=2Frectifier circuit=2E This is fed to t=
he
non-inverting input of an LM-358 op-amp=2E Also from the non-inverting =
input=2C I
have a 10k resistor to grd=2E The output of the op-amp is tied back to=
the
inverting input via a 100k pot to control the gain=2E Also from the inv=
erting
input is a 10k resistor to grd=2E From the output=2C the DC is fed thru=
a 1k
resistor into the base of a 2N2222 that has the emitter grded and the
collector tied to the negative lead of a 12vdc relay=2E The other side =
of the
relay is tied to Vcc of 13=2E6vdc=2E I have bypassed the circuit with l=
ots of .01
and .1 mfd caps=2E

The circuit works great and switches just fine with all continuous carr=
ier
modes (FM=2C CW=2C etc=29 but when I try to set the gain for SSB input=2C=
the circuit
either does not switch on or else it causes the relay to "chatter=22 on=
and
off=2E A continuous whistle or "hhellllllooooo=22 switches it OK=2C but=
the setting
is too damn finicky to trust=2E If I set the gain a bit higher=2C the c=
ircuit
stays held even after the RF is removed from the input=2E

Any ideas on what I may be able to use to solve the problem=2E I do hav=
e the
'standby' system of using the PTT lead from the rig=2C but this seems s=
o simple
and reduces the wire count=2E=2E=2E=2E=2E=2E=2E=3F=3F

Merry Xmas and all the best is 1999=2E
73 de VE6INM (Glenn=29

-----------=3D=3D Posted via Deja News=2C The Discussion Network =3D=3D=
----
http=3A=2F=2Fwww=2Edejanews=2Ecom=2F Search=2C Read=2C Discuss=2C=
or Start Your Own =20
=2E

Date=3A Fri=2C 01 Jan 1999 16=3A55=3A56 +1000
From=3A Murray Kelly <mkelly=40powerup=2Ecom=2Eau=3E

Subject=3A Need Two ECG333 or comparable Transistors

Dear 8877 (no ID - a pirate=3F=29

1=2E Do you always spell it 'allways'=3F
2=2E Do you already know how to spell 'allready' correctly=3F
3=2E Are you a policeman=3F
4=2E Do you demand an answer=3F

These and other pointless questions in the New Year=2E Sigh=2E

448877=40my-dejanews=2Ecom wrote=3A
=3E=20
=3E In article <01be3473$6df97160$e6d0a0cd=40kovar=2Einav=2Enet=3E=2C
=3E "kovar=22 <kovar=40ia=2Enet=3E wrote=3A
=3E >
=3E > I have a Ten-Tec Triton with two bad RF transistors=2E
=3E > Original part number is PT9784=2C which crosses to a ECG333=
=2E
=3E >
=3E > If you have Two in need of a new home=2C please let me kno=
w How much you
=3E > would like for them=2E
=3E >
=3E > OOOPS!
=3E > "My two year old switched it to transmit mode with no anten=
na=2E=22
=3E > By the time I figured out what happened=2C Radio had short=
ed RF
=3E > transistors=2E
=3E=20
=3E Is Your two year old licensed=3F
=3E Is Your two year old allways transmiting unsupervised=3F
=3E Is your two year old allready been infected (by you=3F=29
=3E Does your two year old know the rules=3F
=3E Does your two year old know he-she diserves to burn any
=3E unattented radios=2E
=3E 73

****
* Murray Kelly vk4aok mkelly=40powerup=2Ecom=2Eau =
*
* 29 Molonga Ter=2E / Graceville=2F QLD=2E 4075=2F Australia =
*
* ph=2Ffax Intl+ 61 7 3379 3307 *
****
=2E

Date=3A Thu=2C 31 Dec 1998 20=3A26=3A41 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E

Subject=3A PEP vs RMS

Carl Bauman wrote=3A
=3E . . .
=3E Thus=2C while the average power out of the transmitter is a functio=
n of the
=3E r=2Em=2Es=2E value of the modulation envelope=2C the PEP value is e=
ffectively the
=3E power output at the *instant* of maximum output for the waveform be=
ing used
=3E for modulation=2E . .

What you say is correct if "modulation envelope=22 is taken to mean the=

voltage or current waveform describing the envelope=2C but not if you
mean the RMS value of envelope power=2E RMS and average power are
different values for most waveforms=2C and as I pointed out in an
earlier posting=2C the RMS power has no useful meaning=2C at least not =
for
this application (or any other I know of=29=2E

Roy Lewallen=2C W7EL
=2E

Date=3A Fri=2C 01 Jan 1999 01=3A49=3A55 -0500
From=3A "J=2E Ervin Bates=2C W8ERV=22 <kb8tnq=40voyager=2Enet=3E
Subject=3A Ultimate Web Site!

Hi Gang and Happy New Year!

Since so many of you have commented on the Site=2C I thought I would le=
t
you know we've moved=2E The address is=3A http=3A=2F=2Fwww=2Eqsl=2Ene=
t=2Fw8erv and
this is your invitation to give it another look=2E

Great information for Amateurs and those interested in the Hobby=2E gi=
ve
it a look=2E

7-3=2C
Erv W8ERV

=2E

End of Ham-Homebrew Digest V98 #685
****

=

75. Re: ? 833A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: jbickel@iquest.net
Message-ID: <368d8b72.647529@news.iquest.net>
Source record: 75296
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amareur.boatanchors

On Sat, 02 Jan 1999 00:58:55 -0800, Arthur Moe <kb7ww@chatusa.com>
wrote:

>Seems that my memory has gone. I seem to remember an article somewhere
>on using a 833A in a low band amplifier, class B, grid driven, but can't
>seem to find it. Can someone help?
>
>
>Thanks
>Art

The 1979 ARRL handbook has this amplifier.

76. Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: cd <bearl@ozemail.com.au>
Message-ID: <76k9v5ulh1@reader1.reader.news.ozemail.net>
Source record: 75297

I am building a dip meter, from the Handbook, it calls for silver Micas,
they are a bit hard to find, are NPO ceramics as stable as Silver Micas.

Thanks

77. INCREASING MY POWER SUPPLY OUTPUT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: FREE EAST TIMOR <titania@ats.com.au>
Message-ID: <915255050.680247@dns2.ats.com.au>
Source record: 75298

Thank you to all those that replied.
I certainly got a variety of answers and as a result will probably buy a new power supply, however before I do let me just give some more information.
I have some 3 very large power supplies that come out of those very large computers. The Transformers are very big, the capacitors are large , the heatsinks also large and the particular one I would like to convert or perhaps the best words are "use the parts of" has about 12 X 3055 power transistors preceded by 4 X rectifier diodes. Basically I have the stuff that's needed and the patience, and armed with enough information to make me dangerous I want to try building this thing.
And in response to one person about testing it afterwards, our Australian Radio and Communications magazine which has just recently published an article on upgrading a desktop computer power supply to output 20 amp also gave an example of how to make a load to test the output, they used a length of fencing wire on a wooden frame that is tapped for 5, 10,15 and 20 amp points.
Yes it does sound like something you would hook up in the paddock but it worked for the Wright Brothers.
Laurens

78. Re: @@@@@ RF PARTS & RARE ELECTRONICS @@@@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Marcel <kolibri@freemail.nl>
Message-ID: <76kk34qvh1@news.worldonline.nl>
Source record: 75299
Cross-posted to:
misc.industry.electronics.marketplace,nl.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

En daar ben ik het dus niet mee eens !!!!!

79. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <Pjlj2.3801$Eg3.24765@news13.ispnews.com>
Source record: 75300
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Roy Lewallen wrote in message <368C536C.978777BC@teleport.com>...
>Artech House's _Microwave Engineers' Handbook_, Vol. 2, shows "Epoxy,
>polyester, or silicone fiberglass laminate (120 lbs/cubic foot)" to
>have a dissipation factor of about 0.007 at "microwave frequencies",
>defined as 1 - 30 GHz (with a caution that values will vary with
>frequency). The value is sure to vary a lot with formulation as well
>as frequency.
>
>_Reference Data for Radio Engineers_ gives about 0.02 - 0.03 for epoxy
>resin at 3 GHz.
>
>I recently designed a 6 GHz oscillator on the stuff with no problem,
>but the design would be quite tolerant of loss, and I made no effort
>to determine just how much there was.
>
>Roy Lewallen, W7EL
>
>Bert Douglas wrote:
>>
>> Hi net folks,
>>
>> FR4 is only specified at 1 MHZ.
>> I am wondering if anyone can give me a ball park estimate of its
dissipation
>> factor (loss tangent) at 2.5 GHZ ?
>>
>> Thanks,
>> Bert Douglas

Just to add a little to what Roy said, the conventional G-10/FR-4 material gets fairly lossy above 1 GHz or so. The Artech information is extremely optimistic and the value Roy quotes from the Reference Data for Engineers book is much more realistic.

Polyester fiberglass (Glasteel) is a lower loss material in this frequency range but the manufacturing process tends to produce a material with somewhat nonisotropic dielectric properties (cross grain is different than machine grain). Also thickness variations in this product are not as tightly controlled making microstrip design rather difficult to reproduce.

Specialized PCB material for microwave use is generally used above S-band. It is expensive, but it is reproducible. Manufacturers are Rogers, Trans-Tech, Arlon, Gore, etc.

Most of my experience in this area is at least two years old. With the push for 2.45 GHz digital PCS and such, I expect some of the circuit board manufacturers have spec'ed their materials for this band. I would also expect that some new board materials have been produced with better dielectric properties than FR-4 but not as expensive as the Duroids and such. Maybe Glasteel has seen the light! :-)

Barry L. Ornitz WA4VZQ ornitz@dpnet.net

80. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <qG+FEKAIBfj2EwsQ@ifwtech.demon.co.uk>
Source record: 75301

Carl Bauman wrote:
>|G0MJW was writing about the British regulations, but in fact that
>|definition is identical to the one used by the FCC (except that it says
>|"power supplied to the antenna", which means that Gs can allow for
>|transmission line losses).
>
>
>I did see that he was in G-land, but I was sure that the regs would be
>similar to keep the technical definitions consistent internationally. As it
>was, he only omitted that it was over an 'RF' cycle.

Since the two sets of national regulations are otherwise so very
different, I was astounded that the technical definitions are so nearly
the same!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

81. 12 VOLT POWER SUPPLY XFORMERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: repairrad@aol.com
Message-ID: <19990102072849.20826.00004363@ng153.aol.com>
Source record: 75302

28 VOLT AT 30 AMP CENTER TAPPED TRANSFORMERS $25.00EA. PLUS SHIPPING

82. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <368E2774.154BBEE9@one.net>
Source record: 75303

Carl Bauman wrote:
>
> Rich Griffiths wrote in message <368CEAB7.6817CAEF@one.net>...
> |Carl Bauman wrote:
> |>
> |< snip previous posting >
> |>
> |> Since r.m.s. is a power function, I can see why you get upset when
> someone
> |> mentions "r.m.s. power". It's like saying "power power", which is
> |> redundant. However, the books I have at hand indicate that the average
> |> power *is proportional* to the r.m.s. value, which is what I did say.
> |>
> |> and a Happy New Year to you too!
> |> Carl WB6YFZ
> |
> |You've lost me with the "power function" statement.
> |
> |However, I'm pretty sure that average power is *not* proportional to the
> |RMS value in the general case.
> |
> |Prms = SQRT((1/T) * Integral0->T(P^2 dt))
> |
> |Pave = (1/T) * Integral0->T(P dt)
> |
> |where Integral0->T means the integral from zero to time T.
> |
> |Prms and Pave are proportional in a few cases, but not in many typical
> |cases.
>
> I wasn't talking in the general case. For any waveform, Pave = K*Prms for
> that waveform.

OK, but of what use is this fact? We have a factor K that has no
utility whatever. It's different for every waveform, which means it
changes every millisecond I speak into the microphone.

> K will likely be different for different waveforms, but when
> talking generally about power, what happens to one, happens to the other.
> BTW, when referring to power, r.m.s. also describes a physical property, not
> just a statistical one.
>
> 73,
> Carl WB6YFZ

Could you explain that further? RMS is definitely a statistic. I don't know what it means to call it a physical property.

Rich W2RG

83. Re: 12 VOLT POWER SUPPLY XFORMERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990102090913.06338.00002221@ng49.aol.com>
Source record: 75304

>
>28 VOLT AT 30 AMP CENTER TAPPED TRANSFORMERS $25.00EA. PLUS SHIPPING

Is that 28VAC at rated load? and where are you at?

W4ZCB

84. FS KENWOOD TS-440AT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Gabriel G melo <n1hhf@110.net>
Message-ID: <76lci0oqm1@stalker.oem.net>
Source record: 75305

n1hhf@110.net

85. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368E2F06.7F176CAE@mwci.net>
Source record: 75306

> > |Prms = SQRT((1/T) * Integral0->T(P^2 dt))

This is incorrect. The RMS value of "any" function F(t) is

Frms = 1/T int(0 to T) F(t)^2 dt

Bill W0IYH

86. Internet sports talk help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: btoal@aol.com
Message-ID: <19990102104504.00396.00007661@ng-ft1.aol.com>
Source record: 75307

I recently downloaded Destiny Lite and started doing sports talk shows utilizing the software. I have done local radio with this format and when I heard about destiny, it seemed like a great way to continue doing something I love, with a potential to reach a wide audience. Recently I got the brainstorm that with enough people who posses the software, I could start kind of an online sports station (obviously not a station as much as someone continuously doing a sports talk show on destiny with the same title so it would seem like one station). I would like to treat it like a station however, where hosts get certain time slots, and listeners can email questions to the host, staff meetings via chatrooms or email etc. Obviously this would all be non profit and volunteer.
My purpose for writing this email is basically two fold. First, can someone help me out in letting me know if this is a feasible concept (even f it were just an evening thing where we ran from 5-11 PM). And secondly if this was an idea that I could get off the ground would there be anyone interested in taking a time slot? Any help you might be willing to offer would be appreciated.
Thank you,
Brian Toal
The Perfect Stranger

87. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: jfriley@no.thanks.airmail.net
Message-ID: <368e4173.6485145@netnews.worldnet.att.net>
Source record: 75308

>>To describe a PEP, a power level in watts, as having an rms value is
>>meaningless.

No it isn't. It's a quite simple and proper way of describing the peak voltage and power output capability of a power amplifier. The average power of the amplifier is of no consequence to the amplifier except in certain design areas. It is the peak output power (within the linear range, that is) capability that defines the amplifier's power rating. It is the type of voice you have, the type of audio and/or RF processing you use which determines the RMS Power. And the characteristics of the meters determine what you see as RMS power on your Wattmeter, etc.

Why this concept continues to be the source of discussion, debate, misunderstanding, and misconception is simply beyond me. In SSB, DSB, AM, CW, etc., the peak power capability of the transmitter is the important issue. The definition simply needs to be refined to the peak power capability (while still in the linear transfer area) when AM-relalted modulation signals are being amplified.

Fred, W8OY
jfriley@airmail.net

88. Who Was Needing Phenolic Stock?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "J. Lee Smith" <ckvnfm@mb.sympatico.ca>
Message-ID: <01be3669$68e29ba0$6735c8cd@ckvnfmmb.sympatico.ca.mb.sympatico.ca>
Source record: 75309

I tried to email according to the instructions, but was no able to get it through. I have a good supply that I have not been doing anything with for quite awhile, and would be happy to send some to you for the cost of postage and a dollar or two.

Lee Smith
VE4ANC

89. Need Coaxial Adapters - UG-565 "C" male / "N" female

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19990102112705.11626.00005822@ng99.aol.com>
Source record: 75310

Looking for 2 or 3 adapters - with "C" male on one end, "N" female on the other.

This is a UG-565.

Will pay cash or have UG-567 - "C" right angle adapters, UG-643 - "C" double female adapter or other connectors to trade.

Please reply via email.

Thanks,

Bill

90. Re: Grid Dip Meter Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: Richard Earl <w9juc@juno.com>
Message-ID: <368E4AB4.C8B78C27@juno.com>
Source record: 75311

Hi Russ,

Hi-Manuals
P.O. BOX 802
COUNCIL BLUFFS , IA 51502-0802

They lisst a manual for the GD1B for $15.80

They have no phone number or web site.

GL es 73

Rich

W9JUC

http://homepage.interaccess.com/~jpearl/DeltaXray.html

Russ Nixon wrote:
>
> I've gotten a Heath GD-1B from Ebay (for only $26.00 shipped!) and I
> need a manual and operating instructions for it. I also need the specs
> for the highest coil (the hairpin one). I plugged it in and it seems to
> work, but I need some help.
>
> --
> Russ Nixon - KF4WXD
> The clock of life is wound but once and no man has the power
> to say just when the hands will stop, nor at what day and hour.
>
> Carl Bauman wrote:
> >
> > 8877@my-dejanews.com <8877@my-dejanews.com> wrote in message
> > <76caah$uv0$1@nnrp1.dejanews.com>...
> > |In article <768aib$ne4$1@nnrp1.dejanews.com>,
> > | littlejohn_1@hotmail.com wrote:
> > |> Greetings,
> > |>
> > |> Can anyone suggest a good grid dip meter? What should I look for? I know
> > of
> > |> a Kenwood DM-81 for sale, is this a good meter?
> > |
> > |If you can find an ooooold MEASUREMENTS, tube type true DIP meter, you
> > v'got
> > |it made. All others are toys. In a previus question on how to cut coils,
> > >
> > ... snip ...

> >
> > And If you can find a Measurements model 59, make sure the serial numbers on
> > the coil set match the number on the RF head (the round one) or the dial
> > calibration can be *way* off.
> >
> > Carl WB6YFZ

91. Re: Need Two ECG333 or comparable responses!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be360f$f87b6bc0$30eee6ce@kovar.inav.net>
Source record: 75312

```
--
Jack Kovar
k0var
Iowa

8877@my-dejanews.com wrote in article <76gk6m$7hp$1@nnrp1.dejanews.com>...
> In article <01be3473$6df97160$e6d0a0cd@kovar.inav.net>,
> "kovar" <kovar@ia.net> wrote:
> >
> > I have a Ten-Tec Triton with two bad RF transistors.
> > Original part number is PT9784, which crosses to a ECG333.
> >
> > If you have Two in need of a new home, please let me know How much
you
> > would like for them.
> >
> > OOOPS!
> > "My two year old switched it to transmit mode with no antenna."
> > By the time I figured out what happened, Radio had shorted RF
> > transistors.
>
> Is Your two year old licensed?
Applied for N0CRY! unless you already have it.

> Is Your two year old allways transmiting unsupervised?
No! He just flips switches, I turned on the power switch a week later.

> Is your two year old allready been infected (by you?)
Sorry! I do not sense your humor MR. 8877.

> Does your two year old know the rules?
He knows are rules and is very well behaved for his age.

> Does your two year old know he-she diserves to burn any
> unattented radios.
Diserves?
You problem have a radio that will not transmit if the power is off and
turned back on if left in transmit mode. Try it.

Not that I am comparing you, MR.8877 to a Two year old.
>
OH! BY THE WAY DID YOU HAVE ANY TRANSISTORS or any positive
comments that may help me?
>
>
> Thanks for interest,
```

> > 319-378-9852
> >
> > Jack Kovar
> > k0var
> > Iowa
> >
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

>

92. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368E49F1.78D31F29@mwci.net>
Source record: 75313

William E. Sabin wrote:

> > > |Prms = SQRT((1/T) * Integral0->T(P^2 dt))
>
> This is incorrect. The RMS value of "any" function F(t) is
>
> Frms = 1/T int(0 to T) F(t)^2 dt
>
> Bill W0IYH

My correction was incorrect. The original equation is correct after all.

Frms = sqrt(1/T int(0 to T) F(t)^2 dt)

Bill W0IYH

93. Re: Microphones for IC-756

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Gareth Crispell <gareth@capecod.net>
Message-ID: <368FB9FD.6E5F3AAD@capecod.net>
Source record: 75164
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Oleg Vakushin wrote:
>
> Hello!
> Does anyone have a experience of using ICOM's microphones SM-20 and SM-8?
> Which one give better signal quality? I guess use it with IC-756. May be
> exist better choice instead of ICOM's microphone for that TRX?
>
> Thanks
>
> Oleg
> RV9AX
>
> --
> rv9ax@emirates.net.ae

I use the Heil HM-10 (toggle switch between element #4 and #5). I
nearly always get good audio reports when used with the 756. I do
not use a mic pre-amp as I find the mic gain on the 756 is
sufficient. This was not true with the 726. A pre-amp is necessary.
All of these low end stock mics will do the job. To get studio
quality super audio you have to use mics that cost as much as the
rigs. I don't really see the point on side band unless you have bucs
to burn!

Gareth http://www.capecod.net/~gareth/n1msv.htm

as the sun is setting, it is also rising.....

94. Re: MY POWER SUPPLY UPGRADE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <368FC1D4.C3A43EA8@usit.net>
Source record: 75165

Sounds like your pretty steamed up. Simmer down and I will try to help you out. I think I read or re-read all the previous posts. There was only one that gave any info at all about what you have on hand. (the one where you briefly described a supply with 12 2n3055 power transistors in it.) I dont need any info about your mother's feet, but I will surely have to know a little more about the electronics you have on hand in order to help you. You very well may have everything you need to make the supply you require, but we dont know what you have.

Give a better description. For each supply, try operating it into a load that you think will be reasonable.. at least an amp or two. Find out what the output voltage is and whether its working. Use a vom and find out what the raw dc voltage is before the pass transistors. Measure the AC voltage at the input to the rectifiers. Power it down and make some visual inspections, or maybe do this first. Note some things like the dimensions of the transformer (gives us a rough estimate of power capability), values of the filter caps, describe the diodes...are they a 1n number? are they huge stud mount devices? Look at the chassis...is there any usefull info there? like the ratings of output voltage and current? Are all the supplies the same, or are there different kinds? The little info you gave before, like the 12 transistors tells me that it is capable of a good current, but more is needed.

With this kind of input, you will probably get usefull feed back, but we just dont know what the hell you have. It may turn out that you can use the components to make a new supply, like say wiring 2 or more of the transformers in series to get higher voltage and use the transistors and frame as the pass regulator. There are a lot of possibilities, but you cant get any help when you just say that you have a power supply and you want instructions for increasing the output. It doesnt work like that.

Don

FREE EAST TIMOR wrote:
>
> Thank you for your request
> I did not particularly want to get philosophical when it comes to needing a
> large power supply.
> I have a number of large power supply units constructed for the old style
> computers, the parts basically consist of very large transformers,
> capacitors, diodes, and power transistors. I have a radio that requires some
> 20 plus amps to drive it.
> I wish to build my own 13.8 volt 25amp power supply, I am not sure how to
> piggy back the power diodes to allow me to draw that much current. I will
> then have to set up a crow bar circuit to limit the voltage output.

> One of the things I am conscious of is that I may need resistors and smaller
> caps to make the thing run more efficiently etc etc. I did not want to go
> into a lot of detail about my mothers shoe size and why she had flat feet. I
> consider that the request was simple, does anyone have a circuit to increase
> the power output on a power supply?
> It seemed to give people an excuse to write a whole range of philosophical
> shit and totally avoid the subject, I would have thought that such a simple
> matter would only take a Ham a few minutes to digest and come back with
> something.
> Perhaps we have a lot of WANABE HAMS out there just cruising the net.
> laurens

95. EBAY-Millen GDO w/1 LF coil, HURRY!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990103142026.09164.00006666@ng61.aol.com>
Source record: 75166

Hi Guys;
OVER IN 7 HOURS!
Need a millen GDO with one LF coil?
500 to 1050khz>
Its closing soon at $33 or so.
URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=52016987
Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

96. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <368FBBA4.434E86AE@mwci.net>
Source record: 75167

William E. Sabin wrote:

> Roy Lewallen wrote:
>
> > The ratio of RMS to average power is of course different for each
> > waveform, so the 0.88 dB difference you calculate wouldn't hold for,
> > say, music or voice waveforms.
>
> I didn't claim that, of course, as you mention.

After thinking about this a little more, while shoveling the snow, it occurs to me that 0.88 dB is correct for any waveform. It goes like this:

A complex waveform can be broken down into a set of sine wave components at various frequencies. The total power is the sum of the powers at the distinct frequencies. This applies to the average power at each frequency, therefore it applies also to the rms power at each frequency.

I'm thinking more and more that the rms power thing for audio systems is a marketing gimmick. A 100 watt amplifier is made to look like a 122 watt amplifier.

Bill W0IYH

97. 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: aljon@worldnet.att.net
Message-ID: <76oi7a$7j2@bgtnsc01.worldnet.att.net>
Source record: 75168

Urgently have need for 6 volt battery, with minimum 4 Amp-Hour capacity, for special application.

Would someone please advise source for such item with source name, address, and telephone number - 800 type, if possible (plus please include any internet URL for same, if possible).

Greatly appreciate help. Thanks.

John

98. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368FDBC3.97868C28@teleport.com>
Source record: 75169

> William E. Sabin wrote:
>
> > Roy Lewallen wrote:
> >
> > > The ratio of RMS to average power is of course different for each
> > > waveform, so the 0.88 dB difference you calculate wouldn't hold for,
> > > say, music or voice waveforms.
> >
> > I didn't claim that, of course, as you mention.
>
> After thinking about this a little more, while shoveling the snow, it occurs to me
> that 0.88 dB is correct for any waveform. It goes like this:
>
> A complex waveform can be broken down into a set of sine wave components at various
> frequencies. The total power is the sum of the powers at the distinct frequencies.
> This applies to the average power at each frequency, therefore it applies also to the
> rms power at each frequency.
>
> I'm thinking more and more that the rms power thing for audio systems is a marketing
> gimmick. A 100 watt amplifier is made to look like a 122 watt amplifier.
>
> Bill W0IYH

I don't believe that 0.88 dB is correct for all waveforms. Remember, the 0.88 dB value isn't the value for a sinusoidal power waveform, but for a sine-squared waveform. For a symmetrical sinusoidal waveform, the RMS is the well-known 1/sqrt(2) times the peak value, while the average is zero. Adding the sinusoidal components of the voltage or current waveforms doesn't work, either, because the square of the sum isn't equal to the sum of the squares. As an example of another power waveform, consider a square wave of current, +1 volt for half its period and -1 volt for the other half, going through a 1 ohm resistor. As a function of time, the power is constant, with value of one watt. Both the average and RMS values of this waveform are one watt.

I have the same suspicion you do about audio amplifiers, but would like to hear from some audio folks on the topic. There's undoubtedly a newsgroup catering to this, so it would be an interesting question to post there.

Roy Lewallen, W7EL

99. Re: 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368FDD1C.B7660286@teleport.com>
Source record: 75170

Don't know if you're looking for a primary battery, lead-acid, or
NiCd, but E.H. Yost & Co. has a good selection of the latter two.

(608) 831-3443. They're in Wisconsin, and you can get their address
when you call.

Roy Lewallen, W7EL

John wrote:
>
> Urgently have need for 6 volt battery, with minimum 4 Amp-Hour capacity, for
> special application.
>
> Would someone please advise source for such item with source name, address,
> and telephone number - 800 type, if possible (plus please include any internet
> URL for same, if possible).
>
> Greatly appreciate help. Thanks.
>
> John

100. Re: 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <368FDFD3.B3F1861C@starc.org>
Source record: 75171
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi John,

Why not go to your local auto supply store, most motorcycles run off 6V batteries, they are reasonably
small and not too expensive :)

--Tom
KB1CGA

John wrote:

> Urgently have need for 6 volt battery, with minimum 4 Amp-Hour capacity, for
> special application.
>
> Would someone please advise source for such item with source name, address,
> and telephone number - 800 type, if possible (plus please include any internet
> URL for same, if possible).
>
> Greatly appreciate help. Thanks.
>
> John

101. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368FDFA8.BA0C99FD@teleport.com>
Source record: 75172
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Bert Douglas wrote:
>
> Define "better" please.
>
> Yes I know that teflon is easier to design with because its electrical
> properties are "nicer".
>
> But teflon is also more expensive. It seems to me that it is up to me as a
> good designer, to decide the tradeoff of non-recurring expense versus
> per-unit expense, considering my own situation.

Spoken like a true engineer. I wouldn't have considered using FR4 for microwave design when I was designing high-cost, low-volume test equipment. But as I mentioned, I recently did a 6 GHz oscillator on the stuff. This was for a client making a very low-cost, high-volume product. By making the design tolerant to loss, I was able to keep the cost (an extremely important factor here) down considerably by using FR4. As for a one-off homebrew project, I might use FR4 even for that, if that's all I had on hand and if the design would tolerate the loss.

Anyone can design a bridge that can stand up. It takes an engineer to design a bridge that will barely stand up.

Roy Lewallen, W7EL

102. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <368FDFBD.3200@pop.removethistomailme.net>
Source record: 75173
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

```
Roy Lewallen wrote:
>
> Anyone can design a bridge that can stand up. It takes an engineer to
> design a bridge that will barely stand up.
>

LOL! That one deserves immortalization on a bumper sticker.

-- jm KE5FX

------------------------------------------------------
Note: My E-mail address has been altered to avoid spam
------------------------------------------------------
```

103. Re: 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <76onqc$nn3$1@news7.svr.pol.co.uk>
Source record: 75174

hi John, try a motorcycle lead/acid battery. any good Mcycle dealer should have them

--
=== Mike W mike@corn2.freeserve.co.uk ===
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
John wrote in message <76oi7a$7j2@bgtnsc01.worldnet.att.net>...
>Urgently have need for 6 volt battery, with minimum 4 Amp-Hour capacity, for
>special application.
>
>Would someone please advise source for such item with source name, address,
>and telephone number - 800 type, if possible (plus please include any internet
>URL for same, if possible).
>
>Greatly appreciate help. Thanks.
>
>
>John
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

104. Re: 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: dgsholar <dgsholar@gte.net>
Message-ID: <76oo4vcqn1@news-1.news.gte.net>
Source record: 75175
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

You could also go to Wal-Mart they have motorcycle/lawn and garden
batteries. Pretty cheap.

Dave
KE4YDY

Tom Repstad wrote in message <368FDFD3.B3F1861C@starc.org>...
>Hi John,
>
>Why not go to your local auto supply store, most motorcycles run off 6V
batteries,
>they are reasonably
>small and not too expensive :)
>
>--Tom
>KB1CGA
>
>John wrote:
>
>> Urgently have need for 6 volt battery, with minimum 4 Amp-Hour capacity,
for
>> special application.
>>
>> Would someone please advise source for such item with source name,
address,
>> and telephone number - 800 type, if possible (plus please include any
internet
>> URL for same, if possible).
>>
>> Greatly appreciate help. Thanks.
>>
>> John
>
>
>

105. crystal receiver for the bc band!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: ignatz@datasync.com
Message-ID: <76oqan$h2u$3@news.ametro.net>
Source record: 75176

build a crystal raido! my way cheep! if you play your cards right you
will get an A+ and it wont cost you a penny!
http://www.datasync.com/~ignatz/crystal.htm
or my 3-7MHz receiver
http://www.datasync.com/~ignatz/receive.htm
happy DXing
art

106. Re: Industrial Tubes f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: stefan@*emeraldnet.net
Message-ID: <368ffc8c.162662024@news.emeraldnet.net>
Source record: 75177
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

On Sat, 2 Jan 1999 18:38:25 -0600, "Ron Ostman" <w0nyq@minntaccdp.com>
uttered forth the following:

>NL-760P, (4) @ $25.00 ea. plus shipping
>NL-716 , (2) @ $20.00 ea. "
>NL-1C , (3) @ $10.00 ea. "
>710/6011, (2) @ $30.00 ea. "
>
>Will sell as lot for $200.00 plus shipping.
>
>All tubes are N.O.S. in original boxes. I would consider possible trades for
>tubes more suitable for amateur use.
>
>73,
>
>Ron Ostman, W0NYQ
>Mt. Iron, MN
>

Good luck Ron, I for one can't think of any boatanchors that use large
HV thyratrons... even my radar set does not use those...

Stefan Bishay - KC7SJC
Seattle, WA
ICQ 2141646
stefan00@*emeraldnet.net
Remove * to email

107. FS: Raytheon QKK531 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990103185103.17975.00001306@ng148.aol.com>
Source record: 75178

I am selling one (1) Raytheon QKK531 tube. For a picture and more info, visit my "online garage sale" at;

http://members.aol.com/Reactor001

Regards,
Tom Mitchell
email - OvrReactor@aol.com

108. wtb coil

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: chickenfuz@aol.com
Message-ID: <19990103185701.20407.00006826@ng97.aol.com>
Source record: 75179

Hi,
Looking for piece of coil stock 3in dia 4 turns per inch 8 inchs long,
can you help?
Thanks, WA6CBP

109. 1.85 Mhz transformer design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be3774$b7352500$e1874d0c@default>
Source record: 75180

I'm making a transformer to match a .43 ohm (43/100) source
to a 50 ohm load to operate at 1.85 Mhz.
The amateur handbook talks about broadband transformers
and says "The reactance of the windings should be at least
four times the impedance the winding is designed to look into."
This is not a broadband transformer so do I follow the same
formula or is there another for narrowband transformers.

Mike

110. Re: 1.85 Mhz transformer design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3690105C.77C9735C@teleport.com>
Source record: 75181

For a tuned transformer you can get by with a lower shunt impedance, as long as the impedance is reactive and not resistive. This means using a material which has a reasonably high Q at the frequency of interest. (Type 2 and 6 powdered iron fit this description or, if you're not dealing with much power, some of the 60-series ferrites should be o.k.) The winding impedance can generally be absorbed into the tuned circuits. That is, it becomes part of the tuned circuits. The hardest thing to deal with will probably be stray series inductive reactance, which is likely to be as large or larger than the 0.43 ohm resistance you're trying to match. You may or may not be able to compensate for this by adjusting the tuned circuits. It might be easier to do the transformation in two stages, with two transformers.

You might consider using something like an L network, or possibly a tee or pi. With the right choice of topology, you can probably absorb strays into the network elements.

Roy Lewallen, W7EL

AMDX wrote:
>
> I'm making a transformer to match a .43 ohm (43/100) source
> to a 50 ohm load to operate at 1.85 Mhz.
> The amateur handbook talks about broadband transformers
> and says "The reactance of the windings should be at least
> four times the impedance the winding is designed to look into."
> This is not a broadband transformer so do I follow the same
> formula or is there another for narrowband transformers.
>
> Mike

111. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <369008DF.300593F6@mwci.net>
Source record: 75182

Roy Lewallen wrote:

> > William E. Sabin wrote:
> >
> > > Roy Lewallen wrote:
> > >
> > > > The ratio of RMS to average power is of course different for each
> > > > waveform, so the 0.88 dB difference you calculate wouldn't hold for,
> > > > say, music or voice waveforms.
> > >
> > > I didn't claim that, of course, as you mention.
> >
> > After thinking about this a little more, while shoveling the snow, it occurs to me
> > that 0.88 dB is correct for any waveform. It goes like this:
> >
> > A complex waveform can be broken down into a set of sine wave components at various
> > frequencies. The total power is the sum of the powers at the distinct frequencies.
> > This applies to the average power at each frequency, therefore it applies also to the
> > rms power at each frequency.
> >
>
> I don't believe that 0.88 dB is correct for all waveforms. Remember,
> the 0.88 dB value isn't the value for a sinusoidal power waveform, but
> for a sine-squared waveform.

The 0.88 value for rms power of a sine wave is the average value of a"square of a sine-squared" function, as shown in a previous post.
The average power is for the average of a "sine-squared" function. See text below for clarification.

> For a symmetrical sinusoidal waveform,
> the RMS is the well-known 1/sqrt(2) times the peak value, while the
> average is zero. Adding the sinusoidal components of the voltage or
> current waveforms doesn't work, either, because the square of the sum
> isn't equal to the sum of the squares. As an example of another power
> waveform, consider a square wave of current, +1 volt for half its
> period and -1 volt for the other half, going through a 1 ohm resistor.
> As a function of time, the power is constant, with value of one watt.
> Both the average and RMS values of this waveform are one watt.

The "average power" is equal to the "peak power" of the square wave and the rms "voltage" is equal to the "peak voltage" of the square wave. Average power is *always* rms voltage squared (if R=1 ohm).

If you decompose the square wave (or any other wave) into its frequency components, and calculate the average power in each component, and then add all of these up, you get the

wave average power. If you do the same thing with the rms power components you get the rms power (not the average power) of the wave, which is 0.88 dB higher.

The calculation of the average power for each frequency component involves integrating the sine-squared function.

Pave = 1/(2 pi) * int(0 to 2 pi) [V * sin (theta)]^2 d(theta)
=1/(2 pi) * int (0 to 2 pi) [V^2 * 1/2 * (1 - cos(2 theta)] d(theta)

To get the rms power we integrate the square of the last integrand, which is the term in square brackets:

[V^2 * 1/2 * (1 - cos(2 theta)]^2

If we do this for each frequency component and add them up we get the rms power for the square wave.

Parseval's Theorem equates the average power of a waveform in the time domain and the sum of the spectral sine wave average power components, and that is what we are dealing with here. Parseval's Theorem would also apply to the rms power idea. In other words, it is as if we increased the amplitude of the square wave by 0.88 dB, found the rms power of each sine wave component, and then added them all up to get the equality that Parseval's Theorem requires.

The mathematics of all of this hangs together quite well and I am sure it is OK.

Bill W0IYH

112. Build An Inexpensive Repeater Controller from a Basic Stamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Roger <n0yox@iland.net>
Message-ID: <76pb12csn1@remarQ.com>
Source record: 75183
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Build An Inexpensive Repeater Controller from a Basic Stamp

http://www.iland.net/~n0yox

113. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <368FE5F8.8CC@naples.infi.net>
Source record: 75184

Stuart Baynes wrote:
>
> Looking to make a simple FM tranceiver for the 6m band, frequency steps of
> either 2.5, 10 or 12.5.
> Has any body seen any chips that can do this, that are self contained and
> that don't need an on board computer to program it? Look forward to any
> replies.
> Stuart ZS6OUN @ ZS0DLD

Look in the Motorola PLL chips; they have one that is designed for that
type of operation.

114. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36904229.209FB7E5@teleport.com>
Source record: 75185

That's a fine argument, but it gives the wrong result for a simple square wave. Rather than searching for a flaw, I'll simply directly calculate, by definition, the average and RMS power of the example I gave in my last posting -- a square-wave current waveform through a one ohm resistor.

The current is:

+1 volt from t = 0 to omega/(4*pi)
-1 volt from t = omega/(4*pi) to omega/(2*pi)

The period is omega/(2*pi) = T

The power = (+1)^2 = +1 watt for the first half period.
The power = (-1)^2 = +1 watt for the second half period.
So the power = +1 watt over the whole period.

The average power = 1/T * Integral{t = 0 to T} of (+1) dt = 1/T * t {t = 0 to T} = 1

The RMS power = sqrt[1/T * Integral{t = 0 to T} of (+1)^2 dt] = sqrt(1) = 1

For this waveform, the average power = the RMS power. What have I done wrong in this simple calculation so it doesn't agree with your result?

Roy Lewallen, W7EL

William E. Sabin wrote:
>
> The 0.88 value for rms power of a sine wave is the average value of a"square of a
> sine-squared" function, as shown in a previous post.
> The average power is for the average of a "sine-squared" function. See text below for
> clarification.
>
> > For a symmetrical sinusoidal waveform,
> > the RMS is the well-known 1/sqrt(2) times the peak value, while the
> > average is zero. Adding the sinusoidal components of the voltage or
> > current waveforms doesn't work, either, because the square of the sum
> > isn't equal to the sum of the squares. As an example of another power
> > waveform, consider a square wave of current, +1 volt for half its
> > period and -1 volt for the other half, going through a 1 ohm resistor.
> > As a function of time, the power is constant, with value of one watt.
> > Both the average and RMS values of this waveform are one watt.
>
> The "average power" is equal to the "peak power" of the square wave and the rms "voltage"
> is equal to the "peak voltage" of the square wave. Average power is *always* rms voltage

> squared (if R=1 ohm).
>
> If you decompose the square wave (or any other wave) into its frequency components, and
> calculate the average power in each component, and then add all of these up, you get the
> wave average power. If you do the same thing with the rms power components you get the
rms
> power (not the average power) of the wave, which is 0.88 dB higher.
>
> The calculation of the average power for each frequency component involves integrating
the
> sine-squared function.
>
> Pave = 1/(2 pi) * int(0 to 2 pi) [V * sin (theta)]^2 d(theta)
> =1/(2 pi) * int (0 to 2 pi) [V^2 * 1/2 * (1 - cos(2 theta)] d(theta)
>
> To get the rms power we integrate the square of the last integrand, which is the term in
> square brackets:
>
> [V^2 * 1/2 * (1 - cos(2 theta)]^2
>
> If we do this for each frequency component and add them up we get the rms power for the
> square wave.
>
> Parseval's Theorem equates the average power of a waveform in the time domain and the sum
> of the spectral sine wave average power components, and that is what we are dealing with
> here. Parseval's Theorem would also apply to the rms power idea. In other words, it is as
> if we increased the amplitude of the square wave by 0.88 dB, found the rms power of each
> sine wave component, and then added them all up to get the equality that Parseval's
Theorem
> requires.
>
> The mathematics of all of this hangs together quite well and I am sure it is OK.
>
> Bill W0IYH

115. Re: POWER SUPPLY OUTPUT INCREASE.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: mark beutler <mbeutler@tds.net>
Message-ID: <36904FCE.36BCB5DC@tds.net>
Source record: 75186

FREE EAST TIMOR wrote:

> I have a 5 amp power supply and I would like to increase the power output to
> approx. 30 amps. I believe this is done using the 3055 power transistors,
> could some-one please draw me a circuit or explain where I can find a
> circuit to allow me to build this thing
> Laurens

No argument about some of the great suggestions I have seen, but I do have one alternate for someone trying to do this on a budget. I am making the assumption that what is needed is a 12VDC supply. One possibility is to modify a garage sale automotive type battery charger that is rated for the continuous current that you want. Usually, they have poor filtering, since they are using the battery being charged as the "filter", if you will. So, one can add capacitance to smooth out the output. These things are NOT very well regulated, so if you need a regulated supply, forget it or be prepared to do some plain and fancy modifications.

However, in any case, what you do get, for relatively cheap, is a transformer that will handle the continuous current required even if you have to build a pass transistor regulator.

BTW, one way to aquire some info is to call Motorola and ask for their "Linear and Switchmode Regulator Handbook". They will send you a copy for free. (this is a large, comprehensive book) Has gobs of different power supply designs based around all of their available regulators and schemes for high power output stuff as well. I saw a couple based on a regulator and pass transistor design that don't look too bad at all to build and would work with the above mentioned transformer. Their local phone number for Australia will be on the web. Many of the silicon manufacturers will do this sort of thing as a matter of course. I have aquired many very useful books this way for free or the cost of postage. I just happen to like the Motorola book since it is so well laid out.

Have fun and good luck to you.

-
mark beutler mbeutler@tds.net ICQ# 3851271
-

116. Re: 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: mark beutler <mbeutler@tds.net>
Message-ID: <369052C0.D9387097@tds.net>
Source record: 75187
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Tom Repstad wrote:

> Hi John,
>
> Why not go to your local auto supply store, most motorcycles run off 6V batteries,
> they are reasonably
> small and not too expensive :)
>
> --Tom
> KB1CGA
>
> John wrote:
>
> > Urgently have need for 6 volt battery, with minimum 4 Amp-Hour capacity, for
> > special application.
> >

Well, he's asking for a battery with rated at Amp-Hours as opposed to cold cranking amps.
An automotive battery is designed for short duration, high discharge current conditions and will perform poorly if called upon for long discharge duties. (usually will have a short life span, as well.)

An alternative to this is to buy a battery from Kmart or whatever designed to run a fish locator. These are designed for long slow discharge cycles and will last much longer under such use than a typical motorcycle battery. They are also usually gel cell batts that can be used laying on their sides or whatever, in case it needs to be tucked in a cabinet or something.
--
-
mark beutler mbeutler@tds.net ICQ# 3851271
-

117. WTB: UPC "Unique" Wire Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Vern Van Zandt <vvandt@televar.com>
Message-ID: <369074F7.D6A46ECC@televar.com>
Source record: 75188

I'm looking for two complete units (or parts) for a project. Looks are
not nearly as important as functionality.
Would prefer something in the local area (Washington State) if possible.

Please e-mail with details if you can help.

Thanks!
73 de N7GTB
Vern.

118. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF51pxt.y1@netcom.com>
Source record: 75189

In article <368B5B9E.87DEB2BE@teleport.com>,
Roy Lewallen <w7el@teleport.com> wrote:
>According to Terman's _Radio Engineering_ (p. 31, Third Ed.):
>
>"The total effect that the numerous small coil capacitances have can
>be represented to a high degree of accuracy by assuming that they can
>be replaced by a single condenser of appropriate size shunted across
>the coil terminals."
>
>The absolute best source I've ever found on coil calculations is the
>_Radiotron Designer's Handbook_, edited by F. Langford-Smith. Grab
>hold of a copy of this if you ever get the chance. (Or, if you don't
>want it, let me know!)

Newnes (Butterworth/Heinemann) reprinted this (Radio Designer's Guide
4th ed,? the non-US version) a year or so ago. Has anyone compared
this reprint (about $70) with the old classic book? (I can't talk the
local stores into getting a browsable copy, the Seattle bookstores
have abdicated technical book sales to Powell's, in Portland).

Also, there was a great thread on High Q inductors in sci.electronics.design
a year or two ago. Winfield Hill, the co-author of "The Art of
Electronics", was working on building some sort of equipment for a atomic
laser cooling physics experiment that needed a Hi Q tank for medium wave
frequencies. Should still be on Dejanews in the old archive.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

119. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <3C2CEB11AF87870F.E780DA77DDD213B4.FD4DBE89A60B5512@library-proxy.airnews.net>
Source record: 75248

On Sat, 02 Jan 1999 10:41:04 -0600, "William E. Sabin"
<sabinw@mwci.net> wrote:

>This is often true, but...the tubes and the power
>supply may overheat if the average power becomes too large.

I completely agree and said, in the first two sentences that average power was a matter for other design considerations, e.g., heat sink size, thermal conductivity, air flow, transformer size, fuse or breaker size. All these are important.

An old timer like yourself, older than dirt, ought to well remember the old 1 kW/2 kW confusion. "The power input to the final amplifier shall not exceed one kilowatt when measured using meters having a time constant of one-quarter second or less." Which meant 2 kW input, right? Gadzooks, some of those old advertisments tried to fudge that one way and another to get a 1 kW PEP Input amplifier to be a 2 kW amplifier.

Fred, W8OY
jfriley@airmail.net

120. Re: Various Types of capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <368EF444.C243BF0@usit.net>
Source record: 75249

Keith Brigode wrote:
>
> I'll admit some ignorance. Why are mylar capacitors used sometimes as
> bypass capacitors instead of ceramic?
>
> When do I use aluminum eletrolytic as apposed to tantalum?
>
> What do I use to replace old paper capacitors in old radios?
>
> Could someone refer me to some good reference on capacitors? I really
> don't know how I got to this point without knowing the basic
> differences.

Im no expert, either, but here is some stuff that I saw posted a while
back, and I was impressed enough to save the file to disc. The original
author is at the bottom. I dont think he would mind it being reposted.

Don

There are so many different kinds because each kind has characterisitics
that make it valuable in some applications. It's hard to nail
everything
down, but here are just a few guidelines that might help:

polystyrene: stable, low dielectric absorption, low distortion and high
Q,
but limited temperature range. Not generally very available new.
Polyester: same as Mylar. Almost all would be metalized, I think.
Good compromise for small size and low cost and reasonable audio
distortion performance. Useful to very low RF frequencies.
Polypropylene: Larger and higher cost than polyester, but lower
dielectric absorption and lower distortion. I've measured distortion
below -140dBc using polyprop caps in a single pole HP filter at its
cutoff freq. Polyester is maybe 20dB worse, still very good.
Ceramics
can be much worse! Because of good dielectric absorption, polyprops
are
good for pretty accurate integrators.
Ceramic: two main kinds: temp-stable and "high-K". The temp-stable
seem comparable with polyester for dielectric absorption and
distortion,
and the high-K type are much worse. The high-K also can generate
significant low freq noise when biased! Ceramics are generally very
good for RF bypassing, because they are available with extremely short
leads and low series inductance. The temp-stable kind can be among

the
best for low temp coefficient, and also are available in specific
temp coeffs.
Silver mica: larger than temp-stable ceramics generally. Do well at
RF for filtering and coupling. In some constructions, can handle a
lot of RF current. (Note: capacitors heat when AC current flows thru
them, and that limits how much current they can handle.)
Electrolytic: Aluminum and tantalum. Useful for energy storage, like
power supply filters and low-frequency bypassing on power supply lines
in circuits. Very temperature un-stable, and very high dielectric
absorption. Tantalums can be effective for bypassing frequencies up
to perhaps 1MHz.

People write whole books on capacitors...this is an extremely condensed
set of comments, and perhaps not even the most important things about
each type. Have a look in some books. I know that "Reference Data for
Radio Engineers" has a pretty good discussion of caps, and I'd be
really surprised if "The Art of Electronics" didn't have, too.

--
Cheers,
Tom
tom_bruhns@hp.com

121. Re: PEP vs RMS Protection Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <368F4F2A.3C83BB8E@teleport.com>
Source record: 75250

Correction:

Roy Lewallen wrote:
> . . .
> The reason for the confusion, I think, is that If you multiply RMS
> current times resistance, the result is the average (not RMS) power,
> which has the equivalent heating property I mentioned. Similarly, the
> RMS voltage divided by the resistance equals the average (not RMS)
> power. So the useful quantities when calculating heating effect are
> RMS voltage, RMS current, and average power. Not RMS power.

That should be:

The reason for the confusion, I think, is that If you multiply THE
SQUARE OF THE RMS current times resistance [that is, Irms^2 * R], the
result is the average (not RMS) power, which has the equivalent
heating property I mentioned. Similarly, the SQUARE OF RMS voltage
divided by the resistance [Vrms^2 / R] equals the average (not RMS)
power. So the useful quantities when calculating heating effect are
RMS voltage, RMS current, and average power. Not RMS power.

I apologize for the error.

Roy Lewallen, W7EL

122. MY POWER SUPPLY UPGRADE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: FREE EAST TIMOR <titania@ats.com.au>
Message-ID: <915363696.192513@dns2.ats.com.au>
Source record: 75251

Thank you for your request
I did not particularly want to get philosophical when it comes to needing a large power supply.
I have a number of large power supply units constructed for the old style computers, the parts basically consist of very large transformers, capacitors, diodes, and power transistors. I have a radio that requires some 20 plus amps to drive it.
I wish to build my own 13.8 volt 25amp power supply, I am not sure how to piggy back the power diodes to allow me to draw that much current. I will then have to set up a crow bar circuit to limit the voltage output.
One of the things I am conscious of is that I may need resistors and smaller caps to make the thing run more efficiently etc etc. I did not want to go into a lot of detail about my mothers shoe size and why she had flat feet. I consider that the request was simple, does anyone have a circuit to increase the power output on a power supply?
It seemed to give people an excuse to write a whole range of philosophical shit and totally avoid the subject, I would have thought that such a simple matter would only take a Ham a few minutes to digest and come back with something.
Perhaps we have a lot of WANABE HAMS out there just cruising the net.
laurens

123. Re: DTMF decoding w/Soundblaster

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <368f6206.391748460@netnews.worldnet.att.net>
Source record: 75252

(response also emailed to poster)

Michael, this URL might help. The code is written in C for Linux but
it should provide a starting point.

< http://www.zig.co.za/phrack/p50-13.html >

On Sat, 02 Jan 1999 20:12:14 -0600, "Michael W. Dunham"
<kb9mlh@amsat.org> wrote:

>Does anyone know of any source code in C or Basic that I can get a hold
>of which decodes DTMF tones through a Soundblaster.
>
>Please respond to kb9mlh@amsat.org

Ron N1ZHI
roncook@worldnet.att.net
cook@amsa.com

124. Re: KK7B Direct Conversion Receiver - revision?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: rohrwerk@pconline.cutthespam.com
Message-ID: <rohrwerk-0301990824320001@m18-3-9.pconline.com>
Source record: 75253

In article <Owdsj43M#GA.220@upnetnews02.moswest.msn.net>, "Mike Lucas W5CHR" <lucascom@email.msn.com> wrote:

> Chip- I don't have the URL handy, but try a search for < K0JD, John >Seboldt>.
>He had a really neat web site with a ton of links to various KK7B receiver >projects.

<http://www.pconline.com/~rohrwerk/k0jd/>

The miniR2 is actually my favorite now - lower diplexer loss, a more straightforward opamp for the audio section (so you can de-thump it with the usual back-to-back diode circuit in the feedback path).

Got the parts for some blocks from the "R2A" by Glen Leinweber, but haven't gotten round to it. And of course the DDS is cool to try per that QST article (link to an online version from my page).

Have fun, John K0JD

Spamfoil adr in header. Real adr: rohrwerk at pconline dot com

125. Microphones for IC-756

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Oleg Vakushin <rv9ax@emirates.net.ae>
Message-ID: <76o1b4$o5j4@news1.emirates.net.ae>
Source record: 75254
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello!
Does anyone have a experience of using ICOM's microphones SM-20 and SM-8?
Which one give better signal quality? I guess use it with IC-756. May be
exist better choice instead of ICOM's microphone for that TRX?

Thanks

Oleg
RV9AX

--
rv9ax@emirates.net.ae

126. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <MYLj2.1970$0t.1171621@news4.mia>
Source record: 75255
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

ed ngai wrote in message <368F1925.3B54DE08@sprintmail.com>...
>You'd be better off w/ telfon for GHz freq. Since that's whawt used in
>feedhorn circuits, phased arrays, etc.

Define "better" please.

Yes I know that teflon is easier to design with because its electrical
properties are "nicer".

But teflon is also more expensive. It seems to me that it is up to me as a
good designer, to decide the tradeoff of non-recurring expense versus
per-unit expense, considering my own situation.

>
>
>Barry L. Ornitz wrote:
>> Roy Lewallen wrote in message <368C536C.978777BC@teleport.com>...
>> >Artech House's _Microwave Engineers' Handbook_, Vol. 2, shows "Epoxy,
>> >polyester, or silicone fiberglass laminate (120 lbs/cubic foot)" to
>> >have a dissipation factor of about 0.007 at "microwave frequencies",
>> >defined as 1 - 30 GHz ... snip ...
>
>> >Roy Lewallen, W7EL
>
>> >Bert Douglas wrote:
>> >> Hi net folks, FR4 is only specified at 1 MHZ. I am wondering if
anyone
>> >> can give me a ball park estimate of its dissipation factor (loss
tangent)
>> >> at 2.5 GHZ ?
>> >> Thanks,
>> >> Bert Douglas
>
>> Just to add a little to what Roy said, the conventional G-10/FR-4
material
>> gets fairly lossy above 1 GHz or so.
>
>... snip ...
>

127. 13cm slotted waveguide antenna calculation??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: la8ak@online.no
Message-ID: <368f8b35.55894540@news.online.no>
Source record: 75256

Have now tested the program from W6BY -
http://reality.sgi.com/employees/byee_engr/slot_ant.html using mathcad
explorer to calculate the antenna. Have drawn the modified antenna, but
a question remains, have tried to email W6BY, but the email address
byee@mti.sgi.com, does not seem to work, any change?

My question is why it is the larger 'headspace' ?
Earlier we used half wavelength from center of last slot to end wall?
The 'headspace length' differs by quarterwave (free space).

Believe I found some more basic on this design earlier, but don't find
it now, any info?

73 jan-martin LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

128. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: rogue-warrior@usa.net
Message-ID: <369196c4.5573620@204.127.36.21>
Source record: 75257
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

On Fri, 01 Jan 1999 03:52:35 GMT, "Bert Douglas"
<bertdNOSPAM@dibbs.net> wrote:

>Hi net folks,
>
>FR4 is only specified at 1 MHZ.
>I am wondering if anyone can give me a ball park estimate of its dissipation
>factor (loss tangent) at 2.5 GHZ ?
>
>Thanks,
>Bert Douglas
>

I can't give you exact numbers, but from my experience designing
a 4 pole microstrip combline filter at 3 ghz the fr-4 will have about
6db more loss the 5880 duroid. in other words fr-4 is lossy as hell
at that freq.

If you have a Network Analyzer you should try comparing FR-4 with
Teflon. you'll see how great teflon really is.

129. FS Teflon wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <368FA0C9.980CC7E2@buffnet.net>
Source record: 75258

--I have silver plated stranded 22AWG teflon insulated hookup wire in 50 foot rolls, 10 rolls to a pack (500' total). Up to 10 different colors. shipped priority mail in the US for $20.

1000' rolls of one color each roll for $27 plus UPS charges
The 1000' rolls are available in 22,24 and 26AWG (you save since the labor is reduced)

This is very nice (new) wire at a very low price.

73,

Jim N2go

130. Re: Absolute Beginners Dream of Valve Radios...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Barry McCarthy <barry@silvamethod.demon.co.uk>
Message-ID: <AaSjPDAsm6j2EwZy@silvamethod.demon.co.uk>
Source record: 75259

In article <libbycross-3112981044130001@nas2-53.thefree.net>,
libbycross@yahoo.com writes
>Apologies if this is sent to the wrong newsgroup but I wondered if you could
>give me some pointers on where to find circuit diagrams for building a valve
>radio? Web sites would be particularly useful or library/book resources in
>the UK. Any info would be most appreciated.
>
>Regards
>
>Libby Cross
>(Cheshire, UK)

Take look at Harry's Homebrew web site, there are several easy valve
tx's & rx's. Also on a Japanese site. I can't recall the URL's off-
hand, but if you go to www.nettaxi.com/citizens/ei9gq, you will find the
links for them both.

The Japanese web site should delight you and keep your soldering iron
smoking.

Good luck,
--
Barry McCarthy
G0WBF

131. FS: Collins 51J PTO & parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: k6sde@my-dejanews.com
Message-ID: <76of4n$6e6$1@nnrp1.dejanews.com>
Source record: 75260

I have a Collins 70E-15 PTO for sale. I have never fired it up but my recollection from many years ago is that it was represented as being a workable unit. It doesn't appear that the star washers on the "can" have been moved which may mean that in spite of the broken seal on it (old age?) it hasn't been opened but WHO KNOWS?

I'm asking $50 + shipping & insurance which I would think would be less than $8 or Priority Mail.

You may view several pictures of it at:

http://www.geocities.com/Heartland/Ridge/7463/51J/51jpto1.jpg

http://www.geocities.com/Heartland/Ridge/7463/51J/51jpto2.jpg

http://www.geocities.com/Heartland/Ridge/7463/51J/51jpto3.jpg

By the way, I also still have some other 51J parts left from my parts unit. IF cans, relay, switches, "protection bulb", crystals, crystal socket assembly. Ask, I may have it. However NO front panel, NO covers and NO dial drum--sorry.

Hey, THEY DON'T MAKE THESE ANYMORE! <grin>

Ian, K6SDE
San Jose, CA area

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

132. HP141T and Plug-ins wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <76oasv$f76$1@news7.svr.pol.co.uk>
Source record: 75261

Looking for a HP141T spectrum analyser and 8552B, 8555A, 8554 Plug-ins

John G3UGY

133. Articles on the AWA web page + Calendar of Radio Events

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: John Dilks <oldradio@worldnet.att.net>
Message-ID: <368FB217.29A0@worldnet.att.net>
Source record: 75262
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Articles on the AWA web page + Calendar of Radio Events

To all,

The AWA Web, Page_2, has been updated for January 1999. It now
appears less cluttered.

http://www.ggw.org/awa/page_2

Additionally, there are now two AWA Old Timer's Bulletin (OTB)
articles there, complete with photos. I tried to keep the feel of the
OTB in the layout. I think you can print the articles on a laser or ink
jet and they will come out ok? I'll check from work tomorrow. Anyway,
they're on the web. Spread the word. More to come. (It takes about 3
hours to do an article, depending on the number of photos and tables.)

I broke-down and bought my own scanner so I can add OTB pages from the
past. This should be an attraction to radio buffs, and increase our
membership. It is much handier. Now I don't have to ask permission
from my kids. (My, how the tables have turned.)

The "AWA Radio Events" calendar is becoming very popular. I have
received some nice comments on it, and some new listings have arrived
due to its being there. I'm hoping this calendar will become "the one
to go to" for antique radio meets. This too will bring new people to
the AWA.

--
73' John Dilks, K2TQN

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum

Webmaster for the Antique Wireless Association
http://www.ggw.org/awa Click on "Page 2"
-=and=-
for the New Jersey Antique Radio Club
http://www.eht.com/oldradio
-

134. WTD: IF-10B Info...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-03 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <368FB7DD.CA1E8DE8@starc.org>
Source record: 75263

Hi Gang,

I recently acquired a TS-940SAT and want to hook it up to my shack computer. What exactly is the IF-10B?
The schematic shows a serial interface to the "Digital-A" unit, but there is no info in the manual on the IF-10B, or the RS-232C accessories. Do I need to buy these or can I build them? Does the IF-10B go inside the
940, or connect to the ACC-1 connector where the serial port is?

Any info would be appreciated. Please either respond to this newsgroup or to drepstad@together.net, my
return e-mail is not working at this time.

--Tom
KB1CGA

135. Re: Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369121e2.0@news.netwalk.com>
Source record: 75066

duffer wrote in message <36911144.0@lightning.ica.net>...
>Since It is understood that crystals
>age over time thus changing their
>resonant frequency, Is there any
>way to effectively speed up the
>aging process of a crystal in order
>to provide higher stability over time ?
>We all know that you can't speed
>up the hands of time (yet :)
>...just wondering if there is a known
>process to simulate the aging.
>
>Reply here on the newsgroup or
>remove the 'x' in my address to reply
>by e-mail.
>
>Cheers,
>Hugh VA3TO Toronto
>

Run them near maximum power at elevated temperature?

Jim
N8EE

136. Re: returned mail messages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36912255.0@news.netwalk.com>
Source record: 75067

Lawrence Stoskopf wrote in message <36901A9F.CDD495AE@tri.net>...
>Just finished reading Snow Crash, a science fiction novel of a few years
>back in which the programers brains were fried when looking at snow data
>on the CRT (which only programmers would try to decode). Any plot
>here? I failed.
>
>N0UU
>

I thought that this story was about everone getting hooked on virtual
reality games, and some far east cartel (spelling?) taking over the country
by 'crashing' the game.

Jim
N8EE

137. TDA2610A butn out

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Alison Milnes <alison.milnes@wxs.nl>
Message-ID: <76r7je$p0j$1@reader3.wxs.nl>
Source record: 75068

Hope I�m posting this in the right newsgroup. I'm fixing a transmitter with a burned out TDA2610A LF amplifier. Can�t find any info on the part on the web (so far). It should be a Telefunken IC but no luck on their site. Does anybody know a (pin-) compatible replacement for this IC?

73, Hubert

138. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: munsch@ibm.net
Message-ID: <369124bb.0@news1.ibm.net>
Source record: 75069
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Russ Renaud wrote in message <76qv5e$pk@freenet-news.carleton.ca>...
>
>Has anyone a reference to homebrewing rotary toroidal
>inductors?
>
>I was thinking of trying my hand at building a balanced
>L network, but find the price and availability of roller
>inductors was such as to make one consider alternatives.
>
>I was thinking of 2 x 200-6 powdered-iron cores, with
>#14 wire turns, and some sort of spring-loaded wiper
>inside the toroid making contact with the wire.
>
>That's pretty well where my imagination peters out.
>
>Any suggestions, howls of derisive laughter, detailed
>CAD drawings or references?
>
>tnx de va3rr
Now here's a guy willing to try something, and I think we should give him some support.
One problem is that the physical space inside the hole limits the size of the wiper, and thus the amount of power that can be handled. I seem to remember a design using a wiper on the outside. The wire does not have to be in intimate contact with the iron, so a form or spacer can be used to form the surface shape. Don't get carried away, as the more wire, the more loss and slightly lower Q. The other consideration is the power handling capacity of the core itself, and there someone else is going to have to chip in with some guidance. My active construction with ferrite and powdered iron ended before the current crop of materials appeared. Good luck.
Crazy George

139. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36911C71.BCCB2F88@mwci.net>
Source record: 75070

Roy Lewallen wrote:

> That's a fine argument, but it gives the wrong result for a simple
> square wave. Rather than searching for a flaw, I'll simply directly
> calculate, by definition, the average and RMS power of the example I
> gave in my last posting -- a square-wave current waveform through a
> one ohm resistor.
>
> The current (voltage?) is:
>
> +1 volt from t = 0 to omega/(4*pi)
> -1 volt from t = omega/(4*pi) to omega/(2*pi)
>
> The period is omega/(2*pi) = T
>
> The power = (+1)^2 = +1 watt for the first half period.
> The power = (-1)^2 = +1 watt for the second half period.
> So the power = +1 watt over the whole period.
>
> The average power = 1/T * Integral{t = 0 to T} of (+1) dt = 1/T * t {t
> = 0 to T} = 1
>
> The RMS power = sqrt[1/T * Integral{t = 0 to T} of (+1)^2 dt] =
> sqrt(1) = 1
>
> For this waveform, the average power = the RMS power. What have I done
> wrong in this simple calculation so it doesn't agree with your result?

You have done nothing wrong.

I set up a Mathcad worksheet to compare the ratios of the following integrals:

F1 = SQRT[(1/2pi) * int(0 to 2pi) V(theta)^4 d(theta)] (RMS power)
and
F2 =(1/2pi) * int(0 to 2pi) V(theta)^2 d(theta) (Average power)

I looked at the ratio in dB of F1 to F2 for a lot of various functions V(theta).

Results:

For V(theta) = sine wave I got the expected 0.88 dB. For the square wave 0 dB.

For a large number of other functions the ratio varied quite a lot. If we look at the two formulas, in retrospect, we can pretty much guess that their ratios would not be constant but
would depend on V(theta).

The discussion of Parseval's theorem is correct, but it *only* works when we compare the "average" power in the time domain of the waveform with the sum of the "average" powers of the
sine wave components that make up the waveform.

Your example was helpful in getting a better understanding. In these quick response forums, errors and imperfect understandings usually pop up that need to be corrected.

Bill W0IYH

140. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3868$307ff900$6c3963c3@default>
Source record: 75071
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Arrange for wiping contact to wipe round the side of the toroid.

BIG PROBLEM - if wiper bridges two adjacent turns, shorts them out,
Q falls to very low value and smoke is given off.

I have an Amidon T200 dust iron core, wound with enamel copper wire,
in conjuction with a 24-way rotary switch to tap the coil at every 2
turns. But multi-way switches are very few and far between these
days.
--
****
Reg, G4FGQ Click below.
http://www.btinternet.com/~g4fgq.regp

****

munsch@ibm.net wrote in article <369124bb.0@news1.ibm.net>...
>
> Russ Renaud wrote in message
<76qv5e$pk@freenet-news.carleton.ca>...
> >
> >Has anyone a reference to homebrewing rotary toroidal
> >inductors?
> >
> >I was thinking of trying my hand at building a balanced
> >L network, but find the price and availability of roller
> >inductors was such as to make one consider alternatives.
> >
> >I was thinking of 2 x 200-6 powdered-iron cores, with
> >#14 wire turns, and some sort of spring-loaded wiper
> >inside the toroid making contact with the wire.
> >
> >That's pretty well where my imagination peters out.
> >
> >Any suggestions, howls of derisive laughter, detailed
> >CAD drawings or references?
> >
> >tnx de va3rr
> Now here's a guy willing to try something, and I think we should
give him
> some support.
> One problem is that the physical space inside the hole limits the
size of
> the wiper, and thus the amount of power that can be handled. I

seem to
> remember a design using a wiper on the outside. The wire does not
have to
> be in intimate contact with the iron, so a form or spacer can be
used to
> form the surface shape. Don't get carried away, as the more wire,
the more
> loss and slightly lower Q. The other consideration is the power
handling
> capacity of the core itself, and there someone else is going to
have to chip
> in with some guidance. My active construction with ferrite and
powdered
> iron ended before the current crop of materials appeared. Good
luck.
> Crazy George
>
>
>

141. Crosley 150 cabinet NEEDED

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: marty@netstogie.com
Message-ID: <npak2.25$pA4.5423882@IConNet>
Source record: 75072
Cross-posted to: rec.antiques.radio+phono,radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

This is about a 1932 dome-top (cathedral?) table superhet radio that had 3 57s (rf, 1st det. / mixer-osc., if), an 55 (2nd det, 1st audio), 43 (audio out), 80 (tld - twin light-emitting diode / rect.)

I o'hauled it's chassis 15 yr.s ago & boxed it up while owner sent cabinet out for refurb.

Well cabinetmaker vanished & now the chassis is wanting.

I have cabinet hdw. like little baffle board (for 6.5" Magnavox dynamic spkr.), knobs, & dial 'keystone' escuteon.

FYI, there were three shaft holes: tuning, volume, tone. Tuning was top of the triangular knob pattern & 'keystone' dial escuteon sat above.

This thing belongs to a close friend & I sure hope someone out there might help.

Thanks all,

Marty

142. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <Sq9HbDA7uSk2Ewhr@pickmere.demon.co.uk>
Source record: 75073
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

>>
>>I was thinking of 2 x 200-6 powdered-iron cores, with
>>#14 wire turns, and some sort of spring-loaded wiper
>>inside the toroid making contact with the wire.
>>
>>That's pretty well where my imagination peters out.
>>
>>Any suggestions, howls of derisive laughter, detailed
>>CAD drawings or references?

No laughter! 45 years ago I worked in a research lab where my boss required an infinitely-adjustable delay line. He took a wire wound pot, dismantled it, and rewound the former with 26 swg wire, then emery-papered off the insulation round the top and re-assembled it. He also added the capacitors to ground round the outside. It worked!
>>
Mike

143. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: "M.J.Powell" <mike@pickmere.demon.co.uk>
Message-ID: <MqcALHA$xSk2EwDg@pickmere.demon.co.uk>
Source record: 75074

In article <36912035.924@hp.com>, Don W6JL <Don_Huff@hp.com> writes
>red_strider@my-dejanews.com wrote:
>>
>> This last set of holidays has taught us a few things, one major thing is
>> that cell phones are both a blessing and a curse.
>>
>> This last x-mas we had cell phone madness, and I want a way to make it stop
>> for at least the time it takes us to have our bit of family get togethers.
>>
>> So I am looking for a way to white noise out cells phones from receiving and
>> sending, but only for a home sized area... something I can flick on and off
>> when needed during the holidays is best.
>>
>> Ideas? Suggestions on how to accomplish this?
>>
>> -----------== Posted via Deja News, The Discussion Network ==----------
>> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>
>Red OM,
>
> Pardon my incredulity, but all you need to do is turn off all the
>cellular
>phones in your house (it is YOUR house, isn't it?).

Don't put him off! Let him design a good noise-jammer and publish the
results! We can all benefit.

Mike
>

144. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36912924.97D040D9@mwci.net>
Source record: 75075

Tom Bruhns wrote:

> William E. Sabin (sabinw@mwci.net) wrote:
> : Tom Bruhns wrote:
>
> : > OK, what if instead of modeling the coil loss as a shunt resistance, we
> : > model it as a series resistance, and say that
> : >
> : > Q = wL/Rs
> : >
> : > Now if something causes the reactance of the coil+stray capacitance to
> : > increase, the Q apparently increases...
>
> : If the coil is a series Rs and Xs, and if the coil Q is, say 10 or
> : more, then the coil, considered
> : "all by itself" (ignore for the moment Cs) can be converted into a
> : parallel Rp and and a parallel Xp
> : whose values are very nearly given by the following:
>
> : Rp = wL * wL/Rs = wL * Q
>
> : Xp = wL
>
> : We now have virtually the same situation that I described
> : previously and the addition of stray
> : capacity Cs reduces the Q in the same way as before.

> In the previous posting, it seems like you were saying that
> there is a new Q, which you called Q', which resulted from
> parallel stray capacitance Cs:
>
> : > : Q' = Q (1 - w^2 LCs)

Q' is the the reduced value that results from a parallel stray Cs. Q is the true Q with no Cs.

If we tune the coil to resonance with a tuning capacitor, the Q of the "tuned circuit" is Q, not Q', and the inductance is the true inductance and not the effective inductance. I believe I described all of this pretty carefully. It may take another perusal.

> And then you went on to note that the Q of a resonator built
> from that inductor and another lossless parallel capacitor was
> _not_ Q' but Q. From that I conclude that Q' must be an
> _apparent_ Q, not an _actual_ Q;

Yes, Q' is the reduced Q, caused by stray Cs. But when you tune the coil to resonance the Q is the true Q. If you meditate on that for a minute I think you

will agree.

Incidentally, I set up a Mathcad worksheet that verifies all of my statements regarding the series LRCs coil versus the parallel LRCs coil. Cs does reduce the Q to Q' in both cases.

I will not participate in this discussion any further, thank you.

Bill W0IYH

145. hamradio-online.com: New articles, new mailing list feature, and lots more!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <76rfiu$gl8$1@remarQ.com>
Source record: 75076
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Ham Radio Online is now in its 4th year, as one of the oldest, continuously published "e-zines" on the Internet. Ham Radio Online is a non-commercial (no advertising, nothing to sell) web site devoted to ham radio and telecommunications topics. Ham Radio Online is presently read in 93 countries!

Come visit us at http://hamradio-online.com

We've got lots of new stories online now, and more coming in the weeks ahead. Plus there are hundreds of articles in our massive online Library. We've just added a new mailing list feature as well with more cool stuff yet to come! And of course, we have an expanding set of links in our other sites directories, real-time propagation reports and predictions, emergency communications info and lots more.

If you see news, have an interesting story to tell, or spot an article about ham radio at another web site, drop us a line and let us know about it.

Thanks and 73,
Ed, KF7VY
kf7vy@amsat.org

Ed (KF7VY) and Kim (N7VPL) Mitchell
SEND email replies to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

146. cc:Mail Link to SMTP Undeliverable Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: administrator@globewireless.COM
Message-ID: <9901049154.AA915491158@globewireless.com>
Source record: 75077

```
--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Message is undeliverable.
Reason: Unable to access cc:Mail Post office.
Please retry later.
Original text follows:
---------------------

--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Received: from mail-backup.pacbell.net [206.13.28.30] by globewireless.com (ccMail Link to
SMTP R8.20.00.25)
; Mon, 04 Jan 1999 23:05:53 GMT
Return-Path: <Ham-Homebrew@ucsd.edu>
Received: from globewireless.com (email.globewireless.com [207.214.103.3]) by
mail-backup.pacbell.net (8.8.8/8.7.1+antispam) with SMTP id OAA25513 for
<rory.davis@www.globewireless.com>; Mon, 4 Jan 1999 14:52:28 -0800 (PST)
From: Ham-Homebrew@ucsd.edu
Received: from POP3 Client by globewireless.com (ccMail Link to SMTP R8.20.00.25)
id AA915491149; Mon, 04 Jan 1999 23:05:51 GMT
Message-Id: <9901049154.AA915491149@globewireless.com>
X-Mailer: ccMail Link to SMTP R8.20.00.25
Date: Mon, 04 Jan 1999 04:30:39 GMT
To: <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V98 #718
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: Quoted-Printable
Content-Description: "cc:Mail Note Part"

Ham-Homebrew Digest Mon=2C 4 Jan 99 Volume 98 : Issue 7=
18

Today's Topics=3A
12 VOLT POWER SUPPLY XFORMERS
6 meter quad
6 Volt Battery
Articles on the AWA web page + Calendar of Radio Events
Dissipation factor of FR4 at 2=2E5GHZ ?
FS=3A DX398 Shortwave radio
Looking for a white noise generator
PEP vs RMS (2 msgs=29
```

POWER SUPPLY OUTPUT INCREASE=2E
WTB=3A UPC "Unique=22 Wire Tuner

Send Replies or notes for publication to=3A <Ham-Homebrew=40UCSD=2EEdu=3E=

Send subscription requests to=3A <Ham-Homebrew-REQUEST=40UCSD=2EEdu=3E
Problems you can't solve otherwise to brian=40ucsd=2Eedu=2E

Archives of past issues of the Ham-Homebrew Digest are available=20
=28by FTP only=29 from ftp=2EUCSD=2EEdu in directory "mailarchives=2Fha=
m-homebrew=22=2E

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the officia=
l
policies or positions of any party=2E Your mileage may vary=2E So the=
re=2E
Loop-Detect=3A Ham-Homebrew=3A98=2F718

Date=3A 2 Jan 1999 14=3A09=3A13 GMT
From=3A johnsonhe=40aol=2Ecom (JohnsonHE=29
Subject=3A 12 VOLT POWER SUPPLY XFORMERS

=3E
=3E28 VOLT AT 30 AMP CENTER TAPPED TRANSFORMERS $25=2E00EA=2E PLUS SHIP=
PING=20

Is that 28VAC at rated load=3F and where are you at=3F

W4ZCB
=2E

Date=3A Mon=2C 04 Jan 1999 07=3A45=3A56 GMT
From=3A fisherjr=40ionet=2Enet (John & Ruthann Fisher=29
Subject=3A 6 meter quad

Quick questions -

1=2E Anyone know of a website or newsgroup where cubical quad
experimenters hang out and discuss successes and failures=3F =20

2=2E Anyone have element lengths and spacings for a 4 element quad for=

50=2E200 +=2F-

3=2E Will the standard formulas 1030=2Ffreq (reflector=29 , 1005=2Ffre=
q
=28driven=29 and 975=2Ffreq (driven=29 work on 6 meters=3F

4=2E What is best way to feed this beast=3F direct with 50ohm coax=2C=
1=2F4
wave transformer=2C or gamma=3F

I have all the materials to build this quad but not sure of the
lengths and spacings=2E While reviewing Bill Orr's book "All about
cubical quads=22 (3rd edition=2C page 46=29 he shows a spacing of 10 fe=
et
between each element=2E I've read about wide spacing but that seems a
bit extreme to me=2E I have heard his formulas work well up through and=

including 10 meters but begin to fall short of the mark when you hit
50 mhz and up=2E=20

Sure would like some plans that are tried and true=2E =20

Also - would very much like to get my hands on copies of the quad
articles in the Jul 81=2C Aug 81=2C Dec 81=2C and Apr 82 all of CQ maga=
zine=2E
I'll pay for copies and postage=2E =20

Thanks for your time!!

John KO4OE

=2E

Date=3A Sun=2C 03 Jan 1999 23=3A33=3A52 -0600
From=3A mark beutler <mbeutler=40tds=2Enet=3E
Subject=3A 6 Volt Battery

Tom Repstad wrote=3A

=3E Hi John=2C
=3E
=3E Why not go to your local auto supply store=2C most motorcycles run =
off 6V batteries=2C
=3E they are reasonably
=3E small and not too expensive :=29
=3E
=3E --Tom
=3E KB1CGA
=3E
=3E John wrote=3A
=3E
=3E > Urgently have need for 6 volt battery=2C with minimum 4 Amp-Hour =
capacity=2C for
=3E > special application=2E
=3E >

Well=2C he's asking for a battery with rated at Amp-Hours as opposed to=
cold cranking
amps=2E
An automotive battery is designed for short duration=2C high discharge =
current
conditions and will perform poorly if called upon for long discharge du=
ties=2E (usually

will have a short life span=2C as well=2E=29

An alternative to this is to buy a battery from Kmart or whatever desig=
ned to run a
fish locator=2E These are designed for long slow discharge cycles and =
will last much
longer under such use than a typical motorcycle battery=2E They are al=
so usually gel
cell batts that can be used laying on their sides or whatever=2C in cas=
e it needs to be
tucked in a cabinet or something=2E
--
-
mark beutler mbeutler=40tds=2Enet ICQ# 3851271
-

=2E

Date=3A Mon=2C 04 Jan 1999 15=3A00=3A59 GMT
From=3A wmeara=40erols=2Ecom (Bill Meara)
Subject=3A Articles on the AWA web page + Calendar of Radio Events

John=3A I was visiting your pages the other day and was very impressed=
=2E
Beautiful job! I'll be back to look at the new stuff=2E Thanks=2C 73=

Bill N2CQR=20

On 3 Jan 1999 18=3A11=3A27 GMT=2C John Dilks <oldradio=40worldnet=2Eatt=
=2Enet=3E
wrote=3A

=3EArticles on the AWA web page + Calendar of Radio Events
=3E
=3ETo all=2C
=3E
=3E The AWA Web=2C Page=5F2=2C has been updated for January 1999=2E I=
t now
=3Eappears less cluttered=2E =20
=3E
=3E http=3A=2F=2Fwww=2Eggw=2Eorg=2Fawa=2Fpage=5F2
=3E
=3E Additionally=2C there are now two AWA Old Timer's Bulletin (OTB=29=

=3Earticles there=2C complete with photos=2E I tried to keep the feel o=
f the
=3EOTB in the layout=2E I think you can print the articles on a laser =
or ink
=3Ejet and they will come out ok=3F I'll check from work tomorrow=2E A=
nyway=2C
=3Ethey're on the web=2E Spread the word=2E More to come=2E (It takes=

about 3
=3Ehours to do an article=2C depending on the number of photos and tabl=
es=2E=29
=3E
=3E I broke-down and bought my own scanner so I can add OTB pages from=
the
=3Epast=2E This should be an attraction to radio buffs=2C and increase=
our
=3Emembership=2E It is much handier=2E Now I don't have to ask permis=
sion
=3Efrom my kids=2E (My=2C how the tables have turned=2E=29
=3E
=3E The "AWA Radio Events=22 calendar is becoming very popular=2E I h=
ave
=3Ereceived some nice comments on it=2C and some new listings have arri=
ved
=3Edue to its being there=2E I'm hoping this calendar will become "the=
one
=3Eto go to=22 for antique radio meets=2E This too will bring new peop=
le to
=3Ethe AWA=2E
=3E
=3E--=20
=3E73' John Dilks=2C K2TQN=20
=3E
=3E Please visit my OldRadio Museum
=3E http=3A=2F=2Fwww=2Eeht=2Ecom=2Foldradio=2Fmuseum
=3E
=3E Webmaster for the Antique Wireless Association
=3E http=3A=2F=2Fwww=2Eggw=2Eorg=2Fawa Click on "Page 2=22
=3E-=3Dand=3D-
=3E for the New Jersey Antique Radio Club
=3E http=3A=2F=2Fwww=2Eeht=2Ecom=2Foldradio
=3E-
=3E

=2E

Date=3A Mon=2C 04 Jan 1999 05=3A13=3A50 GMT
From=3A feedback=40pcbmilling=2Ecom (Mark D=2E Braunstein=29
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

You may want to check into the newer microwave materials from Rogers
Corp=2E like 4003 and 6006 material=2E It's not as expensive as Duroid
5880 but has good microwave properties=2E=20

Mark

On Sun=2C 03 Jan 1999 15=3A24=3A28 GMT=2C "Bert Douglas=22
=3CbertdNOSPAM=40dibbs=2Enet=3E wrote=3A

```
=3E
=3Ed ngai wrote in message <368F1925=2E3B54DE08=40sprintmail=2Ecom=3E=2E=
=2E=2E
=3E=3EYou'd be better off w=2F telfon for GHz freq=2E Since that's whaw=
t used in
=3E=3Efeedhorn circuits=2C phased arrays=2C etc=2E
=3E
=3EDefine "better=22 please=2E
=3E
=3EYes I know that teflon is easier to design with because its electric=
al
=3Eproperties are "nicer=22=2E
=3E
=3EBut teflon is also more expensive=2E It seems to me that it is up t=
o me as a
=3Egood designer=2C to decide the tradeoff of non-recurring expense ver=
sus
=3Eper-unit expense=2C considering my own situation=2E
=3E
=3E
=3E=3E
=3E=3E
=3E=3EBarry L=2E Ornitz wrote=3A
=3E=3E=3E Roy Lewallen wrote in message <368C536C=2E978777BC=40teleport=
=2Ecom=3E=2E=2E=2E
=3E=3E=3E >Artech House's _Microwave Engineers' Handbook=5F=2C Vol=2E 2=
=2C shows "Epoxy=2C
=3E=3E=3E >polyester=2C or silicone fiberglass laminate (120 lbs=2Fcubi=
c foot=29=22 to
=3E=3E=3E >have a dissipation factor of about 0=2E007 at "microwave fre=
quencies=22=2C
=3E=3E=3E >defined as 1 - 30 GHz .=2E=2E snip .=2E=2E
=3E=3E
=3E=3E=3E >Roy Lewallen=2C W7EL
=3E=3E
=3E=3E=3E >Bert Douglas wrote=3A
=3E=3E=3E >=3E Hi net folks=2C FR4 is only specified at 1 MHZ=2E I am =
wondering if
=3Eanyone
=3E=3E=3E >=3E can give me a ball park estimate of its dissipation fact=
or (loss
=3Etangent=29
=3E=3E=3E >=3E at 2=2E5 GHZ ?
=3E=3E=3E >=3E Thanks=2C
=3E=3E=3E >=3E Bert Douglas
=3E=3E
=3E=3E=3E Just to add a little to what Roy said=2C the conventional G-1=
0=2FFR-4
=3Ematerial
=3E=3E=3E gets fairly lossy above 1 GHz or so=2E
=3E=3E
```

=3E=3E=2E=2E=2E snip .=2E=2E
=3E=3E
=3E
=3E

--=20
PCB Milling
http=3A=2F=2Fwww=2Epcbmilling=2Ecom
FAX=3A (703=29 818-0071
Low cost=2C precision-made PC boards for electronic hobbyists
=2E

Date=3A 4 Jan 1999 03=3A32=3A32 GMT
From=3A rickw999=40aol=2Ecom (Rick W 999=29
Subject=3A FS=3A DX398 Shortwave radio

Good shape=2EOne year old=2E Includes original material=3A Box=2C case=
and adapter
plus manual=2E
$150 include shipping=2E
=2E

Date=3A Mon=2C 04 Jan 1999 06=3A50=3A07 GMT
From=3A red=5Fstrider=40my-dejanews=2Ecom
Subject=3A Looking for a white noise generator

This last set of holidays has taught us a few things=2C one major thi=
ng is
that cell phones are both a blessing and a curse=2E

This last x-mas we had cell phone madness=2C and I want a way to make=
it stop
for at least the time it takes us to have our bit of family get togethe=
rs=2E

So I am looking for a way to white noise out cells phones from receiv=
ing and
sending=2C but only for a home sized area=2E=2E=2E something I can fli=
ck on and off
when needed during the holidays is best=2E

Ideas=3F Suggestions on how to accomplish this=3F

----------=3D=3D Posted via Deja News=2C The Discussion Network =3D=3D=
----
http=3A=2F=2Fwww=2Edejanews=2Ecom=2F Search=2C Read=2C Discuss=2C=
or Start Your Own =20
=2E

Date=3A Sat=2C 02 Jan 1999 08=3A36=3A55 -0600
From=3A "William E=2E Sabin=22 <sabinw=40mwci=2Enet=3E
Subject=3A PEP vs RMS

=3E > |Prms =3D SQRT=28 (1=2FT=29 * Integral0-=3ET=28 P^2 dt))

This is incorrect=2E The RMS value of "any=22 function F=28t=29 is

Frms =3D 1=2FT int=280 to T=29 F=28t=29^2 dt

Bill W0IYH

=2E

Date=3A Sun=2C 03 Jan 1999 20=3A23=3A05 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A PEP vs RMS

That's a fine argument=2C but it gives the wrong result for a simple
square wave=2E Rather than searching for a flaw=2C I'll simply directly=

calculate=2C by definition=2C the average and RMS power of the example =
I
gave in my last posting -- a square-wave current waveform through a
one ohm resistor=2E

The current is=3A

+1 volt from t =3D 0 to omega=2F=284*pi=29
-1 volt from t =3D omega=2F=284*pi=29 to omega=2F=282*pi=29

The period is omega=2F=282*pi=29 =3D T

The power =3D (+1=29^2 =3D +1 watt for the first half period=2E
The power =3D (-1=29^2 =3D +1 watt for the second half period=2E
So the power =3D +1 watt over the whole period=2E

The average power =3D 1=2FT * Integral{t =3D 0 to T} of (+1=29 dt =3D 1=
=2FT * t {t
=3D 0 to T} =3D 1

The RMS power =3D sqrt=5B1=2FT * Integral{t =3D 0 to T} of (+1=29^2 dt=5D=
=3D
sqrt=281=29 =3D 1

For this waveform=2C the average power =3D the RMS power=2E What have I=
done
wrong in this simple calculation so it doesn't agree with your result=3F=

Roy Lewallen=2C W7EL

William E=2E Sabin wrote=3A
=3E=20
=3E The 0=2E88 value for rms power of a sine wave is the average value =
of a=22square of a

=3E sine-squared=22 function=2C as shown in a previous post=2E
=3E The average power is for the average of a "sine-squared=22 function=
=2E See text below for
=3E clarification=2E
=3E=20
=3E > For a symmetrical sinusoidal waveform=2C
=3E > the RMS is the well-known 1=2Fsqrt=282=29 times the peak value=2C=
while the
=3E > average is zero=2E Adding the sinusoidal components of the voltag=
e or
=3E > current waveforms doesn't work=2C either=2C because the square of=
the sum
=3E > isn't equal to the sum of the squares=2E As an example of another=
power
=3E > waveform=2C consider a square wave of current=2C +1 volt for half=
its
=3E > period and -1 volt for the other half=2C going through a 1 ohm re=
sistor=2E
=3E > As a function of time=2C the power is constant=2C with value of o=
ne watt=2E
=3E > Both the average and RMS values of this waveform are one watt=2E
=3E=20
=3E The "average power=22 is equal to the "peak power=22 of the square =
wave and the rms "voltage=22
=3E is equal to the "peak voltage=22 of the square wave=2E Average powe=
r is *always* rms voltage
=3E squared (if R=3D1 ohm=29=2E
=3E=20
=3E If you decompose the square wave (or any other wave=29 into its fre=
quency components=2C and
=3E calculate the average power in each component=2C and then add all o=
f these up=2C you get the
=3E wave average power=2E If you do the same thing with the rms power c=
omponents you get the rms
=3E power (not the average power=29 of the wave=2C which is 0=2E88 dB h=
igher=2E
=3E=20
=3E The calculation of the average power for each frequency component i=
nvolves integrating the
=3E sine-squared function=2E
=3E=20
=3E Pave =3D 1=2F=282 pi=29 * int=280 to 2 pi=29 [V * sin (theta=29=5D^=
2 d=28theta=29
=3E =3D1=2F=282 pi=29 * int (0 to 2 pi=29 [V^2 * 1=2F2 * (1 - =
cos=282 theta=29=5D d=28theta=29
=3E=20
=3E To get the rms power we integrate the square of the last integrand=2C=
which is the term in
=3E square brackets=3A
=3E=20

=3E [V^2 * 1=2F2 * (1 - cos=282 theta=29=5D^2
=3E=20
=3E If we do this for each frequency component and add them up we get t=
he rms power for the
=3E square wave=2E
=3E=20
=3E Parseval's Theorem equates the average power of a waveform in the t=
ime domain and the sum
=3E of the spectral sine wave average power components=2C and that is w=
hat we are dealing with
=3E here=2E Parseval's Theorem would also apply to the rms power idea=2E=
In other words=2C it is as
=3E if we increased the amplitude of the square wave by 0=2E88 dB=2C fo=
und the rms power of each
=3E sine wave component=2C and then added them all up to get the equali=
ty that Parseval's Theorem
=3E requires=2E
=3E=20
=3E The mathematics of all of this hangs together quite well and I am s=
ure it is OK=2E
=3E=20
=3E Bill W0IYH
=2E

Date=3A Sun=2C 03 Jan 1999 23=3A21=3A18 -0600
From=3A mark beutler <mbeutler=40tds=2Enet=3E
Subject=3A POWER SUPPLY OUTPUT INCREASE=2E

FREE EAST TIMOR wrote=3A

=3E I have a 5 amp power supply and I would like to increase the power =
output to
=3E approx=2E 30 amps=2E I believe this is done using the 3055 power tr=
ansistors=2C
=3E could some-one please draw me a circuit or explain where I can find=
a
=3E circuit to allow me to build this thing
=3E Laurens

No argument about some of the great suggestions I have seen=2C but I do=
have one
alternate for someone trying to do this on a budget=2E I am making the=
assumption
that what is needed is a 12VDC supply=2E One possibility is to modify =
a garage
sale automotive type battery charger that is rated for the continuous c=
urrent
that you want=2E Usually=2C they have poor filtering=2C since they are=
using the
battery being charged as the "filter=22=2C if you will=2E So=2C one ca=

n add capacitance
to smooth out the output=2E These things are NOT very well regulated=2C=
so if you
need a regulated supply=2C forget it or be prepared to do some plain an=
d fancy
modifications=2E

However=2C in any case=2C what you do get=2C for relatively cheap=2C is=
a transformer
that will handle the continuous current required even if you have to bu=
ild a
pass transistor regulator=2E

BTW=2C one way to aquire some info is to call Motorola and ask for thei=
r "Linear
and Switchmode Regulator Handbook=22=2E They will send you a copy for =
free=2E (this
is a large=2C comprehensive book=29 Has gobs of different power supply =
designs based
around all of their available regulators and schemes for high power out=
put stuff
as well=2E I saw a couple based on a regulator and pass transistor des=
ign that
don't look too bad at all to build and would work with the above mentio=
ned
transformer=2E Their local phone number for Australia will be on the w=
eb=2E Many
of the silicon manufacturers will do this sort of thing as a matter of =
course=2E
I have aquired many very useful books this way for free or the cost of =
postage=2E
I just happen to like the Motorola book since it is so well laid out=2E=

Have fun and good luck to you=2E

-
mark beutler mbeutler=40tds=2Enet ICQ# 3851271
-

=2E

Date=3A Sun=2C 03 Jan 1999 23=3A59=3A51 -0800
From=3A Vern Van Zandt <vvandt=40televar=2Ecom=3E
Subject=3A WTB=3A UPC "Unique=22 Wire Tuner

I'm looking for two complete units (or parts=29 for a project=2E Looks=
are
not nearly as important as functionality=2E
Would prefer something in the local area (Washington State=29 if possib=
le=2E

Please e-mail with details if you can help=2E

Thanks!
73 de N7GTB
Vern=2E

=2E

End of Ham-Homebrew Digest V98 #718
****

=

--simple boundary--

147. cc:Mail Link to SMTP Undeliverable Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: administrator@globewireless.COM
Message-ID: <9901049154.AA915491156@globewireless.com>
Source record: 75078

```
--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Message is undeliverable.
Reason: User "rory.davis@globewireless.com" is not found in the cc:Mail Directory.
Original text follows:
---------------------

--simple boundary
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

Received: from mail-backup.pacbell.net [206.13.28.30] by globewireless.com (ccMail Link to
SMTP R8.20.00.25)
; Mon, 04 Jan 1999 23:05:53 GMT
Return-Path: <Ham-Homebrew@ucsd.edu>
Received: from globewireless.com (email.globewireless.com [207.214.103.3]) by
mail-backup.pacbell.net (8.8.8/8.7.1+antispam) with SMTP id OAA25513 for
<rory.davis@www.globewireless.com>; Mon, 4 Jan 1999 14:52:28 -0800 (PST)
From: Ham-Homebrew@ucsd.edu
Received: from POP3 Client by globewireless.com (ccMail Link to SMTP R8.20.00.25)
id AA915491149; Mon, 04 Jan 1999 23:05:51 GMT
Message-Id: <9901049154.AA915491149@globewireless.com>
X-Mailer: ccMail Link to SMTP R8.20.00.25
Date: Mon, 04 Jan 1999 04:30:39 GMT
To: <Ham-Homebrew@ucsd.edu>
Subject: Ham-Homebrew Digest V98 #718
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: Quoted-Printable
Content-Description: "cc:Mail Note Part"

Ham-Homebrew Digest Mon=2C 4 Jan 99 Volume 98 : Issue 7=
18

Today's Topics=3A
12 VOLT POWER SUPPLY XFORMERS
6 meter quad
6 Volt Battery
Articles on the AWA web page + Calendar of Radio Events
Dissipation factor of FR4 at 2=2E5GHZ ?
FS=3A DX398 Shortwave radio
Looking for a white noise generator
PEP vs RMS (2 msgs=29
POWER SUPPLY OUTPUT INCREASE=2E
```

WTB=3A UPC "Unique=22 Wire Tuner

Send Replies or notes for publication to=3A <Ham-Homebrew=40UCSD=2EEdu=3E=

Send subscription requests to=3A <Ham-Homebrew-REQUEST=40UCSD=2EEdu=3E
Problems you can't solve otherwise to brian=40ucsd=2Eedu=2E

Archives of past issues of the Ham-Homebrew Digest are available=20
=28by FTP only=29 from ftp=2EUCSD=2EEdu in directory "mailarchives=2Fha=
m-homebrew=22=2E

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the officia=
l
policies or positions of any party=2E Your mileage may vary=2E So the=
re=2E
Loop-Detect=3A Ham-Homebrew=3A98=2F718

Date=3A 2 Jan 1999 14=3A09=3A13 GMT
From=3A johnsonhe=40aol=2Ecom (JohnsonHE=29
Subject=3A 12 VOLT POWER SUPPLY XFORMERS

=3E
=3E28 VOLT AT 30 AMP CENTER TAPPED TRANSFORMERS $25=2E00EA=2E PLUS SHIP=
PING=20

Is that 28VAC at rated load=3F and where are you at=3F

W4ZCB
=2E

Date=3A Mon=2C 04 Jan 1999 07=3A45=3A56 GMT
From=3A fisherjr=40ionet=2Enet (John & Ruthann Fisher=29
Subject=3A 6 meter quad

Quick questions -

1=2E Anyone know of a website or newsgroup where cubical quad
experimenters hang out and discuss successes and failures=3F =20

2=2E Anyone have element lengths and spacings for a 4 element quad for=

50=2E200 +=2F-

3=2E Will the standard formulas 1030=2Ffreq (reflector=29 , 1005=2Ffre=
q
=28driven=29 and 975=2Ffreq (driven=29 work on 6 meters=3F

4=2E What is best way to feed this beast=3F direct with 50ohm coax=2C=
1=2F4
wave transformer=2C or gamma=3F

I have all the materials to build this quad but not sure of the
lengths and spacings=2E While reviewing Bill Orr's book "All about
cubical quads=22 (3rd edition=2C page 46=29 he shows a spacing of 10 fe=
et
between each element=2E I've read about wide spacing but that seems a
bit extreme to me=2E I have heard his formulas work well up through and=

including 10 meters but begin to fall short of the mark when you hit
50 mhz and up=2E=20

Sure would like some plans that are tried and true=2E =20

Also - would very much like to get my hands on copies of the quad
articles in the Jul 81=2C Aug 81=2C Dec 81=2C and Apr 82 all of CQ maga=
zine=2E
I'll pay for copies and postage=2E =20

Thanks for your time!!

John KO4OE

=2E

Date=3A Sun=2C 03 Jan 1999 23=3A33=3A52 -0600
From=3A mark beutler <mbeutler=40tds=2Enet=3E
Subject=3A 6 Volt Battery

Tom Repstad wrote=3A

=3E Hi John=2C
=3E
=3E Why not go to your local auto supply store=2C most motorcycles run =
off 6V batteries=2C
=3E they are reasonably
=3E small and not too expensive :=29
=3E
=3E --Tom
=3E KB1CGA
=3E
=3E John wrote=3A
=3E
=3E > Urgently have need for 6 volt battery=2C with minimum 4 Amp-Hour =
capacity=2C for
=3E > special application=2E
=3E >

Well=2C he's asking for a battery with rated at Amp-Hours as opposed to=
cold cranking
amps=2E
An automotive battery is designed for short duration=2C high discharge =
current
conditions and will perform poorly if called upon for long discharge du=
ties=2E (usually

```
will have a short life span=2C as well=2E=29

An alternative to this is to buy a battery from Kmart or whatever desig=
ned to run a
fish locator=2E These are designed for long slow discharge cycles and =
will last much
longer under such use than a typical motorcycle battery=2E They are al=
so usually gel
cell batts that can be used laying on their sides or whatever=2C in cas=
e it needs to be
tucked in a cabinet or something=2E
--
-
mark beutler mbeutler=40tds=2Enet ICQ# 3851271
-

=2E

------------------------------

Date=3A Mon=2C 04 Jan 1999 15=3A00=3A59 GMT
From=3A wmeara=40erols=2Ecom (Bill Meara )
Subject=3A Articles on the AWA web page + Calendar of Radio Events

John=3A I was visiting your pages the other day and was very impressed=
=2E
Beautiful job! I'll be back to look at the new stuff=2E Thanks=2C 73=

Bill N2CQR=20

On 3 Jan 1999 18=3A11=3A27 GMT=2C John Dilks <oldradio=40worldnet=2Eatt=
=2Enet=3E
wrote=3A

=3EArticles on the AWA web page + Calendar of Radio Events
=3E
=3ETo all=2C
=3E
=3E The AWA Web=2C Page=5F2=2C has been updated for January 1999=2E I=
t now
=3Eappears less cluttered=2E =20
=3E
=3E http=3A=2F=2Fwww=2Eggw=2Eorg=2Fawa=2Fpage=5F2
=3E
=3E Additionally=2C there are now two AWA Old Timer's Bulletin (OTB=29=

=3Earticles there=2C complete with photos=2E I tried to keep the feel o=
f the
=3EOTB in the layout=2E I think you can print the articles on a laser =
or ink
=3Ejet and they will come out ok=3F I'll check from work tomorrow=2E A=
nyway=2C
=3Ethey're on the web=2E Spread the word=2E More to come=2E (It takes=
```

about 3
=3Ehours to do an article=2C depending on the number of photos and tabl=
es=2E=29
=3E
=3E I broke-down and bought my own scanner so I can add OTB pages from=
the
=3Epast=2E This should be an attraction to radio buffs=2C and increase=
our
=3Emembership=2E It is much handier=2E Now I don't have to ask permis=
sion
=3Efrom my kids=2E (My=2C how the tables have turned=2E=29
=3E
=3E The "AWA Radio Events=22 calendar is becoming very popular=2E I h=
ave
=3Ereceived some nice comments on it=2C and some new listings have arri=
ved
=3Edue to its being there=2E I'm hoping this calendar will become "the=
one
=3Eto go to=22 for antique radio meets=2E This too will bring new peop=
le to
=3Ethe AWA=2E
=3E
=3E--=20
=3E73' John Dilks=2C K2TQN=20
=3E
=3E Please visit my OldRadio Museum
=3E http=3A=2F=2Fwww=2Eeht=2Ecom=2Foldradio=2Fmuseum
=3E
=3E Webmaster for the Antique Wireless Association
=3E http=3A=2F=2Fwww=2Eggw=2Eorg=2Fawa Click on "Page 2=22
=3E-=3Dand=3D-
=3E for the New Jersey Antique Radio Club
=3E http=3A=2F=2Fwww=2Eeht=2Ecom=2Foldradio
=3E-
=3E

=2E

Date=3A Mon=2C 04 Jan 1999 05=3A13=3A50 GMT
From=3A feedback=40pcbmilling=2Ecom (Mark D=2E Braunstein=29
Subject=3A Dissipation factor of FR4 at 2=2E5GHZ ?

You may want to check into the newer microwave materials from Rogers
Corp=2E like 4003 and 6006 material=2E It's not as expensive as Duroid
5880 but has good microwave properties=2E=20

Mark

On Sun=2C 03 Jan 1999 15=3A24=3A28 GMT=2C "Bert Douglas=22
=3CbertdNOSPAM=40dibbs=2Enet=3E wrote=3A

```
=3E
=3Ed ngai wrote in message <368F1925=2E3B54DE08=40sprintmail=2Ecom=3E=2E=
=2E=2E
=3E=3EYou'd be better off w=2F telfon for GHz freq=2E Since that's whaw=
t used in
=3E=3Efeedhorn circuits=2C phased arrays=2C etc=2E
=3E
=3EDefine "better=22 please=2E
=3E
=3EYes I know that teflon is easier to design with because its electric=
al
=3Eproperties are "nicer=22=2E
=3E
=3EBut teflon is also more expensive=2E It seems to me that it is up t=
o me as a
=3Egood designer=2C to decide the tradeoff of non-recurring expense ver=
sus
=3Eper-unit expense=2C considering my own situation=2E
=3E
=3E
=3E=3E
=3E=3E
=3E=3EBarry L=2E Ornitz wrote=3A
=3E=3E=3E Roy Lewallen wrote in message <368C536C=2E978777BC=40teleport=
=2Ecom=3E=2E=2E=2E
=3E=3E=3E >Artech House's _Microwave Engineers' Handbook=5F=2C Vol=2E 2=
=2C shows "Epoxy=2C
=3E=3E=3E >polyester=2C or silicone fiberglass laminate (120 lbs=2Fcubi=
c foot=29=22 to
=3E=3E=3E >have a dissipation factor of about 0=2E007 at "microwave fre=
quencies=22=2C
=3E=3E=3E >defined as 1 - 30 GHz .=2E=2E snip .=2E=2E
=3E=3E
=3E=3E=3E >Roy Lewallen=2C W7EL
=3E=3E
=3E=3E=3E >Bert Douglas wrote=3A
=3E=3E=3E >=3E Hi net folks=2C FR4 is only specified at 1 MHZ=2E I am =
wondering if
=3Eanyone
=3E=3E=3E >=3E can give me a ball park estimate of its dissipation fact=
or (loss
=3Etangent=29
=3E=3E=3E >=3E at 2=2E5 GHZ ?
=3E=3E=3E >=3E Thanks=2C
=3E=3E=3E >=3E Bert Douglas
=3E=3E
=3E=3E=3E Just to add a little to what Roy said=2C the conventional G-1=
0=2FFR-4
=3Ematerial
=3E=3E=3E gets fairly lossy above 1 GHz or so=2E
=3E=3E
```

=3E=3E=2E=2E=2E snip .=2E=2E
=3E=3E
=3E
=3E

--=20
PCB Milling
http=3A=2F=2Fwww=2Epcbmilling=2Ecom
FAX=3A (703=29 818-0071
Low cost=2C precision-made PC boards for electronic hobbyists
=2E

Date=3A 4 Jan 1999 03=3A32=3A32 GMT
From=3A rickw999=40aol=2Ecom (Rick W 999=29
Subject=3A FS=3A DX398 Shortwave radio

Good shape=2EOne year old=2E Includes original material=3A Box=2C case=
and adapter
plus manual=2E
$150 include shipping=2E
=2E

Date=3A Mon=2C 04 Jan 1999 06=3A50=3A07 GMT
From=3A red=5Fstrider=40my-dejanews=2Ecom
Subject=3A Looking for a white noise generator

This last set of holidays has taught us a few things=2C one major thi=
ng is
that cell phones are both a blessing and a curse=2E

This last x-mas we had cell phone madness=2C and I want a way to make=
it stop
for at least the time it takes us to have our bit of family get togethe=
rs=2E

So I am looking for a way to white noise out cells phones from receiv=
ing and
sending=2C but only for a home sized area=2E=2E=2E something I can fli=
ck on and off
when needed during the holidays is best=2E

Ideas=3F Suggestions on how to accomplish this=3F

----------=3D=3D Posted via Deja News=2C The Discussion Network =3D=3D=
----
http=3A=2F=2Fwww=2Edejanews=2Ecom=2F Search=2C Read=2C Discuss=2C=
or Start Your Own =20
=2E

Date=3A Sat=2C 02 Jan 1999 08=3A36=3A55 -0600
From=3A "William E=2E Sabin=22 <sabinw=40mwci=2Enet=3E
Subject=3A PEP vs RMS

=3E > |Prms =3D SQRT=28 (1=2FT=29 * Integral0-=3ET=28 P^2 dt))

This is incorrect=2E The RMS value of "any=22 function F=28t=29 is

Frms =3D 1=2FT int=280 to T=29 F=28t=29^2 dt

Bill W0IYH

=2E

Date=3A Sun=2C 03 Jan 1999 20=3A23=3A05 -0800
From=3A Roy Lewallen <w7el=40teleport=2Ecom=3E
Subject=3A PEP vs RMS

That's a fine argument=2C but it gives the wrong result for a simple
square wave=2E Rather than searching for a flaw=2C I'll simply directly=

calculate=2C by definition=2C the average and RMS power of the example =
I
gave in my last posting -- a square-wave current waveform through a
one ohm resistor=2E

The current is=3A

+1 volt from t =3D 0 to omega=2F=284*pi=29
-1 volt from t =3D omega=2F=284*pi=29 to omega=2F=282*pi=29

The period is omega=2F=282*pi=29 =3D T

The power =3D (+1=29^2 =3D +1 watt for the first half period=2E
The power =3D (-1=29^2 =3D +1 watt for the second half period=2E
So the power =3D +1 watt over the whole period=2E

The average power =3D 1=2FT * Integral{t =3D 0 to T} of (+1=29 dt =3D 1=
=2FT * t {t
=3D 0 to T} =3D 1

The RMS power =3D sqrt=5B1=2FT * Integral{t =3D 0 to T} of (+1=29^2 dt=5D=
=3D
sqrt=281=29 =3D 1

For this waveform=2C the average power =3D the RMS power=2E What have I=
done
wrong in this simple calculation so it doesn't agree with your result=3F=

Roy Lewallen=2C W7EL

William E=2E Sabin wrote=3A
=3E=20
=3E The 0=2E88 value for rms power of a sine wave is the average value =
of a=22square of a

=3E sine-squared=22 function=2C as shown in a previous post=2E
=3E The average power is for the average of a "sine-squared=22 function=
=2E See text below for
=3E clarification=2E
=3E=20
=3E > For a symmetrical sinusoidal waveform=2C
=3E > the RMS is the well-known 1=2Fsqrt=282=29 times the peak value=2C=
while the
=3E > average is zero=2E Adding the sinusoidal components of the voltag=
e or
=3E > current waveforms doesn't work=2C either=2C because the square of=
the sum
=3E > isn't equal to the sum of the squares=2E As an example of another=
power
=3E > waveform=2C consider a square wave of current=2C +1 volt for half=
its
=3E > period and -1 volt for the other half=2C going through a 1 ohm re=
sistor=2E
=3E > As a function of time=2C the power is constant=2C with value of o=
ne watt=2E
=3E > Both the average and RMS values of this waveform are one watt=2E
=3E=20
=3E The "average power=22 is equal to the "peak power=22 of the square =
wave and the rms "voltage=22
=3E is equal to the "peak voltage=22 of the square wave=2E Average powe=
r is *always* rms voltage
=3E squared (if R=3D1 ohm=29=2E
=3E=20
=3E If you decompose the square wave (or any other wave=29 into its fre=
quency components=2C and
=3E calculate the average power in each component=2C and then add all o=
f these up=2C you get the
=3E wave average power=2E If you do the same thing with the rms power c=
omponents you get the rms
=3E power (not the average power=29 of the wave=2C which is 0=2E88 dB h=
igher=2E
=3E=20
=3E The calculation of the average power for each frequency component i=
nvolves integrating the
=3E sine-squared function=2E
=3E=20
=3E Pave =3D 1=2F=282 pi=29 * int=280 to 2 pi=29 [V * sin (theta=29=5D^=
2 d=28theta=29
=3E =3D1=2F=282 pi=29 * int (0 to 2 pi=29 [V^2 * 1=2F2 * (1 - =
cos=282 theta=29=5D d=28theta=29
=3E=20
=3E To get the rms power we integrate the square of the last integrand=2C=
which is the term in
=3E square brackets=3A
=3E=20

=3E [V^2 * 1=2F2 * (1 - cos=282 theta=29=5D^2
=3E=20
=3E If we do this for each frequency component and add them up we get t=
he rms power for the
=3E square wave=2E
=3E=20
=3E Parseval's Theorem equates the average power of a waveform in the t=
ime domain and the sum
=3E of the spectral sine wave average power components=2C and that is w=
hat we are dealing with
=3E here=2E Parseval's Theorem would also apply to the rms power idea=2E=
In other words=2C it is as
=3E if we increased the amplitude of the square wave by 0=2E88 dB=2C fo=
und the rms power of each
=3E sine wave component=2C and then added them all up to get the equali=
ty that Parseval's Theorem
=3E requires=2E
=3E=20
=3E The mathematics of all of this hangs together quite well and I am s=
ure it is OK=2E
=3E=20
=3E Bill W0IYH
=2E

Date=3A Sun=2C 03 Jan 1999 23=3A21=3A18 -0600
From=3A mark beutler <mbeutler=40tds=2Enet=3E
Subject=3A POWER SUPPLY OUTPUT INCREASE=2E

FREE EAST TIMOR wrote=3A

=3E I have a 5 amp power supply and I would like to increase the power =
output to
=3E approx=2E 30 amps=2E I believe this is done using the 3055 power tr=
ansistors=2C
=3E could some-one please draw me a circuit or explain where I can find=
a
=3E circuit to allow me to build this thing
=3E Laurens

No argument about some of the great suggestions I have seen=2C but I do=
have one
alternate for someone trying to do this on a budget=2E I am making the=
assumption
that what is needed is a 12VDC supply=2E One possibility is to modify =
a garage
sale automotive type battery charger that is rated for the continuous c=
urrent
that you want=2E Usually=2C they have poor filtering=2C since they are=
using the
battery being charged as the "filter=22=2C if you will=2E So=2C one ca=

n add capacitance
to smooth out the output=2E These things are NOT very well regulated=2C=
so if you
need a regulated supply=2C forget it or be prepared to do some plain an=
d fancy
modifications=2E

However=2C in any case=2C what you do get=2C for relatively cheap=2C is=
a transformer
that will handle the continuous current required even if you have to bu=
ild a
pass transistor regulator=2E

BTW=2C one way to aquire some info is to call Motorola and ask for thei=
r "Linear
and Switchmode Regulator Handbook=22=2E They will send you a copy for =
free=2E (this
is a large=2C comprehensive book=29 Has gobs of different power supply =
designs based
around all of their available regulators and schemes for high power out=
put stuff
as well=2E I saw a couple based on a regulator and pass transistor des=
ign that
don't look too bad at all to build and would work with the above mentio=
ned
transformer=2E Their local phone number for Australia will be on the w=
eb=2E Many
of the silicon manufacturers will do this sort of thing as a matter of =
course=2E
I have aquired many very useful books this way for free or the cost of =
postage=2E
I just happen to like the Motorola book since it is so well laid out=2E=

Have fun and good luck to you=2E

-
mark beutler mbeutler=40tds=2Enet ICQ# 3851271
-

=2E

Date=3A Sun=2C 03 Jan 1999 23=3A59=3A51 -0800
From=3A Vern Van Zandt <vvandt=40televar=2Ecom=3E
Subject=3A WTB=3A UPC "Unique=22 Wire Tuner

I'm looking for two complete units (or parts=29 for a project=2E Looks=
are
not nearly as important as functionality=2E
Would prefer something in the local area (Washington State=29 if possib=
le=2E

Please e-mail with details if you can help=2E

Thanks!
73 de N7GTB
Vern=2E

=2E

End of Ham-Homebrew Digest V98 #718
****

=

--simple boundary--

148. Re: Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: mark beutler <mbeutler@tds.net>
Message-ID: <36914749.92184A2D@tds.net>
Source record: 75079

duffer wrote:

> Since It is understood that crystals
> age over time thus changing their
> resonant frequency, Is there any
> way to effectively speed up the
> aging process of a crystal in order
> to provide higher stability over time ?
> We all know that you can't speed
> up the hands of time (yet :)
> ...just wondering if there is a known
> process to simulate the aging.
>
> Reply here on the newsgroup or
> remove the 'x' in my address to reply
> by e-mail.
>
> Cheers,
> Hugh VA3TO Toronto

Yah, you can, but the crystal will still continue to age after you are done. All you will do is decrease the lifespan somewhat. If you need very tight stability, perhaps you might wish to consider the idea of an oven controlled oscillator or some other high stability crystal control circuit.

--
-
Regards,
mark beutler
-

149. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <76risq$e6g$1@spock.tinet.ie>
Source record: 75080

Stuart Baynes wrote in message <76lsbj$2rt$1@nnrp01.iafrica.com>...
>Looking to make a simple FM tranceiver for the 6m band, frequency steps of
>either 2.5, 10 or 12.5.
>Has any body seen any chips that can do this, that are self contained and
>that don't need an on board computer to program it? Look forward to any
>replies.
>Stuart ZS6OUN @ ZS0DLD
>

Have a look at www.mot.com
MC145151P for the PLL.
MC13135 for the FM RX.

73, Ed. EI9GQ.

--

****

Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

www.nettaxi.com/citizens/ei9gq/

****

150. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <36915AFC.ED2854E0@one.net>
Source record: 75081

William E. Sabin wrote:
>

< one giant snip right here, sorry if it messes up the thread>

> If you decompose the square wave (or any other wave) into its frequency components, and
> calculate the average power in each component, and then add all of these up, you get the
> wave average power. If you do the same thing with the rms power components you get the
rms
> power (not the average power) of the wave,

This is not correct. I can't do all the math on it right now (got to
run), but root-mean-square doesn't work this way.

> which is 0.88 dB higher.
>
> The calculation of the average power for each frequency component involves integrating
the
> sine-squared function.
>
> Pave = 1/(2 pi) * int(0 to 2 pi) [V * sin (theta)]^2 d(theta)
> =1/(2 pi) * int (0 to 2 pi) [V^2 * 1/2 * (1 - cos(2 theta)] d(theta)
>
> To get the rms power we integrate the square of the last integrand, which is the term in
> square brackets:
>
> [V^2 * 1/2 * (1 - cos(2 theta)]^2

This also doesn't look right, though now I'm having so much trouble
(Bill, too, I guess) with representing this kind of math in em-mailable
ASCII that I'm not sure.

Sigh ...

> If we do this for each frequency component and add them up we get the rms power for the
> square wave.
>
> Parseval's Theorem equates the average power of a waveform in the time domain and the sum
> of the spectral sine wave average power components, and that is what we are dealing with
> here. Parseval's Theorem would also apply to the rms power idea. In other words, it is as
> if we increased the amplitude of the square wave by 0.88 dB, found the rms power of each
> sine wave component, and then added them all up to get the equality that Parseval's
Theorem
> requires.
>
> The mathematics of all of this hangs together quite well and I am sure it is OK.

>
> Bill W0IYH

151. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <369159F1.D8D71380@hevanet.com>
Source record: 75082

red_strider@my-dejanews.com wrote:
>
> This last set of holidays has taught us a few things, one major thing is
> that cell phones are both a blessing and a curse.
>
> This last x-mas we had cell phone madness, and I want a way to make it stop
> for at least the time it takes us to have our bit of family get togethers.
>
> So I am looking for a way to white noise out cells phones from receiving and
> sending, but only for a home sized area... something I can flick on and off
> when needed during the holidays is best.
>
> Ideas? Suggestions on how to accomplish this?
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

Jamming cellphones would be ILLEGAL. Unless your nearest neighbor is
thousands of feet away, there's no way to gurantee you're not jamming
him too.

I'm always amazed that people who lose control of their lives
are perfectly willing to do illegal/dangerous things to indirectly
enforce wishes that they're unwilling/afraid to ask for.

All you gotta do is tell them to turn off their phones or leave.
You can then be tightly puckered all alone. God forbid your phone
should ring...better cut the wire. Do it now, the voltage is lower
when you're online.

Neighbor has a heart attack. They can't call 911 'cause you're
jamming....I'd like to be the lawyer prosecuting you on that one...I
could retire.

152. wtb 150pf air variable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36915DF0.C49A8EFE@buffnet.net>
Source record: 75083

--- I need a 150pf air variable with 0.125 inch/ 3.0mm spacing
-4500v peak voltage. I think it was a johnson 154-15 part number.

I could also use about 3" of B&W 3033 6tpi 12 gauge coil stock.

Any help would be appreciated. I have some 1n914 to trade or cash :-)

73,

Jim N2-go

153. Re: 6 meter quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <76rpgt$dr4$1@spock.tinet.ie>
Source record: 75084

John & Ruthann Fisher wrote in message <76pk9bcle1@ionews.ionet.net>...
>
>Quick questions -
>
>1. Anyone know of a website or newsgroup where cubical quad
>experimenters hang out and discuss successes and failures?
>

#1 Quad Man in EI is:

EI7BA

http://www.iol.ie/~bravo/

73, Ed. EI9GQ.

--

****

Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

www.nettaxi.com/citizens/ei9gq/

****

154. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36916B21.166E3858@teleport.com>
Source record: 75085

Actually, I did make an error, but it fortunately didn't affect the result. I inverted the period. The correct definition of the current waveform is:

+1 volt from t = 0 to pi/omega
-1 volt from t = pi/omega to (2*pi)/omega

The period is (2*pi)/omega = T

Because the result is true regardless of the period, the error has no effect on the result. My apology for the error.

Out of curiosity, I calculated the ratio of RMS to average power for a zero-average rectangular current wave of arbitrary duty cycle D, flowing through a resistance. (D is the fraction of the period that the current wave is positive. You get the same result, of course, if it's defined as the fraction of the period that it's negative, or if it's a voltage instead of current wave.) The positive and negative current or voltage values were adjusted to keep the average value of the current or voltage waveform equal to zero as D varied. (That is, Ap/An = (1-D)/D where Ap and An are the amplitude of the positive and negative parts of the wave, respectively, and D is the fraction of the period the wave is positive.)

Unless I goofed up my math (a distinct possibility, as I keep proving), the ratio of RMS power to average power for this current or voltage wave is

sqrt{(1-3D+3D^2)/[D(1-D)]}

For a low duty cycle (D<<1), this is about equal to 1/sqrt(D). So the RMS power becomes much greater than the average power for a skinny rectangular current or voltage wave. Because a typical audio waveform, at least a speech waveform, has a high peak-average ratio like this, I'd expect it to also have a considerably higher RMS than average value. Consequently, an audio (or RF) amplifier manufacturer could claim an RMS power capability much greater than the average power it could handle. The amplifier's dissipation, though, would be determined by the average power, and the peak output capability as well as maximum voltage and current stress by the peak power. So RMS power would again serve no useful function other than enhancing advertising claims.

-- Thanks very much to the several people who emailed me with information about how to get a Radiotron handbook. I'll have one soon!

Roy Lewallen, W7EL

William E. Sabin wrote:
>
> Roy Lewallen wrote:
>
> > That's a fine argument, but it gives the wrong result for a simple
> >
> > square wave. Rather than searching for a flaw, I'll simply
> > directly
> > calculate, by definition, the average and RMS power of the example
> > I
> > gave in my last posting -- a square-wave current waveform through
> > a
> > one ohm resistor.
> >
> > The current (voltage?) is:
> >
> > +1 volt from t = 0 to omega/(4*pi)
> > -1 volt from t = omega/(4*pi) to omega/(2*pi)
> >
> > The period is omega/(2*pi) = T
> >
> > The power = (+1)^2 = +1 watt for the first half period.
> > The power = (-1)^2 = +1 watt for the second half period.
> > So the power = +1 watt over the whole period.
> >
> > The average power = 1/T * Integral{t = 0 to T} of (+1) dt = 1/T *
> > t {t
> > = 0 to T} = 1
> >
> > The RMS power = sqrt[1/T * Integral{t = 0 to T} of (+1)^2 dt] =
> > sqrt(1) = 1
> >
> > For this waveform, the average power = the RMS power. What have I
> > done
> > wrong in this simple calculation so it doesn't agree with your
> > result?
>
> You have done nothing wrong.
>
> I set up a Mathcad worksheet to compare the ratios of the following
> integrals:
>
> F1 = SQRT[(1/2pi) * int(0 to 2pi) V(theta)^4 d(theta)] (RMS
> power)
> and
> F2 =(1/2pi) * int(0 to 2pi) V(theta)^2 d(theta)
> (Average power)
>
> I looked at the ratio in dB of F1 to F2 for a lot of various
> functions V(theta).
>

> Results:
>
> For V(theta) = sine wave I got the expected 0.88 dB. For the square
> wave 0 dB.
>
> For a large number of other functions the ratio varied quite a lot.
> If we look at the two formulas, in retrospect, we can pretty much
> guess that their ratios would not be constant but would depend on
> V(theta).
>
> The discussion of Parseval's theorem is correct, but it *only* works
> when we compare the "average" power in the time domain of the
> waveform with the sum of the "average" powers of the sine wave
> components that make up the waveform.
>
> Your example was helpful in getting a better understanding. In these
> quick response forums, errors and imperfect understandings usually
> pop up that need to be corrected.
>
> Bill W0IYH
>

155. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <369171EE.6F8376D9@teleport.com>
Source record: 75086

It looks like three values of Q might be getting into the discussion. One is the Q of the LR portion of the circuit*, with no C. I'm going to call it "LR Q" (Bill's "true Q") for lack of a better term. (I don't like "true Q" for the following reason. A pure inductance has no resistance, so by definition has infinite Q. A real inductor has both resistance and capacitance. So why would a Q value which includes one but neglects another unavoidable characteristic of a real component be more "true" than one which includes both the unavoidable R and C?) Another is what I'd like to call the "component Q", (Tom's Q'') which is Terman's definition, and can in theory be determined by a single measurement of the physical inductor. ("Inductor Q" might be technically correct for this but could be confused with the Q of the LR alone.) Finally, Bill refers to a "circuit Q" which is the Q of a circuit which includes the component plus a resonating capacitor. It's not immediately obvious to me whether this would fit either of the previous Q definitions, or whether it would have a third value.

So far, I've convinced myself that if you resonate the inductor with a capacitor, measure the bandwidth and center frequency of the resulting circuit, and calculate Q as the center frequency divided by the bandwidth, you get the "LR Q". This, of course, doesn't change with inductor capacitance, so by itself won't tell you how the inductor would behave in a circuit. Terman's definition is the equivalent series reactance divided by the equivalent series resistance of the physical component -- or what I dubbed "component Q". (It also equals the equivalent parallel resistance divided by the equivalent parallel reactance of the component.) This decreases as coil stray capacitance increases, and will tell you how the component would behave over a narrow frequency range, provided the frequency is well below self-resonance.

It would seem that both the "LR Q" and "component Q" would be useful. The former can be used in representing the LR portion of a model inductor, where the capacitor is modeled as a separate element. The latter could be used in a simplified LR model for a real inductor, over a narrow frequency range well below self-resonance.

At least I know now what I'm measuring. A simple, direct, and reliable way to measure the "component Q", without separately determining the capacitive part, would be nice. A direct measurement using an impedance bridge doesn't work well for most of the inductors I'm interested in because of limited resolution in the range of interest. Wes Hayward, W7ZOI has suggested a method based on amplitude that might give this information. I'll run through the math and see when I get some time.

*The model I've been using is a series LR, with shunt C across the
series combination.

Roy Lewallen, W7EL

Tom Bruhns wrote:
>
> OK, a little while ago I posted:
>
> (section deleted...)
>
> : And then you went on to note that the Q of a resonator built
> : from that inductor and another lossless parallel capacitor was
> : _not_ Q' but Q. From that I conclude that Q' must be an
> : _apparent_ Q, not an _actual_ Q; or else the actual Q of an
> : inductor depends on the circuit topology around it. (Or else
> : the simple model of a single parallel capacitance is flawed...)
>
> Another way to look a things: If you define Q in terms of
> the Q of a resonator built from some inductor with its inherent
> strays, then it seems to me that the inductor Q should be just
> Q, not the Q', so the Q is unaffected by the stray capacitance...
> at least in the simple "lump all the C into one shunt C value"
> model.
>
> However, you _could_ also "define" inductor Q (just to
> distinguish, let's call it Q'') as ratio of the reactive
> part to the resistive part of the impedance of the coil
> (with all its strays included) at some frequency omega
> (w) = 2*pi*f. If you model the coil with parasitics as an
> ideal inductor in parallel with an ideal capacitor and an
> ideal resistor, then the Q'' defined as reactive part of
> impedance divided by resistive part of impedance is:
>
> Rp * (1 - w^2*L*C) / (w*L)
>
> and obviously as C goes to zero, this goes to the classic R/wL.
> If you model the coil with its parasitics as an ideal inductor
> in series with an ideal resistor, and that paralleled by an
> ideal capacitor, the result is slightly different:
>
> w*L * (1 - Rs^2*C/L - w^2*L*C) / Rs
>
> (Note: Rp and Rs are used to distinguish between modelling the
> loss as a parallel or series resistor.) This one reduces to
> wL/R, as C goes to zero, as expected. Each of these two models
> reduces to the "well-known" formula for inductor Q if you let C
> go to zero. (With luck, I haven't made any algebra or
> transcription mistakes in all that.)
>
> But my always-implied, sometimes-stated question remains:
> is the reactance/resistance "definition" of Q'' really useful?

> Can I build a resonator with that coil by adding only a
> capacitance and no other losses, in which I will see resonator
> Q equal to Q''? If not, what do I do with Q''?
>
> --
> Cheers,
> Tom
> tom_bruhns@hp.com

156. Re: Internal Circuit for Blinking LED?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <36917507.460A@mail.rancho.cc.ca.us>
Source record: 75087
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

Jean-Guy Michaud wrote:

> I'm looking for the internal circuit diagram of blinking LEDs which are
> produced by several manufacturers. Please note that I don't want any
> external blinking circuits.

> Thanks,
> Jean-Guy Michaud, VE3SKJ

That's an odd request. You will obviously have to go to the
manufacturer of the chip for any information such as that.

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

157. Swan HF-700S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: The Calhoun Printers <calprint@gnat.net>
Message-ID: <369186F8.7DC69909@gnat.net>
Source record: 75088

I have a really nice Swan HF 700S transceiver, but no book on it. Is there anyone out there who
can sell me a book or a copy of a book? You can't play with this guy with no book to instruct
how to align, parts, etc.

Best wishes - 73, Vince N4BWD

158. F.S. Tubes, 20LF6, 8950, 6lf6, 2057

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: The Calhoun Printers <calprint@gnat.net>
Message-ID: <369187CF.3E68C4A7@gnat.net>
Source record: 75089

These tubes used as finals in various vintage Swan Equipment . Asking
$20.00 each, ship CONUS
pre-paid.

Best wishes - Vince N4BWD

159. Re: KK7B Direct Conversion Receiver - revision?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Bill Kelsey <kanga@bright.net>
Message-ID: <36919642.29AEBCD3@bright.net>
Source record: 75090

Hi -

I had an e-mail that there was a thread on this newsgroup about the R2 revision. I'll let you know what I know at this point, and as I get more info from Rick I will post more....

Rick is re-designing the PC board to have the same footprint as the miniR2, T2, and LM-2, and to improve performance. The only component change I know of for sure is the change from the SBL-1 dbm's to the TUF-1's. To reduce the size of the board I am sure there are more but I don't know what as yet. The prototype of the new board should be received shortly, and the production board should be available around the end of the month.

I have asked Rick to fill me in on a few more of the details so I can pass them on, and so I can be sure I am set with a stock of parts when the boards arrive.

I'll post more when I know more....

73 - Bill - N8ET
Kanga US

160. Re: Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Douglas Cole <dcole@ior.com>
Message-ID: <36919949.4C7344B7@ior.com>
Source record: 75091

I read an excellent article on aging of crystals and aging of rubidium oscillators and how you can have a very accurate crystal osicillator just by letting the unit run powered up continously , after a certain period the crystal will stabalize to a point where as long as power is not removed from the circuit it will stay at that point (I am grossly oversimplifing of course) and all you should have to do is net your frequency after a time of stabalizing and it will not drift much at all, they also have found that after netting , if you remove power from the circuit it will "rubberband " back and you will have to re-net it.....

Now I know that I haven't given a technically correct explanation of this but I know it works, because I had built a packet repeater and had troulbes with the tx frequency drifting and never stabilizing (the oscillator was switched on and off with the tx line) so I applied continous dc to the circuits before the driver output to the PA and after a period of on time I netted the frequency and it has stayed put for the last 3.5 years!

And then later I read this in a trade magazine (MRT or some such) ,so to see it in a tech book made me feel that much better about what I had experienced......

Anyway if you want I can get a copy of the article for you , it goes into great detail , mostly about why its not always necessary to use a rubidium standard......

Let me know if your interested....

Douglas Cole
N7BFS
AMSAT#26182
dcole@ior.com

duffer wrote:

> Since It is understood that crystals
> age over time thus changing their
> resonant frequency, Is there any
> way to effectively speed up the
> aging process of a crystal in order
> to provide higher stability over time ?
> We all know that you can't speed
> up the hands of time (yet :)
> ...just wondering if there is a known

> process to simulate the aging.
>
> Reply here on the newsgroup or
> remove the 'x' in my address to reply
> by e-mail.
>
> Cheers,
> Hugh VA3TO Toronto

161. Re: PEP vs RMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <369197D1.89A4BCAD@mwci.net>
Source record: 75092

Rich Griffiths wrote:

> William E. Sabin wrote:
> > If you decompose the square wave (or any other wave) into its frequency components, and
> > calculate the average power in each component, and then add all of these up, you get
the
> > wave average power. If you do the same thing with the rms power components you get the
rms
> > power (not the average power) of the wave,

The error in this has been corrected in my most recent post. If we compare the average
power in
the time domain with the sum of the average powers in the spectrum components then the
equality
shows up. This is Parseval's Theorem. But it doesn't work for rms power.

> > To get the rms power we integrate the square of the last integrand, which is the term
in
> > square brackets:
> >
> > [V^2 * 1/2 * (1 - cos(2 theta)]^2
>
> This also doesn't look right,

This is OK, but as we agreed before, we have to take the square root after doing the
integration.
This term uses the trig identity:

[sin(th)]^2 = 1/2 [1 - cos (2th)]

My Mathcad worksheet experiment revealed the facts about Prms vs Pave for various
waveforms.

Bill W0IYH

162. returned mail messages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <36901A9F.CDD495AE@tri.net>
Source record: 75190

Just finished reading Snow Crash, a science fiction novel of a few years back in which the programers brains were fried when looking at snow data on the CRT (which only programmers would try to decode). Any plot here? I failed.

N0UU

163. FS: DX398 Shortwave radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: rickw999@aol.com
Message-ID: <19990103223232.29751.00008797@ng-ft1.aol.com>
Source record: 75191

```
Good shape.One year old. Includes original material: Box, case and adapter
plus manual.
$150 include shipping.
```

164. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: feedback@pcbmilling.com
Message-ID: <36904dd3.35352899@news.mindspring.com>
Source record: 75192
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

You may want to check into the newer microwave materials from Rogers
Corp. like 4003 and 6006 material. It's not as expensive as Duroid
5880 but has good microwave properties.

Mark

On Sun, 03 Jan 1999 15:24:28 GMT, "Bert Douglas"
<bertdNOSPAM@dibbs.net> wrote:

>
>ed ngai wrote in message <368F1925.3B54DE08@sprintmail.com>...
>>You'd be better off w/ telfon for GHz freq. Since that's whawt used in
>>feedhorn circuits, phased arrays, etc.
>
>Define "better" please.
>
>Yes I know that teflon is easier to design with because its electrical
>properties are "nicer".
>
>But teflon is also more expensive. It seems to me that it is up to me as a
>good designer, to decide the tradeoff of non-recurring expense versus
>per-unit expense, considering my own situation.
>
>
>>
>>
>>Barry L. Ornitz wrote:
>>> Roy Lewallen wrote in message <368C536C.978777BC@teleport.com>...
>>> >Artech House's _Microwave Engineers' Handbook_, Vol. 2, shows "Epoxy,
>>> >polyester, or silicone fiberglass laminate (120 lbs/cubic foot)" to
>>> >have a dissipation factor of about 0.007 at "microwave frequencies",
>>> >defined as 1 - 30 GHz ... snip ...
>>
>>> >Roy Lewallen, W7EL
>>
>>> >Bert Douglas wrote:
>>> >> Hi net folks, FR4 is only specified at 1 MHZ. I am wondering if
>anyone
>>> >> can give me a ball park estimate of its dissipation factor (loss
>tangent)
>>> >> at 2.5 GHZ ?
>>> >> Thanks,
>>> >> Bert Douglas
>>

>>> Just to add a little to what Roy said, the conventional G-10/FR-4
>material
>>> gets fairly lossy above 1 GHz or so.
>>
>>... snip ...
>>
>
>

--
PCB Milling
http://www.pcbmilling.com
FAX: (703) 818-0071
Low cost, precision-made PC boards for electronic hobbyists

165. Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: red_strider@my-dejanews.com
Message-ID: <76poau$7l1$1@nnrp1.dejanews.com>
Source record: 75193

This last set of holidays has taught us a few things, one major thing is that cell phones are both a blessing and a curse.

This last x-mas we had cell phone madness, and I want a way to make it stop for at least the time it takes us to have our bit of family get togethers.

So I am looking for a way to white noise out cells phones from receiving and sending, but only for a home sized area... something I can flick on and off when needed during the holidays is best.

Ideas? Suggestions on how to accomplish this?

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

166. 6 meter quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: fisherjr@ionet.net
Message-ID: <76pk9bcle1@ionews.ionet.net>
Source record: 75194

Quick questions -

1. Anyone know of a website or newsgroup where cubical quad experimenters hang out and discuss successes and failures?

2. Anyone have element lengths and spacings for a 4 element quad for 50.200 +/-

3. Will the standard formulas 1030/freq (reflector) , 1005/freq (driven) and 975/freq (driven) work on 6 meters?

4. What is best way to feed this beast? direct with 50ohm coax, 1/4 wave transformer, or gamma?

I have all the materials to build this quad but not sure of the lengths and spacings. While reviewing Bill Orr's book "All about cubical quads" (3rd edition, page 46) he shows a spacing of 10 feet between each element. I've read about wide spacing but that seems a bit extreme to me. I have heard his formulas work well up through and including 10 meters but begin to fall short of the mark when you hit 50 mhz and up.

Sure would like some plans that are tried and true.

Also - would very much like to get my hands on copies of the quad articles in the Jul 81, Aug 81, Dec 81, and Apr 82 all of CQ magazine. I'll pay for copies and postage.

Thanks for your time!!

John KO4OE

167. Re: Articles on the AWA web page + Calendar of Radio Events

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3690d72b.40790106@news.erols.com>
Source record: 75195
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

John: I was visiting your pages the other day and was very impressed.
Beautiful job! I'll be back to look at the new stuff. Thanks, 73
Bill N2CQR

On 3 Jan 1999 18:11:27 GMT, John Dilks <oldradio@worldnet.att.net>
wrote:

>Articles on the AWA web page + Calendar of Radio Events
>
>To all,
>
> The AWA Web, Page_2, has been updated for January 1999. It now
>appears less cluttered.
>
> http://www.ggw.org/awa/page_2
>
> Additionally, there are now two AWA Old Timer's Bulletin (OTB)
>articles there, complete with photos. I tried to keep the feel of the
>OTB in the layout. I think you can print the articles on a laser or ink
>jet and they will come out ok? I'll check from work tomorrow. Anyway,
>they're on the web. Spread the word. More to come. (It takes about 3
>hours to do an article, depending on the number of photos and tables.)
>
> I broke-down and bought my own scanner so I can add OTB pages from the
>past. This should be an attraction to radio buffs, and increase our
>membership. It is much handier. Now I don't have to ask permission
>from my kids. (My, how the tables have turned.)
>
> The "AWA Radio Events" calendar is becoming very popular. I have
>received some nice comments on it, and some new listings have arrived
>due to its being there. I'm hoping this calendar will become "the one
>to go to" for antique radio meets. This too will bring new people to
>the AWA.
>
>--
>73' John Dilks, K2TQN
>
> Please visit my OldRadio Museum
> http://www.eht.com/oldradio/museum
>
> Webmaster for the Antique Wireless Association
> http://www.ggw.org/awa Click on "Page 2"
>-=and=-
> for the New Jersey Antique Radio Club

> http://www.eht.com/oldradio
>-
>

168. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Bill Sloman <sloman@sci.kun.nl>
Message-ID: <3690B512.4B946203@sci.kun.nl>
Source record: 75196
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Rogue Warrior wrote:

> On Fri, 01 Jan 1999 03:52:35 GMT, "Bert Douglas"
> <bertdNOSPAM@dibbs.net> wrote:
>
> >Hi net folks,
> >
> >FR4 is only specified at 1 MHZ.
> >I am wondering if anyone can give me a ball park estimate of its dissipation
> >factor (loss tangent) at 2.5 GHZ ?
> >
> >Thanks,
> >Bert Douglas
> >
>
> I can't give you exact numbers, but from my experience designing
> a 4 pole microstrip combline filter at 3 ghz the fr-4 will have about
> 6db more loss the 5880 duroid. in other words fr-4 is lossy as hell
> at that freq.
>
> If you have a Network Analyzer you should try comparing FR-4 with
> Teflon. you'll see how great teflon really is.

One catch with Teflon is that it is difficult - in practice impossible - tomake
multi-layer boards (four or more) with the stuff. I've used
acrylate-bonded teflon cloth as the outer layers of 6-layer boards,
and Rogers now has several board materials that offer more or
less comparable performance over a range of prices.

Bill Sloman, Nijmegen

169. Internal Circuit for Blinking LED?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Jean-Guy Michaud <jg.michaud@sympatico.ca>
Message-ID: <3690D187.2878@sympatico.ca>
Source record: 75197
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

I'm looking for the internal circuit diagram of blinking LEDs which are produced by several manufacturers. Please note that I don't want any external blinking circuits.

Thanks,

Jean-Guy Michaud, VE3SKJ

170. Re: 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <3690CF7E.3EF5@alliedsignal.com>
Source record: 75198

Try Toys-R-Us. They sell 6v lead-acid batteries for those child-sized electric cars. You can get 6 and 12 volt varieties. Capacity runs around 6 Ah. Price is about $25, depending on voltage and capacity.

171. Re: Yaesu FT-920: To mod or not to mod (please share your experiences)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Rich - KK7PL <n7hmb@spiretech.com>
Message-ID: <3690F387.89EB04D6@spiretech.com>
Source record: 75199
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.ham-radio,rec.radio.amateur

I guess RT Systems (CB Supply?) Amateur Radio Supply just needs the money
and no MARS/CAP on file.
Be clear in the N/G's.
Rich - KK7PL:

Rod Thompson wrote:

> We, RT Systems Amateur Radio Supply, have seen numerous radio that were
> damaged by using the software that was found the internet. The usual
> charges to repair the damage is $160.00 plus shipping.
>
> We can do the mod for you for $30.00 plus shipping.
>
> Hugh Jass wrote in message <1xXh2.12020$Vg2.3304605@news3.mia>...
> >I have a new Yaesu ft-920 HF+6M radio and have been itching to do the
> >Tx-expand mod found at various radio mod sites. See:
> >http://home1.inet.tele.dk/ehh/mods/mod/yaesu/ft-920.htm
> >
> >This mod involves uploading a file directly through the serial port that
> will
> >supposedly unlock Tx on the full range of frequencies.
> >
> >I have searched around and read the newsgroups and some have said that
> >this mod was not intended for the US model, and that it could damage the
> >CPU. Others have said that it worked fine. I did not actually see any
> posts
> >from anyone who did the mod unsuccessfully and ruined their radio.
> >
> >I would appreciate feedback/comments from people who have performed this
> >mod to their radios, and what the outcome was. I would like to see this
> issue
> >clarified once and for all.
> >
> >Please, no flames.
> >
> >Thanks,
> >
> >Hugh

172. Amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990104110341.25353.00006833@ng30.aol.com>
Source record: 75200

For Sale ï¿½Solid State Linear Amplifier 160-10 meters
Amplifier built by Henry +low pass filter
28 volt power supply
Internal TR switching /keyed by rig/radio
H=6.5" X W=15.25" X D=18.25"
Drive 35 to 40 watts input
Power output 250 watts
AM,FM,CW,SSB
$ 395.00 + Shipping from 78641 Austin,Texas

173. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <3690E9C7.B0A12109@certco.com>
Source record: 75201

Roy Lewallen wrote:

> In my experience, silver micas have a higher temperature coefficient
> than good-quality NPOs, and the temperature coefficient varies from
> one silver mica capacitor to another.

I bought a batch of silver-mica caps (from Dan's Small Parts) a while ago. I also have an AADE LC meter (model IIB, I think). I read numerous messages about silver micas not really being temperature stable.

So, I got a can of freeze spray, and an incandescent light, and measured a few of my silver micas after alternately heating and cooling them. I didn't write any numbers down, but measured values were more or less rock solid and didn't vary measurably, modulo the repeatability of the test.

I also tried hitting the cap with freeze spray while it was in the test "fixture". No change.

I'll try to redo this and actually write some numbers down. Don't have any way of reliably measuring the cap's temperature, but I'll try to standardize the cooling and heating times and conditions.

Am I missing something? Is there some glaring flaw in my test? Or, are some silver micas simply better than others? I freely admit that there isn't any solid data here, and my procedure was fairly slapdash, but I did see measurable (several pF to tens of pF) variation in other, non-NPO ceramics and random other caps.

--ncc

174. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3690FE2E.4E76FCB8@teleport.com>
Source record: 75202

I'm not surprised at your results. But if you build an oscillator using the different types of capacitor in the tank circuit and measure the frequency with a counter or receiver, you'll make a much more sensitive measurement. If a capacitor changes value by, say, 0.1%, it would cause a 10 MHz VFO to move 5 kHz, which most folks would consider unacceptable for a moderate temperature change. But you're not likely to be able to see this much change on your meter.

If your application can tolerate the smallest amount of drift that you can see with your measuring system, silver micas and NPOs will be equally good. The only common application where you're likely to see a difference is in a VFO, or perhaps an extremely narrow filter.

Roy Lewallen, W7EL

nicholas charles caruso wrote:
>
> Roy Lewallen wrote:
>
> > In my experience, silver micas have a higher temperature coefficient
> > than good-quality NPOs, and the temperature coefficient varies from
> > one silver mica capacitor to another.
>
> I bought a batch of silver-mica caps (from Dan's Small Parts) a while ago.
> I also have an AADE LC meter (model IIB, I think). I read numerous messages
> about silver micas not really being temperature stable.
>
> So, I got a can of freeze spray, and an incandescent light, and measured a few
> of my silver micas after alternately heating and cooling them. I didn't
> write any numbers down, but measured values were more or less rock solid and
> didn't vary measurably, modulo the repeatability of the test.
>
> I also tried hitting the cap with freeze spray while it was in the test
> "fixture". No change.
>
> I'll try to redo this and actually write some numbers down. Don't have any
> way of reliably measuring the cap's temperature, but I'll try to standardize
> the cooling and heating times and conditions.
>
> Am I missing something? Is there some glaring flaw in my test? Or, are some
> silver micas simply better than others? I freely admit that there isn't any
> solid data here, and my procedure was fairly slapdash, but I did see
> measurable (several pF to tens of pF) variation in other, non-NPO ceramics and
> random other caps.
>

> --ncc

175. Re: Can you use an Oscilloscope for measuring SWR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <3691058b.0@news.netwalk.com>
Source record: 75203
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Charles T. Young wrote in message <76el3a$218$1@campus1.mtu.edu>...
>:
>aJesse: In principle, the problem is that the tdr works in the time domain
>that is it uses a pulse, and you want answers at specific frequencies, so
>I agree with Jerry, wait for the SWR kit.

The principle that Charles refers to is, I beleive, that if the feedline has a resistive termination you should be able to derive SWR from coefficient of reflection. It will have to be resistive at all frequencies however. This immediately rules out testing antennas.

Jim
N8EE

176. Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <76qv5e$pk@freenet-news.carleton.ca>
Source record: 75204
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Has anyone a reference to homebrewing rotary toroidal
inductors?

I was thinking of trying my hand at building a balanced
L network, but find the price and availability of roller
inductors was such as to make one consider alternatives.

I was thinking of 2 x 200-6 powdered-iron cores, with
#14 wire turns, and some sort of spring-loaded wiper
inside the toroid making contact with the wire.

That's pretty well where my imagination peters out.

Any suggestions, howls of derisive laughter, detailed
CAD drawings or references?

tnx de va3rr

177. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: davem@zeppo.cs.ubc.ca
Message-ID: <76r2ul$ftv@zeppo.cs.ubc.ca>
Source record: 75205

red_strider@my-dejanews.com writes:
> So I am looking for a way to white noise out cells phones from receiving and
>sending, but only for a home sized area... something I can flick on and off
>when needed during the holidays is best.

The technologically simple solution is to just have everyone turn off
their cellphones. It's your home - can't you declare it a
cellphone-free zone? If you can suggest this and get everyone to do
it, then no technology is necessary.

And if there are some members of your family who would *not* be willing
to turn off their cellphones voluntarily, how do you think they are
going to feel and behave when they find out that you are jamming their
cellphones? This is *not* likely to contribute to family harmony.

Technically, it's probably not difficult to jam the paging channels
from cell sites near your home, so the phones can't receive information
from the network. If they can't receive data, they can't receive or
initiate calls. However, the "No Service" indicators on the phones
will light up, so people will know something is wrong.

Dave

178. Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: xhduff@ica.net
Message-ID: <36911144.0@lightning.ica.net>
Source record: 75206

Since It is understood that crystals
age over time thus changing their
resonant frequency, Is there any
way to effectively speed up the
aging process of a crystal in order
to provide higher stability over time ?
We all know that you can't speed
up the hands of time (yet :)
...just wondering if there is a known
process to simulate the aging.

Reply here on the newsgroup or
remove the 'x' in my address to reply
by e-mail.

Cheers,
Hugh VA3TO Toronto

179. Re: 6 Volt Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <76r40v$sd6$1@news8.svr.pol.co.uk>
Source record: 75207
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I bet Captain Ahab would like one of these batteries, it should save on
boats !

--
=== Mike W mike@corn2.freeserve.co.uk ===

>

180. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36911530.0@news.netwalk.com>
Source record: 75208

Stuart Baynes wrote in message <76lsbj$2rt$1@nnrp01.iafrica.com>...
>Looking to make a simple FM tranceiver for the 6m band, frequency steps of
>either 2.5, 10 or 12.5.
>Has any body seen any chips that can do this, that are self contained and
>that don't need an on board computer to program it? Look forward to any
>replies.
>Stuart ZS6OUN @ ZS0DLD
>
>

Motorola makes some ICs in the 145nnn series that are single chip PLL devices, but do not include the voltage controlled oscillator. I do not remember the ratings so you may also need a prescaler. I know it is needed at 120 MHz. There is one that has a 12 bit parallel input, if I remember correctly. This could be used with a diode matrix or 12 pole rotary switch.

There are newer devices made for the wireless telephone industry that contain everything, including the VCO, but they will probably need an 'on board computer'. They are also surface mount devices which are more difficult to homebrew. The 145nnn series are available as DIPs.

Look at the various internet sites for companies like Motorola, Plessey, Philips, etc.

Jim
N8EE

181. Re: Various Types of capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <3691194a.0@news.netwalk.com>
Source record: 75209

Keith Brigode wrote in message <368EE461.238082@ibm.net>...
>I'll admit some ignorance. Why are mylar capacitors used sometimes as
>bypass capacitors instead of ceramic?
>
The simple answer is that the ceramic capacitors are not available in the values needed. Mylar capacitors are usually used to bypass lower frequency signals, so a larger value capacitor is needed, on the order of microfarads or tens of microfarads. Ceramic capacitors are almost always much smaller than microfarad and are used at higher frequencies.

>When do I use aluminum eletrolytic as apposed to tantalum?
>
Tantalum capacitors are usually used where you want a relatively high value of capacitance that can be used over a relatively 'large' frequency range, such as in a high quality audio circuit. Aluminum electrolytics are usually used in power supply circuits. Also, power supply voltage is a concern. I don't recall ever seeing a 450 volt tantalum, for example.

Quite often you will see a tantalum (10 to 20 uF) in parallel with a ceramic (.001 to .01) to bypass a
low voltage (5-15 volt) three terminal regulator.

>What do I use to replace old paper capacitors in old radios?
>
Sounds like you have an old radio that you are fixing up. I would suggest using Mylar for the high voltage ones in the 'radio' part of it for moderate values of capacitance. The Sprague 'Orange Drop' series are a good choice. Unless there is obvious signs of damage the ceramics should still be good. For larger values, such as in the power supply section, modern electrolytics are OK.

I am sure that there are others on here that are more knowledgable than I on this topic.

>Could someone refer me to some good reference on capacitors? I really
>don't know how I got to this point without knowing the basic
>differences.
>

Try the ARRL handbook to start.

Anyone else on the group have any suggestions?

Jim
N8EE

182. Re: KK7B Direct Conversion Receiver - revision?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36911B8C.E5815DDC@certco.com>
Source record: 75210

Chip Owens wrote:

> Does anyone know how the KK7B direct conversion receiver kit
> is being modified? Please post to this newsgroup if you know what
> changes are being made.
>
> Thanks!, CHip, NW0O
>
> --
> Chip Owens (owens@atd.ucar.edu)

My wife tried to place an order for an R2 circuit board from Kanga (a gift for me), and was told that the PC board design was changing, but no more info than that. I'll see if I can find out more.

73,

--ncc KB1DEJ

183. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <76r6rp$l3g@hpcvsnz.cv.hp.com>
Source record: 75211

William E. Sabin (sabinw@mwci.net) wrote:
: Tom Bruhns wrote:

: > OK, what if instead of modeling the coil loss as a shunt resistance, we
: > model it as a series resistance, and say that
: >
: > Q = wL/Rs
: >
: > Now if something causes the reactance of the coil+stray capacitance to
: > increase, the Q apparently increases...

: Not true, and there is a simple way to see this. And above all I
: would suggest keep everything simple
: and not get into a quagmire of electromagnetics and energy/power
: arguments. Circuit analysis is all
: that is needed for this problem. Q implies an energy relation and
: it is only necessary to think in
: terms of Q in the circuit analysis.

: If the coil is a series Rs and Xs, and if the coil Q is, say 10 or
: more, then the coil, considered
: "all by itself" (ignore for the moment Cs) can be converted into a
: parallel Rp and and a parallel Xp
: whose values are very nearly given by the following:

: Rp = wL * wL/Rs = wL * Q

: Xp = wL

: We now have virtually the same situation that I described
: previously and the addition of stray
: capacity Cs reduces the Q in the same way as before.

All after what??

In the previous posting, it seems like you were saying that
there is a new Q, which you called Q', which resulted from
parallel stray capacitance Cs:

: > : Q' = Q (1 - w^2 LCs)

And then you went on to note that the Q of a resonator built
from that inductor and another lossless parallel capacitor was
not Q' but Q. From that I conclude that Q' must be an
apparent Q, not an _actual_ Q; or else the actual Q of an
inductor depends on the circuit topology around it. (Or else
the simple model of a single parallel capacitance is flawed...)

If that was not what you intended originally to say, or if it leaves too much to the imagination, perhaps you could find different words to more accurately communicate the situation. An example of a _resonator_ in which Q' applies, and not Q, would be helpful, for instance.

--
Cheers,
Tom
tom_bruhns@hp.com

(I'll be happy to leave fields out of the situation. I just would like to be able to understand from any explanation exactly what the losses are in the resonator versus the stored energy; then I will know the Q. And I'm happy enough assigning a Q to individual components, realizing that this is an extrapolation from the basic definition of the Q of a resonator involving energy. Energy isn't at all a quagmire to me, thank you. For the simple model of a parallel Cs, I would agree with the interpretation that Q' is only an apparent Q, and the actual Q is unchanged by Cs. But is the simple model adequate? Clearly that model doesn't predict anything interesting above the first parallel self resonance, but yet there are interesting things that go on there.)

184. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Don W6JL <Don_Huff@hp.com>
Message-ID: <36912035.924@hp.com>
Source record: 75212

red_strider@my-dejanews.com wrote:
>
> This last set of holidays has taught us a few things, one major thing is
> that cell phones are both a blessing and a curse.
>
> This last x-mas we had cell phone madness, and I want a way to make it stop
> for at least the time it takes us to have our bit of family get togethers.
>
> So I am looking for a way to white noise out cells phones from receiving and
> sending, but only for a home sized area... something I can flick on and off
> when needed during the holidays is best.
>
> Ideas? Suggestions on how to accomplish this?
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

Red OM,

Pardon my incredulity, but all you need to do is turn off all the
cellular
phones in your house (it is YOUR house, isn't it?).
73,
Don, W6JL

185. Re: MY POWER SUPPLY UPGRADE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36912170.0@news.netwalk.com>
Source record: 75213

FREE EAST TIMOR wrote in message <915363696.192513@dns2.ats.com.au>...
>Thank you for your request
>I wish to build my own 13.8 volt 25amp power supply, I am not sure how to
>piggy back the power diodes to allow me to draw that much current. I will
>then have to set up a crow bar circuit to limit the voltage output.
>One of the things I am conscious of is that I may need resistors and
smaller
>caps to make the thing run more efficiently etc etc. I did not want to go
>into a lot of detail about my mothers shoe size and why she had flat feet.
I
>consider that the request was simple, does anyone have a circuit to
increase
>the power output on a power supply?

I didn't see your original request, but the simple answer is that you can not get more power out of a supply than is fed into it. If you want 345 watts out (13.8 x 25) you are going to be drawing at least 345 watts from the wall socket. This is simple physics...there is no way around it.

You will, in fact, be drawing more than 345 watts from the electric plug because of the inefficiency of the power supply. The amount of power available will be limited by the weakest component in the supply, which hopefully will be the fuse. All other components will have to be appropriately rated.

I do not know what you mean by 'piggy back the power diodes', but putting them in parallel is not suggested. There are single diodes available that will do the job. Sometimes diodes are put in series to increase the voltage handling capability. In either case you will still need a transformer that can supply the power.

I assume you do not really mean 'crow bar'. A crow bar circuit is used to shut off the power supply if something goes wrong causing the voltage or current to go too high. What you need is a regulator that will keep the voltage at a constant level. The simplest that I can think of will need a 3 terminal regulator (type 7812), 3 or 4 hefty transistors, a handfull of resistors, and a few capacitors.

Try checking around the internet. There may be some web sites with detailed designs on power supplies. Or look at the ARRL or RSGB (what is the AU equivalent?) handbooks.

Jim
N8EE

186. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <76rm1f$15r@hpcvsnz.cv.hp.com>
Source record: 75093

OK, a little while ago I posted:

(section deleted...)

: And then you went on to note that the Q of a resonator built
: from that inductor and another lossless parallel capacitor was
: _not_ Q' but Q. From that I conclude that Q' must be an
: _apparent_ Q, not an _actual_ Q; or else the actual Q of an
: inductor depends on the circuit topology around it. (Or else
: the simple model of a single parallel capacitance is flawed...)

Another way to look a things: If you define Q in terms of
the Q of a resonator built from some inductor with its inherent
strays, then it seems to me that the inductor Q should be just
Q, not the Q', so the Q is unaffected by the stray capacitance...
at least in the simple "lump all the C into one shunt C value"
model.

However, you _could_ also "define" inductor Q (just to
distinguish, let's call it Q'') as ratio of the reactive
part to the resistive part of the impedance of the coil
(with all its strays included) at some frequency omega
(w) = 2*pi*f. If you model the coil with parasitics as an
ideal inductor in parallel with an ideal capacitor and an
ideal resistor, then the Q'' defined as reactive part of
impedance divided by resistive part of impedance is:

Rp * (1 - w^2*L*C) / (w*L)

and obviously as C goes to zero, this goes to the classic R/wL.
If you model the coil with its parasitics as an ideal inductor
in series with an ideal resistor, and that paralleled by an
ideal capacitor, the result is slightly different:

w*L * (1 - Rs^2*C/L - w^2*L*C) / Rs

(Note: Rp and Rs are used to distinguish between modelling the
loss as a parallel or series resistor.) This one reduces to
wL/R, as C goes to zero, as expected. Each of these two models
reduces to the "well-known" formula for inductor Q if you let C
go to zero. (With luck, I haven't made any algebra or
transcription mistakes in all that.)

But my always-implied, sometimes-stated question remains:
is the reactance/resistance "definition" of Q'' really useful?
Can I build a resonator with that coil by adding only a
capacitance and no other losses, in which I will see resonator

Q equal to Q''? If not, what do I do with Q''?

--
Cheers,
Tom
tom_bruhns@hp.com

187. 6 meter amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990104193912.13863.00007156@ng-fb2.aol.com>
Source record: 75094

For Sale: 6 Meter Amplifier _ G.G. 4-400
2800 volts on plate / TR switching
50 to 75 watts drive / 350 to 650 watts output
about 90 lbs.
Price $600.00 plus shipping from A/C 78641
Can be seen at ï¿½ www.inetport.com/~arl/
Look under (Items for sale ï¿½ Amplifiers
kb5mer@aol.com JR

188. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: exray@caribe.net
Message-ID: <76s238$6b8$1@nnrp1.dejanews.com>
Source record: 75095

I'm jumping into this thread kinda late...
I've never done any serious comparison, but have built a few little VFO circuits and found the polystyrene caps to be very stable. To those of you who have actually made serious comparisons, how do the polystyrenes stack up against silvered-micas in such an application?

-Bill M WX4A

> So, I got a can of freeze spray, and an incandescent light, and measured a few
> of my silver micas after alternately heating and cooling them. I didn't
> write any numbers down, but measured values were more or less rock solid and
> didn't vary measurably, modulo the repeatability of the test.

> Am I missing something? Is there some glaring flaw in my test? Or, are some
> silver micas simply better than others? I freely admit that there isn't any
> solid data here, and my procedure was fairly slapdash, but I did see
> measurable (several pF to tens of pF) variation in other, non-NPO ceramics and
> random other caps.
>
> --ncc

--
-exray
WX4A
Vieques Island, PR

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

189. great site really BIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <36917A71.F1FC45A5@bellsouth.net>
Source record: 75096

http://www.paradox2010.com/ham/

190. Re: N7BG Opinions?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: stupidly.high@prices.com
Message-ID: <369181a3.9624604@news.mnsinc.com>
Source record: 75097
Cross-posted to: rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Why pick so many fights, Brian?

Life is too short!

Recently, bshort@speedchoice.com (Brian Short) wrote:

>Subject: Opinions?
>From: bshort@speedchoice.com (Brian Short)
>Newsgroups: rec.radio.swap
>
>Return-Path: trogo@telegraphy.com
>Received: from mail01.detroit.speedchoice.com
>(root@mail01.detroit.speedchoice.com [207.238.183.31]) by
>mail.phoenix.speedchoice.com (8.8.8/) with ESMTP id RAA01726 for
><bshort@phoenix.speedchoice.com>; Sun, 20 Dec 1998 17:22:21 -0700 (MST)
>Received: from smtp04.primenet.com (daemon@smtp04.primenet.com
>[206.165.6.134])
>by mail01.detroit.speedchoice.com (8.9.1/8.9.1) with ESMTP id IAA00768
>for <bshort@speedchoice.com>; Mon, 21 Dec 1998 08:23:45 -0600
>Received: (from daemon@localhost)
>by smtp04.primenet.com (8.8.8/8.8.8) id RAA14782
>for <bshort@speedchoice.com>; Sun, 20 Dec 1998 17:21:17 -0700 (MST)
>Received: from ip-26-155.phx.primenet.com(206.165.26.155), claiming to be
>
>"pb"
>via SMTP by smtp04.primenet.com, id smtpd014677; Sun Dec 20 17:21:08 1998
>
>
>Message-ID: <00b901be2c76$5b796cc0$09a7dacf@pb>
>From: "Tony Rogozinski" <trogo@telegraphy.com>
>To: "Brian Short" <bshort>
>Subject: Re: Address for N7BG
>Date: Sun, 20 Dec 1998 17:10:37 -0700
>MIME-Version: 1.0
>Content-Type: text/plain;
>charset="iso-8859-1"
>Content-Transfer-Encoding: 7bit
>X-Priority: 3
>X-MSMail-Priority: Normal
>X-Mailer: Microsoft Outlook Express 4.72.3110.5
>X-MimeOLE: Produced By Microsoft MimeOLE V4.72.3110.3
>X-UIDL: a16d7dc016044bc2391a0f3a46b8ef61

>
>I said no further communication and I meant it. Oh
>well. Guess you better start filing an action in small
>claims court. You waited six months during which
>time you never said you wanted the antenna after
>I told you to tell me when you wanted it and I would
>get it down. Then, you apparently either got a better
>deal on another antenna or simply decided you didn't
>want mine. During that time my antenna was off
>the market so I'm out the interest on my money for
>those months as well. If you weren't such a jerk
>we could have settled this without a problem but
>since you chose not to do so then you'll just have to
>bear the consequences.
>No further correspondence from you will be read.
>Merry Xmas
>Tony N7BG
>-----Original Message-----
>From: Brian Short <bshort@speedchoice.com>
>To: Tony Rogozinski <trogo@telegraphy.com>; cadxa@listserv.tempe.gov
><cadxa@listserv.tempe.gov>
>Date: Sunday, December 20, 1998 5:08 PM
>Subject: Re: Address for N7BG
>
>>You said 2 wks and that was 1 wk ago. Time is
>>counting down and I have been in contact with
>>legal authorities as well. The fact remains that
>>I have a cancelled check which you cashed, but
>>nothing in return, as yet.
>>
>>Simply, get the antenna down in 1 week or before
>>or we meet in court under much less pleasant
>>circumstances.
>>
>>As for your stress, see a shrink or whatever you
>>need to do. This is of no concern to me.
>>
>>As for what I expect, I expect the antenna as
>>originally promised or my deposit back. Period.
>>
>>None of this has anything to do with your stress,
>>or what degree of cooperation you are willing to
>>put forth in return for whatever.
>>
>>Simply, in the next week, tell me when to come to
>>get the antenna as promised some 6 months ago.
>>Or, refund my $100 deposit.
>>
>>Otherwise, we take this up in a different venue.

>>
>
>>Brian
>>
>>At 04:17 PM 12/20/98 -0700, you wrote:
>>>You don't seem to hear or read well. I said it would be
>>>ready when I got it down and I also requested no further
>>>communication from you. Get it? Don't push me if
>>>you expect me to cooperate with you. The more you
>>>bother me the longer it will take to get the antenna
>>>off the tower - I can't climb when I'm stressed.
>>>
>>>Tony
>>>
>>>>-----Original Message-----
>>>>From: Brian Short <bshort@SPEEDCHOICE.COM>
>>>>To: CADXA@LISTSERV.TEMPE.GOV <CADXA@LISTSERV.TEMPE.GOV>
>>>>Date: Sunday, December 20, 1998 9:32 AM
>>>>Subject: Address for N7BG
>>>>
>>>>
>>>>>Thanks for the phone number replies,
>>>>>but evidently my number has been "blocked."
>>>>>
>>>>>Can someone give me an address (current)
>>>>>and/or directions for N7BG's shack?
>>>>>
>>>>>73, Brian
>>>>>
>>>>>--
>>
>>--
>>Brian Short 1994 E Laguna Dr Tempe, Az 85282
>>bshort@speedchoice.com >or< http://www.qex.net/
>>--
>>
>>
>>To: trogo@primenet.com
>>From: Brian Short <bshort@speedchoice.com>
>>Subject: Re: KLM LPDA
>>
>>Tony,
>>
>>I have your remaining balance here.&#65533; When can I
>>come get the antenna?&#65533; I have a very long utility
>>trailer and pick-up truck.&#65533; I'm ready, the tower is
>>ready for installation of the antenna.
>>
>>I can come any time as I don't work.

>>
>>(602)839-3484
>>
>>The sooner the better!&#65533; This is the better antenna&#65533; as
>>it has the 40m element.&#65533; The other one does not and
>>I have a use for both, actually.
>>
>>73, Brian
>>
>>At 07:59 AM 12/17/98 -0700, you wrote:
>>>Interesting.&#65533; You never told me you were ready for it so I had
>>>no reason to take it down.&#65533; It takes only a matter of a couple
>>>of hours to do so but there was no sense in doing it and
>>>having it lay in my yard.&#65533; There are many ways to contact
>>>me if you really want to so that's a poor excuse.&#65533; I will
>>>not refund your money since I have not had the opportunity
>>>to sell the antenna to anyone else after receiving the
>>>deposit from you.&#65533; Sorry.
>>>
>>>Tony
>>>
>>>
>>>-----Original Message-----
>>>From: Brian Short <bshort@speedchoice.com>
>>>To: trogo@primenet.com <trogo@primenet.com>
>>>Date: Thursday, December 17, 1998 7:20 AM
>>>Subject: KLM LPDA
>>>
>>>
>>>>Tony,
>>>>
>>>>As you know, I gave you $100 some months ago
>>>>as deposit on your KLM LPDA antenna.&#65533; You had
>>>>promised taking it down in the near future.
>>>>
>>>>After more than 6mos, I have to conclude that you
>>>>are reluctant to take the antenna down or sell it.
>>>>Anyway, I have purchased one elsewhere now and
>>>>will put it up very soon.
>>>>
>>>>This being the case, I am no longer in need of yours.
>>>>So, please refund my $100 deposit as you have been
>>>>unable to consummate the deal in a reasonable amount
>>>>of time.
>>>>
>>>>Send $100 to:
>>>>
>>>>Brian K. Short
>>>>1994 E Laguna Dr

>>>>Tempe, Az 85282
>>>>
>>>>73, Brian
>>>>
>>>>PS I tried contacting you via cluster etc and Monty
>>>>said you had not been on packet after trying...
>>>>
>
>--
>
>Check received.
>
>
>Tony
>
>
>
>At 05:08 AM 6/10/98 +0000, you wrote:
>>FB, will go out in the AM mail.
>>
>>At 09:51 PM 6/9/98 -0700, you wrote:
>>>Ok, that's fine - you can send it to my office address which follows.
>>>I'll now have some incentive to get it off the tower.&#65533; Thanks.
>
>>>
>>>Tony Rogozinski
>>>3030 N. Central Ave., #1201
>>>Phoenix&#65533; 85012
>>>
>>>Tony
>>>
>>>
>>>At 03:14 AM 6/10/98 +0000, you wrote:
>>>>Tony,
>>>>
>>>>I am ready to pay you the deposit against the $450 cost of
>>>>the KLM 7-10-30 LPDA at your QTH.
>>>>
>>>>$100 up front would be fine if that is ok with you?
>>>>
>>>>I will pick up the antenna when it is on the ground.
>>>>
>>>>
>>>>73, Brian
>>>>
>>>>>Ok, before I do, let me see what materializes in the coming
>>>>>couple days. If nothing out of the ordinary comes along, we
>>>>>can firm it up, then.
>>>>

>>>>>>Yes, that all sounds fine. I don't climb, however.
>>>>>>Also, I am still looking for the tower... No real big
>>>>>>hurry getting it down etc, but I will take it.
>>>>>>
>>>>>>That antenna is perfect for what I need.
>>>>>>
>>>>>>You can consider it sold, just tell me when to
>>>>>>come get it.
>>>>>>
>>>>>
>>>>>*****Guess I can't condsider it sold then. Don't understand or
>>>>>   I guess you're hedging your bet but please don't tell me
>>>>>   to consider it sold if it isn't.
>>>>>
>>>>>   Tony
>>>>>
>>>>>
>>>>>
>>>>>>At 05:44 PM 5/31/98 -0700, you wrote:
>>>>>>>Ok, FB. Would like to get a deposit - say $100 for now so
>>>>>>>I don't advertise it. I'll try to get it down in a couple
>>>>>>>of weeks or so.
>>>>>>>
>>>>>>>Tony
>>>>>>>
>>>>>>>
>>>>>>>At 12:40 AM 6/1/98 +0000, you wrote:
>>>>>>>>Yes, that all sounds fine. I don't climb, however.
>>>>>>>>Also, I am still looking for the tower... No real big
>>>>>>>>hurry getting it down etc, but I will take it.
>>>>>>>>
>>>>>>>>That antenna is perfect for what I need.
>>>>>>>>
>>>>>>>>You can consider it sold, just tell me when to
>>>>>>>>come get it.
>>>>>>>>
>>>>>>>>73, Brian
>>>>>>>>
>>>>>>>>At 05:12 PM 5/31/98 -0700, you wrote:
>>>>>>>>>It's up in the air at this location. In excellent condition -
>bought
>>>>>>>>>from original owner and put it up about a year ago. I will be
>selling
>>>>>>>>>my house and guess I'll start selling stuff now. Price is what I
>>>>>>>>>paid for it $450.
>>>>>>>>>
>>>>>>>>>Tony
>>>>>>>>>
>>>>>>>>>

>>>>>>>>>At 12:06 AM 6/1/98 +0000, you wrote:
>>>>>>>>>Yes, that would do nicely. Is it new? Assembled? Condition?
>>>>>>>>>Also, price? Location of antenna?
>>>>>>>>>
>>>>>>>>>73, Brian
>>>>>>>>>
>>>>>>>>>At 04:53 PM 5/31/98 -0700, you wrote:
>>>>>>>>>>I have a KLM 7-30MHZ log periodic for sale if that's what
>>>>>>>>>>you're looking for.&#65533; Also have some other HF antennas.
>>>>>>>>>>
>>>>>>>>>>Tony
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>>
>>>>>>>>>>At 11:42 PM 5/31/98 +0000, you wrote:
>>>>>>>>>>>Hi,
>>>>>>>>>>>
>>>>>>>>>>>We have acquired some rural acreage (DM-32)
>>>>>>>>>>>and I'd like to get started with some antennas,
>>>>>>>>>>>so I'm looking for various items: tower, beam,
>>>>>>>>>>>log periodic, tilt-over crank-up tower, vertical,
>>>>>>>>>>>radial wire, large VHF arrays, or what have you.
>>>>>>>>>>>
>>>>>>>>>>>Looking to get started with what is available in
>>>>>>>>>>>the used market in the area (Phoenix, Casa Grande,
>>>>>>>>>>>etc). Anyone have leads especially for crank-up
>>>>>>>>>>>tilt-over tower or tubular tower.
>>
>>>>>>>>>>>
>>>>>>>>>>>73, Brian
>>>>>>>>>>>
>
>--
>Brian Short 1994 E. Laguna Dr. Tempe, Az 85282
>bshort@speedchoice.com >or< http://www.qex.net/
>--
>
>--
>Brian Short 1994 E. Laguna Dr. Tempe, Az 85282
>bshort@speedchoice.com >or< http://www.qex.net/
>--

191. Re: Microphones for IC-756

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: kn4aq.NOSPAMatALL@ipass.net
Message-ID: <369185d3.3754734@news.ipass.net>
Source record: 75098
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Oleg Vakushin" <rv9ax@emirates.net.ae> wrote:

>Hello!
>Does anyone have a experience of using ICOM's microphones SM-20 and SM-8?
>Which one give better signal quality? I guess use it with IC-756. May be
>exist better choice instead of ICOM's microphone for that TRX?
>
>Thanks
>
>Oleg RV9AX
>
>--
>rv9ax@emirates.net.ae

Hello, Oleg

I'm using an SM-20 with my 756, and get good audio reports. I did some on-air comparisons with the stock hand-mic, and a couple other mics I had lying around here, and the SM-20 was a clear winner. But I do not have a SM-8 available for comparison. I don't think I would have spent that much money myself, but it was a Christmas present from my wife. Besides, it looks nice.

73,
Gary KN4AQ
kn4aq@ipass.NOSPAM.net (remove nospam for reply)

192. Capacitors 10 220uf @ 450wv

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: xrrwitt@webt.com
Message-ID: <369188f8.22193082@news.webt.com>
Source record: 75099

I have 10 cde Electrolytic Capacitors value of 220uf @ 450wv. They are
General purpose aluminum snap in type radial lead with temp range of
-40 to 85+. The size is 1 1/4 dia by 1 1/2 inch long with tabs out the
end of 1/4 inch. They are can shaped. They are like new and have been
checked for cap and leakage. $3.00 ea plus shipping

rrwitt@webt.com
To reply please remove x from in front of rrwitt@webt.com

193. Re: need info on programming languages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <76sd6o$6oa@nnrp4.farm.idt.net>
Source record: 75100

Douglas Cole wrote in message <368D1D43.6327144B@ior.com>...
>I am interested as a hobbyist/experiment to learn and then write
>a win/NT or Xwindows program to control a Yaesu FT847 via
>computer and also via soundblaster input via a remote radio (ie
>Handheld DTMF) anyone out there do any hacking and can point me
>in the right direction?
>Am I biting off more than I can chew?
>
>As background I did do some fortran/cobol programming in
>highschool so I have a small idea of what is going on, but I have
>not done anything else.......
>please reply to my email not the list.
>Any input would be sincerely appreciated !
>

Douglas,

Since you did not say if you had any Windows programming experience at all I will assume you don't have any for my following comments.

Windows uses an "event driven programming model" using "messaging passing" which is very different from the "procedural programming model" you are familiar with from doing FORTRAN and COBOL programming. This means that everything on the screen is "live" such as menus, buttons etc. Windows passes messages to every section of code (attached to a menu item etc.) that performs some action. Each of these code sections must check to see if the current program state makes sense for the action to occur. If nothing is done by the current code section then the messages are passed on to the next code section. As you can see, this type of model does not allow a completely predetermined or controlled sequence through the program code. This description is a very-very basic idea of what goes on inside of even a simple Windows program.

The really bad thing from your point of view will come from the fact that Windows, and not you, controls the hardware in the computer. There is none of the DOS world crap where you just grab whatever hardware resource(s) you need. There is a way around this buy using Windows hardware device drivers supplied by Windows or written by yourself. Writing Windows device drivers is something even professional programmers would prefer not to even think about.

Finally you will most likely be working with some sort of software development environment to do your work in. These development environments can be a great help is doing some of the basic tasks in getting a "minimal" Windows program up and running. What you will find however is another layer of complexity you will need to learn along with the development environment

itself.

I don't mean to scare you with the above comments. I just want to point out to you that what you want to do will require a significant about of your time and a lot of effort. Many people have done it and have written some very good programs so I am sure you can. I would say go for it. If you run into problems Microsoft has their own news server with NGs to cover just about anything you can think of for programming in Windows. When you have any questions I would suggest that you check there.

Leland C. Scott
KC8LDO

194. Re: Articles on the AWA web page + Calendar of Radio Events

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <3691c09b.56221667@news.earthlink.net>
Source record: 75101
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On 3 Jan 1999 18:11:27 GMT, John Dilks <oldradio@worldnet.att.net>
wrote:

>Articles on the AWA web page + Calendar of Radio Events
>
>To all,
>
> The AWA Web, Page_2, has been updated for January 1999. It now
>appears less cluttered.
>
> http://www.ggw.org/awa/page_2
>
> Additionally, there are now two AWA Old Timer's Bulletin (OTB)
>articles there, complete with photos. I tried to keep the feel of the
>OTB in the layout. I think you can print the articles on a laser or ink
>jet and they will come out ok? I'll check from work tomorrow. Anyway,
>they're on the web. Spread the word. More to come. (It takes about 3
>hours to do an article, depending on the number of photos and tables.)
>
> I broke-down and bought my own scanner so I can add OTB pages from the
>past. This should be an attraction to radio buffs, and increase our
>membership. It is much handier. Now I don't have to ask permission
>from my kids. (My, how the tables have turned.)
>
> The "AWA Radio Events" calendar is becoming very popular. I have
>received some nice comments on it, and some new listings have arrived
>due to its being there. I'm hoping this calendar will become "the one
>to go to" for antique radio meets. This too will bring new people to
>the AWA.
>
>--
>73' John Dilks, K2TQN
>
> Please visit my OldRadio Museum
> http://www.eht.com/oldradio/museum
>
> Webmaster for the Antique Wireless Association
> http://www.ggw.org/awa Click on "Page 2"
>-=and=-
> for the New Jersey Antique Radio Club
> http://www.eht.com/oldradio
>-
>

John:
Excellent job, ... and all schematics are very readable (my figure of merit of a good web site). Please continue to include past articles. I subscribed not too long ago, and really miss to opportunity to read past articles. Unfortunately, no OTB Review (like QST View) is available, and not many past issues can be purchased.
73's Jim
Delete the X before using my e-mail address.
The X was added to stop spam.

195. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3691C989.E3C4CB88@teleport.com>
Source record: 75102

I haven't directly compared silver micas to polystyrenes because the former vary from manufacturer to manufacturer (and maybe from lot to lot). But I did compare some polystyrenes to NPOs. The polystyrenes have a fairly low positive temperature coefficient, but one that's noticeably higher than an NPO. The inductors I've made, anyway, tend to have a negative temperature coefficient, and the tempco of a good one is less than that of a polystyrene capacitor. If you make a fairly poor inductor, you can sometimes get lucky and cancel its tempco with a polystyrene capacitor. The approach I like to take, though, is to begin with the best inductor I can (just about a full single layer on a type 6 powdered iron core) and the lowest tempco capacitor (NPO), then compensate what's left. The VFOs I build with this combination pretty repeatably have about 200 Hz warmup drift at 7 MHz, with no compensation at all. Because it's repeatable, compensation would be pretty easy, but I haven't found it to be worth the bother.

You might find it enlightening to separately spray each component in the VFO with spray cold to get an idea of about how much drift is due to each component, and in which direction. In the ones I build with NPO capacitors, the inductor is always the dominant source of temperature drift.

Roy Lewallen, W7EL

exray@caribe.net wrote:
>
> I'm jumping into this thread kinda late...
> I've never done any serious comparison, but have built a few little VFO
> circuits and found the polystyrene caps to be very stable. To those of you
> who have actually made serious comparisons, how do the polystyrenes stack up
> against silvered-micas in such an application?
>
> -Bill M WX4A

196. Re: BD135/BD137/BD139=MRF476...?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: don ward <don@kay-dee.demon.co.uk>
Message-ID: <E$sTwBAbHfk2EwSs@kay-dee.demon.co.uk>
Source record: 75103

In article <368192a6.15353744@news.online.no>, "J.-M. Noeding"
<la8ak@online.no> writes
>Don't see the reason for European QRP enthusiasts to buy the much more
>expensive Motorola transistor when a Pro-Electron consumer device is
>readily available at very low price in almost every electronic shops.
>
>MRF476 15-18dB gain 3W RF on 30MHz, and I measured a common collector PA
>using 4x BD139 to 15dB on 28MHz (10W RF). Case TO-220.
>
>
>BD135 BVCE0 45V, BD137 - 60V, BD139 - 80V, NPN 1.5A 10W,
>HFE 40-160(250), TO126
>
>I am quite aware that some small switching FETs may be better for some
>applications today, but still, quite frequently MRF476 seems required
>
>73
>Jan-Martin
>
>---
>DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
>Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

I have used a BD139 at 50Mhz with 5watts out from 500mW drive as the PA
to my transvertor. Not bad for an Audio device! I am now using a VN88AFD
mosfet, not quite as cheap, needs more volts but nice and stable, now
QRO at 10 watts.
--
don ward G0MDO

197. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: FP <doug@ddwyer.demon.co.uk>
Message-ID: <bDuVMBAWDgk2Ewis@ddwyer.demon.co.uk>
Source record: 75104

In article <3691C989.E3C4CB88@teleport.com>, Roy Lewallen
<w7el@teleport.com> writes
>I haven't directly compared silver micas to polystyrenes because the
>former vary from manufacturer to manufacturer (and maybe from lot to
>lot). But I did compare some polystyrenes to NPOs.
Inherrent good quality silver micas are about +40 to +100 ppm/deg c but
for low values the fringing field means that the dylectric of the
potting material comes in and give a worse tc and loss angle.
NPO ceramic are specified as +-30ppm/deg/c and are doped for minimum tc.
there are also porcelain npo that have lower loss at UHF chip caps
because of their absence of potting could be better though low values
will include board Tc as part of their overall performance.
Polystyrene are also good if unencapsulated but vulmerable to solder
damage.
Doug Dwyer

198. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be38aa$db60c2e0$17003bcb@default>
Source record: 75105

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Stuart Baynes <sbaynes@iafrica.com> wrote in article
<76lsbj$2rt$1@nnrp01.iafrica.com>...
> Looking to make a simple FM tranceiver for the 6m band, frequency steps
of
> either 2.5, 10 or 12.5.
> Has any body seen any chips that can do this, that are self contained and
> that don't need an on board computer to program it? Look forward to any
> replies.
> Stuart ZS6OUN @ ZS0DLD

Stuart

I did a 6 meter synth using the MC145170 which is a serially programmable synthesizer. The details are available on my website. The source code for a PIC16C57 is also there. I have to admit the circuit only <sortof> worked and stability was a problem
However it might serve as a starting point for your deliberations. For my own education I attempted to write an article on PLL design and what I had discovered from various sources which is also on the site. Unfortunately all current designs use a microcontroller to drive the PLL. You might be able to use something like a BASIC stamp which isnt too hard to program so I understand. If you want to use a diode matrix or EPROM you have to go to one of the older PLL chips such as the MC145151 which will need a prescaler at 50 MHz (note that the MC145170 does not.) There are newer PLL chips (eg from Phillips) that even have the loop amp/filter built in Bear in mind that PLL design is not for the faint hearted but with persistence it should work.

Richard

199. Re: Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <36921B44.D96ACA89@NOSPAM.aud.alcatel.com>
Source record: 75106

Most of the drift of crystal oscillators is caused by power-supply
variationand temperature variation. Once those effects are fixed, then
crystal aging
can be the next smaller effect to look at.

For our commercial products, we used to purchase 'aged' crystals. These
had
been burned-in for several weeks at elevated temperature before being
shipped
to us, and we found that it tended to improve the aging characteristics
of the
crystals. Discussion with the manufacturer indicated that the physical
causes
of crystal drift were not that well understood, but that it appeared to
be at
least related to stress in the crystal and diffusion of the plated
metallic surface
contact (usually silver?) into the crystal surface. First-order
diffusion usually is
proportional to temperature and proportional to the square-root of time.

The aging characteristics we saw could have either poistive or negative
sign,
and the slope wold often change throughout the course of the
measurement,
leading to the technical conclusion that we didn't exactly know what in
the
world was going on! Simulation of the aging would appear to be futuile
if the
cause(s) are not well known.

However, burning-in the crystals at elevated temperature did seem to
more
rapidly take us down the aging curve, and to answer your question
directly, that's
the only approach I am aware of.

Tom McDermott
n5eg@tapr.org

> duffer wrote:
>
> > Since It is understood that crystals
> > age over time thus changing their
> > resonant frequency, Is there any
> > way to effectively speed up the

> > aging process of a crystal in order
> > to provide higher stability over time ?
> > We all know that you can't speed
> > up the hands of time (yet :)
> > ...just wondering if there is a known
> > process to simulate the aging.
> >
> > Reply here on the newsgroup or
> > remove the 'x' in my address to reply
> > by e-mail.
> >
> > Cheers,
> > Hugh VA3TO Toronto

200. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Frank Lynch <falynch@americasm01.nt.com>
Message-ID: <369217CD.AC57D4AE@americasm01.nt.com>
Source record: 75107
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Roy Lewallen wrote:

> Bert Douglas wrote:
> >
> > Define "better" please.
> >
> > Yes I know that teflon is easier to design with because its electrical
> > properties are "nicer".
> >
> > But teflon is also more expensive. It seems to me that it is up to me as a
> > good designer, to decide the tradeoff of non-recurring expense versus
> > per-unit expense, considering my own situation.
>
> Spoken like a true engineer. I wouldn't have considered using FR4 for
> microwave design when I was designing high-cost, low-volume test
> equipment. But as I mentioned, I recently did a 6 GHz oscillator on
> the stuff. This was for a client making a very low-cost, high-volume
> product. By making the design tolerant to loss, I was able to keep the
> cost (an extremely important factor here) down considerably by using
> FR4. As for a one-off homebrew project, I might use FR4 even for that,
> if that's all I had on hand and if the design would tolerate the loss.
>
> Anyone can design a bridge that can stand up. It takes an engineer to
> design a bridge that will barely stand up.
>
> Roy Lewallen, W7EL

I too have used FR4 over the past several years in some areas that FR4 would not have been used in say 10 years ago. (2-3 GHz range). Cost and need for high layer count were the primary drivers. A couple of important things about designing RF (stripline and microstrip) with FR4 compaired to some of the other laminates....

FR4 is really a mix of two different dielectric materials, the glass part (which has a dielectric constant of about six which is also fairly constant from DC up to several GHz), and the resin part (whose dielectric constant varies consideraby from vendor to vendor and also changes dramatically with frequency). Thus depending on what the glass to resin ratio is in the board, one can build a FR4 board with a fairly wide range of "finished dielectric constant" and which also varies as a function of frequency..

Some of the Rogers RF laminates, Teflon, etc, have a dielectric constant that is CONSTANT (doesn't vary much with freq) and doesn't vary much due to the fabrication process.

This isn't to say that one can't design RF with FR4, it's just that one must know and understand how your material is going to behave (especially if you're doing distributed element stuff "striplines, microstrip, etc"). Kinda like Norm Abraham understanding the properties and behaviour of all the different kinds of woods that he uses in his construction projects! <grin>

Frank, KE4ZEQ

201. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: fragbait@my-dejanews.com
Message-ID: <76t7qv$4lu$1@nnrp1.dejanews.com>
Source record: 75108
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

In article <7EXi2.1147$Zk.436769@news3.mia>,
"Bert Douglas" <bertdNOSPAM@dibbs.net> wrote:
> Hi net folks,
>
Hi Bert

> FR4 is only specified at 1 MHZ.
> I am wondering if anyone can give me a ball park estimate of its dissipation
> factor (loss tangent) at 2.5 GHZ ?

No problem, its about 0.08 (PTFE is typically 0.002). for broadband circuits
and filters such as low pass elliptic, FR4 is perfectly fine.

I have used FR4 to replace a PTFE design in one of the companies RF products,
it is a frequency doubler covering output 1 to 2.5GHz with edge coupled
tracking filters and a 6th order elliptic low pass. The gain stages are
Stanford MMICs.

The losses of FR4 are historically overstated, as long as you allow for
dielectric constant variation and the loss tangent then you will be fine.

i.e. don't use it for super high Q narrow band filters/matchign circuits :)

Instead of PTFE one could also use ROGERS R4000 and similar laminates, they
require standard FR4 proccesses but have loss tangents of PTFE.

want any more info then mail me direct.

Bill Lewis

Snr RF Design Engineer - Wayne Kerr Electronics Ltd.

Bill.Lewis@eudoramail.com (wow a non doctored address for the spammers :)

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

202. Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: bbwolf@my-dejanews.com
Message-ID: <76tf9ebkh1@nnrp1.dejanews.com>
Source record: 75109

Wanted: *Complete Detailed* amplifier plans for a 10m-80m (160m is a plus) using an 8877 triode. I prefer a straightforward amplifier sans the bells and whistles (although w/adequate protection to ensure long tube life).

Any assistance will be greatly appreciated,

73s
RH

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

203. FA: Some good manuals, R-390A, KWM-2, 30L-1, BC-610...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Indy <NOindySPAMMY@theriver.com>
Message-ID: <36924ABF.BEA6B8B9@theriver.com>
Source record: 75110

Hi,

I am auctioning some pretty good manuals on eBay. Do a lookup on the keywords above or my email address for all of them.

Remove the NO and SPAMMY before the search.

Thanks,

Indy

204. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <76tteb$525@hpcvsnz.cv.hp.com>
Source record: 75111
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reg Edwards (G4fgq.Regp@btinternet.com) wrote:
: Arrange for wiping contact to wipe round the side of the toroid.

: BIG PROBLEM - if wiper bridges two adjacent turns, shorts them out,
: Q falls to very low value and smoke is given off.

: I have an Amidon T200 dust iron core, wound with enamel copper wire,
: in conjuction with a 24-way rotary switch to tap the coil at every 2
: turns. But multi-way switches are very few and far between these
: days.
: --
: ****************************
: Reg, G4FGQ Click below.
: http://www.btinternet.com/~g4fgq.regp

: ****************************

Yesterday, I hit the wrong key and deleted the followup I'd written
to the original question, but it said about the same thing. In
an air-core coil, the coupling is low enough that shorting out
the unused section just dings the Q a little. But putting that
shorted turn on a toroid with good coupling is indeed like having
a shorted secondary, and will very significantly alter the
inductance, I'm sure. Another thing to consider: by shorting
the unused part of an air-core variable (or switched-tapped)
inductor, you insure that you don't have big voltages floating
around. But in the toroid where you _probably_ want to avoid
shorting either one or many turns, you must live with whatever
voltage is induced in them. If your "variable" gets you down
to one turn active, with, say, 20 turns open, and you end up
with 200 volts applied to that one turn, then you'll get
something approaching 4kV across the other 20 turns. Beware!

I've found a lot of times I don't need really fine adjustment
of the inductance if I have continuously variable capacitance
available as well, and perhaps even just a 12-position rotary
switch (probably much easier to find) would do. Also, you
could have two inductors, each with switched taps, for "fine"
and "coarse" adjustment. But consider that inductance goes as
the square of the number of turns, so the taps probably should not
be a uniform "every third turn" all along the coil. Guess they'd
be more closely spaced toward the end of the coil if you wanted
more uniform delta-inductance per step. (But then on the other
hand you might _want_ it to be nonlinear anyway.)

--
Cheers,
Tom
tom_bruhns@hp.com

205. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <76tui0$525@hpcvsnz.cv.hp.com>
Source record: 75112

Roy Lewallen (w7el@teleport.com) wrote:

: It looks like three values of Q might be getting into the discussion.
: One is the Q of the LR portion of the circuit*, with no C. I'm going
: to call it "LR Q"...

: Another is what I'd like to call the "component Q", ... which
: is Terman's definition, and can in theory be determined by a single
: measurement of the physical inductor.
[at a particular frequency, if Z = R + jX, "component Q" = X/R]

: So far, I've convinced myself that if you resonate the inductor with a
: capacitor, measure the bandwidth and center frequency of the resulting
: circuit, and calculate Q as the center frequency divided by the
: bandwidth, you get the "LR Q".

Yep, I agree with that.

: At least I know now what I'm measuring. A simple, direct, and reliable
: way to measure the "component Q", without separately determining the
: capacitive part, would be nice. A direct measurement using an
: impedance bridge doesn't work well for most of the inductors I'm
: interested in because of limited resolution in the range of interest.

Hmmm...the LRC meters we make seem to do just fine.

At least we seem to be at the heart of the answer to the original question now: the "component Q" does decrease with stray capacitance increase, but the "LR Q" (or if I may, the Q of a tank you build with the inductor) does not decrease with stray capacitance increase, so long as that stray is itself lossless.

I guess the bottom line for me is that the "component Q" expressed as a Q isn't very useful. The only way I'd really model the inductor (with its inherent capacitance and resistance) would be as R + jX at the frequency where I measured it, or perhaps as R + jwL' over some (narrow) range. Over a wider range I'd always use at least R, L and Cparasitic at least, and realize that I really need a frequency-dependent R to accurately model things.

:-) Guess I remain most comfortable with Q defined in terms of resonator bandwidth, or equivalently as losses inherent in a resonator, and "component Q" just doesn't seem that directly useful to me.

It's been an interesting discussion.

--
Cheers,

Tom
tom_bruhns@hp.com

206. Re: 6 meter amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: "Rexford T. Hound" <*****@ix.netcom.com>
Message-ID: <76u2m3$ov9@dfw-ixnews9.ix.netcom.com>
Source record: 75113

Wow!!! You still have that gem of an amp your trying to pawn off? I thought
it would have been sold the first day you advertised it. Doesn't it make
you want to scratch your ass in total bewilderment and wonder why no fool
has taken you up on your attempt to sell scrap metal.
If you want us to take you seriously, please post with a price that you
think would be fair for everyone. Look at it another way, would you
honestly pay $600 for it. I think not.
Oh! Look! I haven't included your advertisement in my response. Ever
wonder why? I'm too embarrassed to ask that much for a piece of crap and I
won't advertise it for you. Wouldn't you be if you had any sense?
--
From the paws of,
Rexford T. Hound
>If you tag your note on to this listing it
>will show everyone how low ham radio
>has to go to find the bottom._________
>and there you will be.

No, it just shows that some ham's aren't as stupid as you would like them to
be. Haven't you ever wondered why your adds aren't taken seriously? Son,
look in the mirror and you'll see the culprit, it sure and hell isn't use
honest hard working hams that don't want to get screwed.

207. Re: TDA2610A butn out

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: "Al Lorona, Jr." <al_lorona@hp.com>
Message-ID: <369298FB.E5B@hp.com>
Source record: 75114

Alison Milnes wrote:

> a burned out TDA2610A LF amplifier. Can´t find any info on the part on the

Hi, Hubert,

That sounds like a Philips IC. I know that a TDA2611A is an audio power
amplifier, so perhaps it is worth checking the pinouts to see if it is
an exact replacement for a '2610. Good luck to you.

R,

Al

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost
$USER@$HOST
-h1024@localhost
root@mailloop.com
Chairman Reed Hundt: rhundt@fcc.gov
Commissioner James Quello: jquello@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Rachelle Chong: rchong@fcc.gov
US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

208. For Sale 6 meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990105181939.13903.00007817@ng98.aol.com>
Source record: 75115

For Sale: 6 Meter Amplifier _ G.G. 4-400
2800 volts on plate / TR switching
50 to 75 watts drive / 350 to 650 watts output
about 90 lbs.
Price $600.00 plus shipping from A/C 78641
Can be seen at ï¿½ www.inetport.com/~arl/
Look under (Items for sale ï¿½ Amplifiers
kb5mer@aol.com JR

209. Thank You/ 6 meter amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990105184309.13903.00007827@ng98.aol.com>
Source record: 75116

I KB5MER apoligize for the inconvenience that my posting on the 6 meter amplifier has drawn out 3 foolish (ham operators?) that think they can buy 600 watts on 6 meters for 2 or 3 hundred dollars. One being NS1Z@AGATE.NET and the other one being TOMFALLS@NORTHWINDS.NET.

Sincerely yours,
JR Adams

210. Re: For Sale 6 meter Amplifier Spam Alert!!!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: "Rexford T. Hound" <*****@ix.netcom.com>
Message-ID: <76u8l6$1ac@dfw-ixnews9.ix.netcom.com>
Source record: 75117

Wow!!! You still have that gem of an amp your trying to pawn off? I thought
it would have been sold the first day you advertised it. Doesn't it make
you want to scratch your ass in total bewilderment and wonder why no fool
has taken you up on your attempt to sell scrap metal.
If you want us to take you seriously, please post with a price that you
think would be fair for everyone. Look at it another way, would you
honestly pay $600 for it. I think not.
Oh! Look! I haven't included your advertisement in my response. Ever
wonder why? I'm too embarrassed to ask that much for a piece of crap and I
won't advertise it for you. Wouldn't you be if you had any sense?
>If you tag your note on to this listing it
>will show everyone how low ham radio
>has to go to find the bottom._________
>and there you will be.
No, it just shows that some ham's aren't as stupid as you would like them to
be. Haven't you ever wondered why your adds aren't taken seriously? Son,
look in the mirror and you'll see the culprit, it sure and hell isn't use
honest hard working hams that don't want to get screwed.

--
From the paws of,
Rexford T. Hound

211. Re: Thank You/ 6 meter amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: "Rexford T. Hound" <*****@ix.netcom.com>
Message-ID: <76u8t7$1gp@dfw-ixnews9.ix.netcom.com>
Source record: 75118

You forgot to mention me as one of the fools. I thought you said three? You only named two. Don't I count? Your hurting my feelings.

Tell us what you really think it's worth.

I can cut and paste too....

--

Wow!!! You still have that gem of an amp your trying to pawn off? I thought it would have been sold the first day you advertised it. Doesn't it make you want to scratch your ass in total bewilderment and wonder why no fool has taken you up on your attempt to sell scrap metal.
If you want us to take you seriously, please post with a price that you think would be fair for everyone. Look at it another way, would you honestly pay $600 for it. I think not.
Oh! Look! I haven't included your advertisement in my response. Ever wonder why? I'm too embarrassed to ask that much for a piece of crap and I won't advertise it for you. Wouldn't you be if you had any sense?
>If you tag your note on to this listing it
>will show everyone how low ham radio
>has to go to find the bottom._____
>and there you will be.
No, it just shows that some ham's aren't as stupid as you would like them to be. Haven't you ever wondered why your adds aren't taken seriously? Son, look in the mirror and you'll see the culprit, it sure and hell isn't use honest hard working hams that don't want to get screwed.

--
From the paws of,
Rexford T. Hound

212. KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: "Rexford T. Hound" <*****@ix.netcom.com>
Message-ID: <76uaks$322@dfw-ixnews9.ix.netcom.com>
Source record: 75119
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Many have noticed the countless posting of adds by KB5MER trying to sell his $600 six meter amp without any success. Several of us have responded to him in a professional manor with serious questions about his amp and were greeted with smart ass comments and the like. He feels it necessary to post constantly to the newsgroups thinking that some fool will purchase this amp from him. He should realize by now that it's counterproductive at this point to constantly harass the good reader's of these newsgroups since we feel that he has no intentions of ever selling his merchandise. If he would have responded to my questions in an adult manor he probably would be shipping this amp to me right now. But, we know now that his intentions are to spam the newsgroups and not sell his merchandise.

If he truly is the "good ham" that he claims he is he will respond to people's questions and comments in an adult fashion and post his adds in a manor that is not considered spamming. A good ham wouldn't post several hundred posts and harass all the people that respond to his adds.

He is also listed in the news.admin.abuse list if anyone cares.

--
From the paws of,
Rexford T. Hound

..

213. FS:Variable DC pwr supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: John Williams <ac6tsxx@n2.net>
Message-ID: <76uficblm1@remarQ.com>
Source record: 75120

>FS: Variable lab/industrial regulated DC power supply. LAMBDA model
>LH125A FM. 0-40 vdc coarse and fine voltage adjust. 0-3A current adj.,
>all front panel. Rack mount or has feet for benchtop. Dimensions H=5"x
>W=8"x Depth 16". Weight=30 lbs. All solid state fully regulated. 115vac
>in. Current limiter max ratings 3.0A@30 deg.C,2.7A@50 deg.C,2.3A@60
>deg.C,1.9A@71deg.C. MISSING front panel V & I meter covers and needles.
>I ran my fast scan ATV station on it for one year useing my VOM. All
>controls very linear-no jumps/lags. Very stable and reliable. Price
>$70.00 ups ground 48 states. COD add $5.00. I am down sizing my shack.
>AC6TS@N2.NET
>
>

214. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <76ujn5$61s$1@spock.tinet.ie>
Source record: 75121

ARRL Handbook 1993 page 30-41.
"A legal Limit Amplifier for 160 through 10 Meters"

73, Ed.

--

****

Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

www.nettaxi.com/citizens/ei9gq/

****

215. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3692E0A7.27423D6B@teleport.com>
Source record: 75122

Tom Bruhns wrote:
>
> Roy Lewallen (w7el@teleport.com) wrote:
> . . .
> : At least I know now what I'm measuring. A simple, direct, and reliable
> : way to measure the "component Q", without separately determining the
> : capacitive part, would be nice. A direct measurement using an
> : impedance bridge doesn't work well for most of the inductors I'm
> : interested in because of limited resolution in the range of interest.
>
> Hmmm...the LRC meters we make seem to do just fine.

Let me rephrase that. . . A simple, direct, and reliable way THAT I
CAN AFFORD. . :) Or something I can put together out of the limited
and somewhat antiquated test equipment I already have.

>. . .
> I guess the bottom line for me is that the "component Q" expressed as a
> Q isn't very useful. The only way I'd really model the inductor (with
> its inherent capacitance and resistance) would be as R + jX at the
> frequency where I measured it, or perhaps as R + jwL' over some (narrow)
> range. Over a wider range I'd always use at least R, L and Cparasitic
> at least, and realize that I really need a frequency-dependent R to
> accurately model things.
>
> :-) Guess I remain most comfortable with Q defined in terms of
> resonator bandwidth, or equivalently as losses inherent in a resonator,
> and "component Q" just doesn't seem that directly useful to me.

I agree that "component Q" by itself wouldn't be very useful. But it
might be easier in some cases to measure the "component Q" than the
component series R. (All I've gotta figure out is how. . .) Combined
with the relatively easy measurement of component series X, you could
use the "component Q" to get the component series R. But if you can
directly measure the component series R and component series X or L,
as you say there's not much need for the "component Q".

Thanks to all for your comments. I hadn't thought about this before --
it's been educational.

Roy Lewallen, W7EL

216. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3692E25A.D1BD2C6A@teleport.com>
Source record: 75123

lasse.moell@swipnet.se wrote:
>
> Years ago a company named Oxley did make a adjustable cap called
> terma-trim. This one (if I recall correctly) did cange the temp-co
> whilst keeping the nominal cap value constant.
>
> This would be a nice gadget when building free-running oscillators...
> If I just could figure out how to build one of these trimmers easy....

What an interesting idea! How about this: Get two capacitors of equal value but opposite temperature coefficients. Connect one end of each of these to point "A". Connect the other ends to the two ends of a differential variable capacitor. The "variable tempco capacitor" terminals are point "A" and the center of the differential capacitor. Whether or not it maintains a constant C would depend on how the sections of the differential capacitor vary with respect to each other, but it might be usable.

Roy Lewallen, W7EL

217. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <369310DD.3368@csolve.net>
Source record: 75124
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Frank Lynch wrote:

[...]

> I too have used FR4 over the past several years in some areas that FR4 would not
> have been used in say 10 years ago. (2-3 GHz range). Cost and need for high
> layer count were the primary drivers. A couple of important things about
> designing RF (stripline and microstrip) with FR4 compaired to some of the other
> laminates....

> FR4 is really a mix of two different dielectric materials, the glass part (which
> has a dielectric constant of about six which is also fairly constant from DC up
> to several GHz), and the resin part (whose dielectric constant varies
> consideraby from vendor to vendor and also changes dramatically with frequency).
> Thus depending on what the glass to resin ratio is in the board, one can build a

> FR4 board with a fairly wide range of "finished dielectric constant" and which
> also varies as a function of frequency..

> Some of the Rogers RF laminates, Teflon, etc, have a dielectric constant that is
> CONSTANT (doesn't vary much with freq) and doesn't vary much due to the
> fabrication process.

> This isn't to say that one can't design RF with FR4, it's just that one must
> know and understand how your material is going to behave (especially if you're
> doing distributed element stuff "striplines, microstrip, etc"). Kinda like Norm
> Abraham understanding the properties and behaviour of all the different kinds of
> woods that he uses in his construction projects! <grin>

> Frank, KE4ZEQ

I read somewhere that one of the reasons for higher loss with FR4 is the
copper is etched in order to bond to the substrate. This increases the
surface roughness which increases losses due to skin effect. It also
contributes to waviness in the copper edges, also increasing losses due
to skin effect.

Supposedly, teflon substrates require a different bonding process which
gives a much smoother surface and edges, so it has lower losses.

The latest version of Puff is supposed to include surface roughness in
calculations of skin effect, but I have not had a chance to try it yet.

Best Regards,

Michael R. Monett,
Automated Production Test

mailto:add@csolve.net

218. FS Boonton 42BD Microwatt meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: "John D. Farr" <johnfarr@ro.com>
Message-ID: <76uqtgugp1@news.ro.com>
Source record: 75125
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment

I have for sale a Boonton Model 42BD Microwatt meter with Model 41-4B sensor and cable. This instrument is in near perfect condition, last calibrated in 1995. Some of the specifications:

Frequency 200 kHz to 12 GHz (not sure of lower frequency limit)
Power range 10 nW to 10 mW full scale in six ranges
3 1/2 digit resolution

Although this meter has the switch for auto ranging and dBm display, these two functions are options and not present with this meter. This meter can be viewed at http://ro.com/~johnfarr/boonton.htm . I am asking $300 for it, buyer pays shipping. I am willing to trade for other quality test equipment.

Thanks
John D. Farr

219. FS: 1 Mhz Freq Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-05 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <3692F0F4.2986E5C0@calweb.com>
Source record: 75126
Cross-posted to: sci.electronics.equipment,sci.electronics.components,rec.radio.swap,rec.radio.amateur.homebrew

For Sale:

Electronic Resources Co. (ERC) 1 Mhz Frequency Standard, model
EROS-800-ARA3

115 AC powered Solid state source 7.5" deep, 4 Inches Wide, 4.5 inches
tall. Output is 4 Volts P-P sine wave. OCXO with external buffer
amplifier and regulated DC power supply.

1 Short Term Stability 1 part 10E-9/ 1000 seconds
2 Drift 1 part in 10E-8 per week
3 Fine and course adjustments available on OCXO

Units are in like new condition. With full set of prints.

$75 post paid conus

Thanks for the read.
Bob, KE6F

220. Re: 'Solid State Design' update

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Tony Breathnach <ei5em@indigo.ie>
Message-ID: <3693F5A7.C699EDB2@indigo.ie>
Source record: 75016

Great to hear that SSD new version is in offing

de EI5EM

MR EMERSON N WASSER wrote:

> I just received a thoughtful e-mail from Wes Hayward informing me that
> the 1986 version of SSD just corrected typegraphical errors found in the
> 1977 version. He is currently co-authoring a totally new version of SSD
> and expects to be done in late 1999. It does not have a title at the
> present time.
> As a reader of this board I hope he is inspired by the intrest shown by
> the replies to my initial inqury and this spurs him on to complete the new
> version. ---We are anxiously awaiting, Wes---
> Bud K7TFY

221. Re: Internal Circuit for Blinking LED?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3693e25e.16729382@news.online.no>
Source record: 75017
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

On Wed, 06 Jan 1999 18:51:31 +0000, Hansanter <shbcommm@indigo.ie>
wrote:

>There is an IC called LM3909 (I think 'LM' but definitely '3909') that
>is specifically for flashing an LED. The frequency of the flash is
>determined by a capacitor on two of the IC pins. You could search around
>for a data sheet of this IC.
>
>Regards
>
isn't it two outputs one slow and one fast?
Built one unit with two diodes and put it under the ceiling in the
entrance at work, and some ladies complaint about surveillance, later
put it inside back of a telephone directory.......
very simple circuit, just few components, an 1.5V cell may last for a
half year

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

222. QRP Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Tony Breathnach <ei5em@indigo.ie>
Message-ID: <3693F5F1.74C166B1@indigo.ie>
Source record: 75018

```
EI5EM CW QRP page
http://indigo.ie/~ei5em

73 Tony
```

223. Re: REQ: Recipes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: bowman <bowman@montana.com>
Message-ID: <36940D0B.D9AC48E4@montana.com>
Source record: 75019

smiffy wrote:
>
> Can any one send me some recipes ofr wine making please

take 1 bushel 6AU6s, crush and strain well. Add one tablespoon of
powdered geraniums, and decant into a Svetlana flask.

224. Re: Can you use an Oscilloscope for measuring SWR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <3693D1E8.D11@naples.infi.net>
Source record: 75020
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Nick wrote:
>
> On Wed, 06 Jan 1999 12:44:48 -0500,
> frederick.mckenzie-1@kmail.ksc.nasa.gov (Fred McKenzie) wrote:
>
> >Now, let's take the oscilloscope's horizontal timebase
> >"ramp" and drive a VCO that will cover the frequency range of interest.
> >Using an open circuit on the Co-Ax, adjust the vertical axis of the
> >oscilloscope for full scale. Using a good 50 Ohm load, verify that the
> >reflectometer output is zero. If the horizontal axis can be calibrated
> >for frequency, then we now have an "FDR"!
>
> Otherwise known as a network analyser.
>
> Nick

In the broadcast field, the VSWR of the transmitting system including
the transmission line and antenna is currently tested using an RF sweep
generator connected to a VSWR RF bridge or a directional coupler or
a power splitter. Since the signal to be measured is very weak, an
amplifier is usually connected between the measuring device and a diode
detector. Professional consultants who contract this type of measurement
will also use a Network Analyzer or a spectrum analyzer with a tracking
generator. Regards!

225. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <3693DCB6.60B6@naples.infi.net>
Source record: 75021

Richard Hosking wrote:
>
> --
> Richard Hosking
> VK6BRO
> http://www.iinet.net.au/~richardh/VK6BRO.htm
> richardh@iinet.net.au
> QRP/Amateur Radio/Microcontrollers
>
> Stuart Baynes <sbaynes@iafrica.com> wrote in article
> <76lsbj$2rt$1@nnrp01.iafrica.com>...
> > Looking to make a simple FM tranceiver for the 6m band, frequency steps
> of
> > either 2.5, 10 or 12.5.
> > Has any body seen any chips that can do this, that are self contained and
> > that don't need an on board computer to program it? Look forward to any
> > replies.
> > Stuart ZS6OUN @ ZS0DLD
>
> Stuart
>
> I did a 6 meter synth using the MC145170 which is a serially programmable
> synthesizer. The details are available on my website. The source code for a
> PIC16C57 is also there. I have to admit the circuit only <sortof> worked
> and stability was a problem
> However it might serve as a starting point for your deliberations. For my
> own education I attempted to write an article on PLL design and what I had
> discovered from various sources which is also on the site. Unfortunately
> all current designs use a microcontroller to drive the PLL. You might be
> able to use something like a BASIC stamp which isnt too hard to program so
> I understand. If you want to use a diode matrix or EPROM you have to go to
> one of the older PLL chips such as the MC145151 which will need a prescaler
> at 50 MHz (note that the MC145170 does not.) There are newer PLL chips (eg
> from Phillips) that even have the loop amp/filter built in Bear in mind
> that PLL design is not for the faint hearted but with persistence it should
> work.
>
> Richard

Hi Richard! I read with interest your article on synthesisers using
PLL's. I would like to share my experience on this subject. The most
difficult type of synthesizer to build is the octave bandwidth (example
500 to 1000 Mhz) In order to keep the phase noise and the phase detector
sideband supression over this bandwidth is not for the faint hearted

to use your expression. I spent hundreds of hours using design data from various manufacturers (10 inches thick) Since I was using a paralel (MC145151) I had to design the low pass integrator with a voltage of 28 volts to run the VCO over the full range. I never succeeded to get the phase noise and sideband supression below 70 DB
as measured on a spectrum analyzer at 10 Khz from the carrier. I then decided to design a charge pump using transistors; there is very little design literature on this subject and I had to work hard but finally it worked. The charge pump delivered 1 volt at 500 Mhz and 26 volts at 1000 Mhz and I met the 70 DB specification over the whole band. The filter consist of a capacitor plus a resistor/capacitor circuit for damping. The charge pump must be very well balanced in order to achieve these results. I have used this design at lower frequencies and narrower group of frequencies, it is rock stable. When the charge pump is well balanced, the filter capacitor value which had been calculated from a design equation can be varied by experimentation for best results at both ends of the band. Since my design used eproms and thumbwheel switches, the channel switching speed was not a problem in my application. Regards! Yvon

226. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3694445B.98E@pop.removethistomailme.net>
Source record: 75022

yvon wrote:
>
> Richard Hosking wrote:
> >
> > --
> > Richard Hosking
> > VK6BRO
> > http://www.iinet.net.au/~richardh/VK6BRO.htm
> > richardh@iinet.net.au
> > QRP/Amateur Radio/Microcontrollers
> >
> > Stuart Baynes <sbaynes@iafrica.com> wrote in article
> > <76lsbj$2rt$1@nnrp01.iafrica.com>...
> > > Looking to make a simple FM tranceiver for the 6m band, frequency steps
> > of
> > > either 2.5, 10 or 12.5.
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> > > replies.
> > > Stuart ZS6OUN @ ZS0DLD
> >
> > Stuart
> >
> > I did a 6 meter synth using the MC145170 which is a serially programmable
> > synthesizer. The details are available on my website. The source code for a
> > PIC16C57 is also there. I have to admit the circuit only <sortof> worked
> > and stability was a problem
> > However it might serve as a starting point for your deliberations. For my
> > own education I attempted to write an article on PLL design and what I had
> > discovered from various sources which is also on the site. Unfortunately
> > all current designs use a microcontroller to drive the PLL. You might be
> > able to use something like a BASIC stamp which isnt too hard to program so
> > I understand. If you want to use a diode matrix or EPROM you have to go to
> > one of the older PLL chips such as the MC145151 which will need a prescaler
> > at 50 MHz (note that the MC145170 does not.) There are newer PLL chips (eg
> > from Phillips) that even have the loop amp/filter built in Bear in mind
> > that PLL design is not for the faint hearted but with persistence it should
> > work.
> >
> > Richard
>
> Hi Richard! I read with interest your article on synthesisers using
> PLL's. I would like to share my experience on this subject. The most
> difficult type of synthesizer to build is the octave bandwidth (example

> 500 to 1000 Mhz) In order to keep the phase noise and the phase detector
> sideband supression over this bandwidth is not for the faint hearted
> to use your expression. I spent hundreds of hours using design data
> from various manufacturers (10 inches thick) Since I was using a paralel
> (MC145151) I had to design the low pass integrator with a voltage of 28
> volts to run the VCO over the full range. I never succeeded to get the
> phase noise and sideband supression below 70 DB
> as measured on a spectrum analyzer at 10 Khz from the carrier. I then
> decided to design a charge pump using transistors; there is very little
> design literature on this subject and I had to work hard but finally
> it worked. The charge pump delivered 1 volt at 500 Mhz and 26 volts at
> 1000 Mhz and I met the 70 DB specification over the whole band. The
> filter consist of a capacitor plus a resistor/capacitor circuit for
> damping. The charge pump must be very well balanced in order to achieve
> these results. I have used this design at lower frequencies and narrower
> group of frequencies, it is rock stable. When the charge pump is well
> balanced, the filter capacitor value which had been calculated from a
> design equation can be varied by experimentation for best results at
> both ends of the band. Since my design used eproms and thumbwheel
> switches, the channel switching speed was not a problem in my
> application. Regards! Yvon

I'd be interested in seeing a schematic of your transistor-based charge pump design... do you have anything available? I've run across similar problems, trying to use low-noise opamps.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

227. MT8888 interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Francis Lee <kitfai@asiaonline.net>
Message-ID: <36924A80.84A@asiaonline.net>
Source record: 75127
Cross-posted to: sci.electronics.design,alt.comp.hardware.homedesigned,comp.home.automation,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

Dear all

Anyone can tell me when can found more info. from internet on interface
the mitel MT8888 with a minimum 89C51 system. I had follow the
instruction of mitel data sheet but it seen no response.

Rgds

Francis

228. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be394b$7f3eb8e0$56f9abc3@default>
Source record: 75128
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Tom, agreed,

My Amidon coil taps are not tapped uniformly. Every turn tapped,
then every two turns, then every three.

Bur using a multi-contact rotary switch there is no danger of any
make-before-break contacts.
--
****
Reg, G4FGQ Click below.
http://www.btinternet.com/~g4fgq.regp

****

229. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <76ugs4bbk1@nnrp1.dejanews.com>
Source record: 75129

In article <76tf9ebkh1@nnrp1.dejanews.com>,
bbwolf@my-dejanews.com wrote:
> Wanted: *Complete Detailed* amplifier plans for a 10m-80m (160m is a plus)
> using an 8877 triode. I prefer a straightforward amplifier sans the bells and
> whistles (although w/adequate protection to ensure long tube life).
>
> Any assistance will be greatly appreciated,

From the nickname i selected, one can tell i have something to do with the 8877. I would say this tube has made my ham radio activities a real pleasure. My second 8877 amp was in one of the magazines not long ago. In a new project, i would NOT select this tube any more. when i started to build my first 8877 the tube was $165 (1975) today it is more than $700, i think it is rediculus. Send me a personal, with your call and i will inondate you with info. 73 De WA1WLA and remember IT CAN KILL YOU.

>
> 73s
> RH
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

230. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3692abdb.12153611@news.online.no>
Source record: 75130
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 6 Jan 1999 00:03:51 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
wrote:

>Tom, agreed,
>
>My Amidon coil taps are not tapped uniformly. Every turn tapped,
>then every two turns, then every three.
>
>Bur using a multi-contact rotary switch there is no danger of any
>make-before-break contacts.

just one question (hope it is not too silly). Is it possible to have
half turn tapping on a toroid coil, or will it count for one turn just
every time a turn passes the inner side, leaving little variation where
a turn is tapped on the outside?

Example: Is it the same difference between 2.2 and 2.8 turn taps on a
toroid core as for a high Q airwound coil?

73 jan-martin LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

231. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: lasse.moell@swipnet.se
Message-ID: <3692b578.4775471@nntpserver.swip.net>
Source record: 75131

Years ago a company named Oxley did make a adjustable cap called
terma-trim. This one (if I recall correctly) did cange the temp-co
whilst keeping the nominal cap value constant.

This would be a nice gadget when building free-running oscillators...
If I just could figure out how to build one of these trimmers easy....

Cheers
/Lasse

On Tue, 05 Jan 1999 00:12:57 -0800, Roy Lewallen <w7el@teleport.com>
wrote:

>I haven't directly compared silver micas to polystyrenes because the
>former vary from manufacturer to manufacturer (and maybe from lot to
>lot). But I did compare some polystyrenes to NPOs. The polystyrenes
>have a fairly low positive temperature coefficient, but one that's
>noticeably higher than an NPO. The inductors I've made, anyway, tend
>to have a negative temperature coefficient, and the tempco of a good
>one is less than that of a polystyrene capacitor. If you make a fairly
>poor inductor, you can sometimes get lucky and cancel its tempco with
>a polystyrene capacitor. The approach I like to take, though, is to
>begin with the best inductor I can (just about a full single layer on
>a type 6 powdered iron core) and the lowest tempco capacitor (NPO),
>then compensate what's left. The VFOs I build with this combination
>pretty repeatably have about 200 Hz warmup drift at 7 MHz, with no
>compensation at all. Because it's repeatable, compensation would be
>pretty easy, but I haven't found it to be worth the bother.
>
>You might find it enlightening to separately spray each component in
>the VFO with spray cold to get an idea of about how much drift is due
>to each component, and in which direction. In the ones I build with
>NPO capacitors, the inductor is always the dominant source of
>temperature drift.
>
>Roy Lewallen, W7EL
>
>exray@caribe.net wrote:
>>
>> I'm jumping into this thread kinda late...
>> I've never done any serious comparison, but have built a few little VFO
>> circuits and found the polystyrene caps to be very stable. To those of you
>> who have actually made serious comparisons, how do the polystyrenes stack up
>> against silvered-micas in such an application?
>>

>> -Bill M WX4A

232. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3955$603bfca0$56f9abc3@default>
Source record: 75132
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hello Jan, nice to see you again.

I have thought about this for many years. But after much practical experience I have come to the conclusion there is no way of having fractional turns on a toroidal ring core.

When the turn-taps have to be wired up to a multi-contact rotary switch, if you observe the way in which the wires run between the taps and the switch contacts there can be only a whole numbers of turns.

Of course, if you want to cheat, you can drill a hole through the magnetic core material and obtain fractional turns in that dishonest method.

All the best for 1999, 2000, 2001, 2002, 2003, etc. . . . . .
--
****
Reg, G4FGQ Click below.
http://www.btinternet.com/~g4fgq.regp

****

J.-M. Noeding <la8ak@online.no> wrote in article
<3692abdb.12153611@news.online.no>...
> On 6 Jan 1999 00:03:51 GMT, "Reg Edwards"
<G4fgq.Regp@btinternet.com>
> wrote:
>
> >Tom, agreed,
> >
> >My Amidon coil taps are not tapped uniformly. Every turn tapped,
> >then every two turns, then every three.
> >
> >Bur using a multi-contact rotary switch there is no danger of any
> >make-before-break contacts.
>
> just one question (hope it is not too silly). Is it possible to
have
> half turn tapping on a toroid coil, or will it count for one turn
just
> every time a turn passes the inner side, leaving little variation
where
> a turn is tapped on the outside?
>

> Example: Is it the same difference between 2.2 and 2.8 turn taps on
a
> toroid core as for a high Q airwound coil?
>
> 73 jan-martin LA8AK
>
> ---
> DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
> Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/
>

233. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Barry McCarthy <barry@anti-junk-silvamethod.demon.co.uk>
Message-ID: <p8GJGKAjNsk2Ewmh@silvamethod.demon.co.uk>
Source record: 75133
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <3692abdb.12153611@news.online.no>, J.-M. Noeding
<la8ak@online.no> writes
>just one question (hope it is not too silly). Is it possible to have
>half turn tapping on a toroid coil, or will it count for one turn just
>every time a turn passes the inner side, leaving little variation where
>a turn is tapped on the outside?
>
>Example: Is it the same difference between 2.2 and 2.8 turn taps on a
>toroid core as for a high Q airwound coil?
>
Every time the wire passes through the centre of the core is one turn,
even if it doesn't actually wrap around it, so no, only complete turns
are possible.

--
Barry G0WBF
Remove no-junk

234. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: gmfoster@epix.net
Message-ID: <3692d3a6.30677838@news.epix.net>
Source record: 75134
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

There was an article a few years back where they cut about a quqter
out of the torrid. Then they rotated the core in and out a a self
supporting coil of wire..

ARRL pub I think..
Garry

On Mon, 4 Jan 1999 14:29:00 -0600, <munsch@ibm.net> wrote:

>
>Russ Renaud wrote in message <76qv5e$pk@freenet-news.carleton.ca>...
>>
>>Has anyone a reference to homebrewing rotary toroidal
>>inductors?
>>
>>I was thinking of trying my hand at building a balanced
>>L network, but find the price and availability of roller
>>inductors was such as to make one consider alternatives.
>>
>>I was thinking of 2 x 200-6 powdered-iron cores, with
>>#14 wire turns, and some sort of spring-loaded wiper
>>inside the toroid making contact with the wire.
>>
>>That's pretty well where my imagination peters out.
>>
>>Any suggestions, howls of derisive laughter, detailed
>>CAD drawings or references?
>>
>>tnx de va3rr
>Now here's a guy willing to try something, and I think we should give him
>some support.
>One problem is that the physical space inside the hole limits the size of
>the wiper, and thus the amount of power that can be handled. I seem to
>remember a design using a wiper on the outside. The wire does not have to
>be in intimate contact with the iron, so a form or spacer can be used to
>form the surface shape. Don't get carried away, as the more wire, the more
>loss and slightly lower Q. The other consideration is the power handling
>capacity of the core itself, and there someone else is going to have to chip
>in with some guidance. My active construction with ferrite and powdered
>iron ended before the current crop of materials appeared. Good luck.
>Crazy George
>
>

235. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: xkmillerx@flash.net
Message-ID: <3693d6c7.862630323@news.flash.net>
Source record: 75135

I agree that the price for this tube is pretty steep. So, what would
your second choice be? In the interest of lower cost and not a "lot"
of sacrificed power, I'm now using a pair of 3-500's. I doubt the guy
on the other end can tell a difference (assuming you're running the
8877 at the legal limit and not at what it will really do...)
Kerry Miller, WD5ABC

PS Actually my last project went the other way, 4x 2n2222's!

On Wed, 06 Jan 1999 02:13:24 GMT, 8877@my-dejanews.com wrote:

>My second 8877 amp was in one of the magazines not long ago. In a new
>project, i would NOT select this tube any more. when i started to build my
>first 8877 the tube was $165 (1975) today it is more than $700, i think it is
>rediculus

236. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <3692F018.245F@powerup.com.au>
Source record: 75136
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

You might like to think abouta Variometer. A coil with a smaller coil rotating inside it. As you rotate the inner coil you reduce and finally reverse some of the inductance of the big outer coil.

The windings are connected in series, of course.

> Russ Renaud wrote in message <76qv5e$pk@freenet-news.carleton.ca>...
> >
> >Has anyone a reference to homebrewing rotary toroidal
> >inductors?
> >
> >I was thinking of trying my hand at building a balanced
> >L network, but find the price and availability of roller
> >inductors was such as to make one consider alternatives.
>
--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

237. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990106004209.1136A-100000@Stratus.CAM.ORG>
Source record: 75137

On Tue, 5 Jan 1999, Roy Lewallen wrote:

> lasse.moell@swipnet.se wrote:
> >
> > Years ago a company named Oxley did make a adjustable cap called
> > terma-trim. This one (if I recall correctly) did cange the temp-co
> > whilst keeping the nominal cap value constant.
> >
> > This would be a nice gadget when building free-running oscillators...
> > If I just could figure out how to build one of these trimmers easy....
>
> What an interesting idea! How about this: Get two capacitors of equal
> value but opposite temperature coefficients. Connect one end of each
> of these to point "A". Connect the other ends to the two ends of a
> differential variable capacitor. The "variable tempco capacitor"
> terminals are point "A" and the center of the differential capacitor.
> Whether or not it maintains a constant C would depend on how the
> sections of the differential capacitor vary with respect to each
> other, but it might be usable.
>
This has been done. I thought it was in a piece of commercial equipment, and in an article in QST in 1964 or 65. I also thought it was in an edition of the ARRL Single Sideband manual.

However, checking the fifth edition of the book, I see a half-page bit (no author listed) on page 51 titled "Temperatur Compensation of Oscillators". It mentions that such a scheme is used in the Hallicrafters HT-32 transmitter. It does not give a value for the capacitors, but it mentions one of the fixed capacitors is an NP0 and the other an N1500

Checking the 1968 Handbook (because my QSTs are not in any sort of order to easily look up an article), there is a small bit about a 5MHz oscillator on page 285 that includes this scheme. It's from an article in QST for November 1965, page 29, which has to be the article I'm thinking of. It was a nice built like a battleship VFO intended for SSB use. It shows an NP0 and an N750 as the fixed capacitors, but doesn't say much about the scheme, so anyone curious might want to look up the original article.

I think the "Terma-Trim" was probably written up in QST around that time too. They used to run little pieces about interesting components, though I can't of the nifty term they used to feature them. It too might be findable in an index.

Michael VE2BVW

238. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be39b4$838ceca0$745dac3e@default>
Source record: 75138
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Yes, variometers are/were nice to use - even nice to look at.

BUT one big snag - Q

As inductance falls the loss resistance remains the same. Result -
when set to one tenth of max inductance the Q is only one tenth of
what it was at max inductance. In an antenna matching/tuning
application as much as half the transmitter power could be dissipated
in the variometer windings. Keep a bucket of water handy.
--
****
Reg, G4FGQ Click below.
http://www.btinternet.com/~g4fgq.regp

****

Murray Kelly <mkelly@powerup.com.au> wrote in article
<3692F018.245F@powerup.com.au>...
> You might like to think abouta Variometer. A coil with a smaller
coil
> rotating inside it. As you rotate the inner coil you reduce and
finally
> reverse some of the inductance of the big outer coil.
>
> The windings are connected in series, of course.
>
>
> > Russ Renaud wrote in message
<76qv5e$pk@freenet-news.carleton.ca>...
> > >
> > >Has anyone a reference to homebrewing rotary toroidal
> > >inductors?
> > >
> > >I was thinking of trying my hand at building a balanced
> > >L network, but find the price and availability of roller
> > >inductors was such as to make one consider alternatives.
> >
> --
> ***
> * Murray Kelly vk4aok mkelly@powerup.com.au *
> * 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
> * ph/fax Intl+ 61 7 3379 3307 *
> ***
>

239. WTB 7.5 Volt/21 Amp transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990106080814.08587.00003768@ng53.aol.com>
Source record: 75139

Either 120 or 240 Volt primary is fine, need a 4-1000 filament transformer for an old friend without E-mail capability.Reply direct or by Newsgroup

W4ZCB

240. FS: 4CX250B's (never used)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: paul@actiontel.com
Message-ID: <369364ac.3872041@news.abilene.com>
Source record: 75140
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap

```
$100.00 each (2 available)

email me if interested....

Thanks,
Paul
N5DUP
```

241. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7703ktniv1@nnrp1.dejanews.com>
Source record: 75141

In article <76ugs4bbk1@nnrp1.dejanews.com>,
8877@my-dejanews.com wrote:

> From the nickname i selected, one can tell i have something to do with the
> 8877. I would say this tube has made my ham radio activities a real pleasure.
> My second 8877 amp was in one of the magazines not long ago. In a new
> project, i would NOT select this tube any more. when i started to build my
> first 8877 the tube was $165 (1975) today it is more than $700, i think it is
> rediculus. Send me a personal, with your call and i will inondate you with
> info. 73 De WA1WLA and remember IT CAN KILL YOU.

That's not bad when you consider 25 years of inflation. It's still not
bad in terms of dollars per watt - a (U.S.) legal-limit amplifier
remains a major piece of equipment, with a price tag (and
electricity bills) to match.

What would you use in a new design? One of Svetlana's products? An army
of power MOSFETs?

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

242. Wilson T-1402SM HT info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Joel Armstrong <joelarmstrong@inetnow.net>
Message-ID: <36938316.CEFBE9CC@inetnow.net>
Source record: 75142

I have a wilson T-1402SM HT that I would like to find a manual for and maybe a battery. Dose anyone know who made that HT and if the company has a web site?

I also have a Winson 460mhz Radio mobel. Model WU1514S. Wouild like to

know if it can do ham 70cm?

Thanks.

joelarmstrong@inetnow.net

243. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Frank Lynch <falynch@americasm01.nt.com>
Message-ID: <36938761.394B9D09@americasm01.nt.com>
Source record: 75143

red_strider@my-dejanews.com wrote:

> This last set of holidays has taught us a few things, one major thing is
> that cell phones are both a blessing and a curse.
>
> This last x-mas we had cell phone madness, and I want a way to make it stop
> for at least the time it takes us to have our bit of family get togethers.
>
> So I am looking for a way to white noise out cells phones from receiving and
> sending, but only for a home sized area... something I can flick on and off
> when needed during the holidays is best.
>
> Ideas? Suggestions on how to accomplish this?

A couple of things about this....

Besides this being illegal (jamming a radio common carrier even on your own property is a no-no, but I'll let you and the cellular carriers legal dept handle that one!), you'll need to do some homework to build an effective jamming system that would prevent ANY and ALL potential guests to your home from gettting calls, (I assume you don't want any beepers going off either).

First borrow or rent a good lab grade spectrum analyzer so you can make signal level measurements of ALL paging and cellular carriers at your location (uh...on second throught just buy one instead of renting since you'll need to do this often as more cell sites get built, new service providers come on line, etc...) Once of determined all the frequencies that need to be jammed (you don't want to do broadband white noise as this would interfere with the listening of Christmas music on the radio or watching an off the air ball game or "It's a Wonderful Life").

Now you can start designing a frequency agile jamming system. You'll likely need to develop something that can deal with wideband carriers such as CDMA which are very resistant to jamming.

You'll likely be so busy with this project that you won't even have time to sit and eat any Christmas dinner so whether you ever get it working or not, may not even matter! You know what they say it's the journey, not the destination...

244. WTD: Some misc parts for 40 meter transmitter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990106113038.02622.00005796@ng151.aol.com>
Source record: 75144

Greetings,

I am building a 7Mhz transmitter from scratch. Uses a 4-65 for the final, at about 200W input. I am collecting parts but having a problem finding a few. These used to be common junkbox items when I was doing this stuff in the late 50's, but times have changed. I know I can buy all this stuff (at high prices) various places, but I am on a tight budget. Have other antique electronic stuff to trade, or will buy used if the price is reasonable. Looking for:

Ceramic socket for 4-65 (odd 5 pin, same as used for 829B)
Ceramic plate cap for 4-65, and plate caps for pair of 866A rectifiers
Plate RF choke (about 1Mh? 1500VDC on this, passes about 200Ma max.)
Plate coupling capacitor (1000pf or so, value not real critical but must be 3000V)

That's it, I've scrounged most of the other stuff. Thanks

Doug Moore KB9TMY (Formerly K6HWY)

245. FS:6JE6/6LQ6s 6MJ6

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: John Williams <ac6tsxx@n2.net>
Message-ID: <77032mbta2@remarQ.com>
Source record: 75145

>Cleaning my shack...have six 6je6/6lq6's and one 6mj6 (heavy duty plate
>straps). All pulls and test good on my Conair tester and tested in
>device. These were backup tubes for my Apollo Amp that I no longer use.
>The pwr sup transformer died. All 7 tubes guaranteed good. $70.00 all
>UPS ground 48 states. COD add $5.00. ac6ts@n2.net
>
>

246. Re: KK7B Direct Conversion Receiver - revision?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36b1997f.539029980@news.atl.bellsouth.net>
Source record: 75146

On Mon, 04 Jan 1999 23:34:11 -0500, Bill Kelsey <kanga@bright.net> wrote:
>Rick is re-designing the PC board to have the same footprint as the
>miniR2, T2, and LM-2, and to improve performance. The only component
>change I know of for sure is the change from the SBL-1 dbm's to the
>TUF-1's. To reduce the size of the board I am sure there are more but I
>don't know what as yet. The prototype of the new board should be
>received shortly, and the production board should be available around
>the end of the month.
>
>I have asked Rick to fill me in on a few more of the details so I can
>pass them on, and so I can be sure I am set with a stock of parts when
>the boards arrive.

Bill, you might want to offer the TUF-3 as an option for Lowfers and
cavers, and those lucky Europeans with 136 kHz allocations. It will
go down there, the TUF-1 won't. I helped a caver friend modify a
mini-R2 for cave radio. We used the TUF-3.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

247. Re: Can you use an Oscilloscope for measuring SWR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-0601991244480001@k4dii.ksc.nasa.gov>
Source record: 75147
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <3691058b.0@news.netwalk.com>, "Jim" <jbolinger@lintek.com> wrote:
> The principle that Charles refers to is, I beleive, that if the feedline has
> a resistive termination you should be able to derive SWR from coefficient of
> reflection. It will have to be resistive at all frequencies however. This
> immediately rules out testing antennas.

Jim-

I think the original premise was that an SWR Bridge was on order, and an alternate method was needed. Now, we have gone so far as to design a TDR, only to realize that it gives results that are only meaningful for a resistive load.

Since we have taken this approach, let's go a step further. Lets build the reflectometer portion of of the bridge in order to derive a voltage related to reflected power, which will be fed to the oscilloscope's vertical input. Now, let's take the oscilloscope's horizontal timebase "ramp" and drive a VCO that will cover the frequency range of interest. Using an open circuit on the Co-Ax, adjust the vertical axis of the oscilloscope for full scale. Using a good 50 Ohm load, verify that the reflectometer output is zero. If the horizontal axis can be calibrated for frequency, then we now have an "FDR"!

73, Fred, K4DII

248. Heath Amp user ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <3693AB2E.8A70BEF4@buffnet.net>
Source record: 75148

-I have two heath meters. They look like they are either from an SB-200
or SB-220. I am wondering which they are from. I don't have either amp

They are marked

Plate 0-500
Grid 1-10
Output 0-10

-
73,

Jim N2go

249. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <3693AC07.8BD3DA75@cadvision.com>
Source record: 75149

The differential cap circuit is used in the Yaesu FT-101 VFO and works well.

Irv
VE6BP

Roy Lewallen wrote:

> lasse.moell@swipnet.se wrote:
> >
> > Years ago a company named Oxley did make a adjustable cap called
> > terma-trim. This one (if I recall correctly) did cange the temp-co
> > whilst keeping the nominal cap value constant.
> >
> > This would be a nice gadget when building free-running oscillators...
> > If I just could figure out how to build one of these trimmers easy....
>
> What an interesting idea! How about this: Get two capacitors of equal
> value but opposite temperature coefficients. Connect one end of each
> of these to point "A". Connect the other ends to the two ends of a
> differential variable capacitor. The "variable tempco capacitor"
> terminals are point "A" and the center of the differential capacitor.
> Whether or not it maintains a constant C would depend on how the
> sections of the differential capacitor vary with respect to each
> other, but it might be usable.
>
> Roy Lewallen, W7EL

250. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <Z2mFwLBZ32k2EwB2@jmwa.demon.co.uk>
Source record: 75150
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

<369310DD.3368@csolve.net>, Mike Monett <add@csolve.net> wrote,
preferably NOT having sent me a copy by e-mail:
>I read somewhere that one of the reasons for higher loss with FR4 is the
>copper is etched in order to bond to the substrate. This increases the
>surface roughness which increases losses due to skin effect.

Can anyone confirm that? The point is that if one wanted to make a very
high-Q coil from thick copper wire or tube, would it be a good thing to
polish it?
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. You can fool all of the people some of the time, but
you can't please some of the people any of the time.

251. Re: Internal Circuit for Blinking LED?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Hansanter <shbcommm@indigo.ie>
Message-ID: <3693B0B3.6AFFB857@indigo.ie>
Source record: 75151
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

There is an IC called LM3909 (I think 'LM' but definitely '3909') that
is specifically for flashing an LED. The frequency of the flash is
determined by a capacitor on two of the IC pins. You could search around
for a data sheet of this IC.

Regards

Terry Gaff

Jean-Guy Michaud wrote:
>
> I'm looking for the internal circuit diagram of blinking LEDs which are
> produced by several manufacturers. Please note that I don't want any
> external blinking circuits.
>
> Thanks,
>
> Jean-Guy Michaud, VE3SKJ

252. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <770ce7$etl@hpcvsnz.cv.hp.com>
Source record: 75152
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

J.-M. Noeding (la8ak@online.no) wrote:
: On 6 Jan 1999 00:03:51 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
: wrote:

: >Tom, agreed,
: >
: >My Amidon coil taps are not tapped uniformly. Every turn tapped,
: >then every two turns, then every three.
: >
: >Bur using a multi-contact rotary switch there is no danger of any
: >make-before-break contacts.

: just one question (hope it is not too silly). Is it possible to have
: half turn tapping on a toroid coil, or will it count for one turn just
: every time a turn passes the inner side, leaving little variation where
: a turn is tapped on the outside?

: Example: Is it the same difference between 2.2 and 2.8 turn taps on a
: toroid core as for a high Q airwound coil?

If the toroid core has high permeability, it's really not possible to
get fractional turns. You either have a full turn, or you don't. You
can think about drilling holes through the core to intercept a fraction
of the flux, but then you have to think about how current in the wire
that passes through the hole will affect the distribution of flux!
(I can't imagine doing this as anything but a "thought-experiment"
.. Well, I can imagine it, but won't be doing it myself!)

If the core is very low permeability...and the Amidon #2 and #6 cores
probably qualify...then you can get _some_ partial-turn effects. But
I think it's not worth the effort. We should probably combine these
thoughts with the discussion a while ago about how spacing of turns
around a low permeability core DOES affect the inductance some.

--
Cheers,
Tom
tom_bruhns@hp.com

253. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <770dca$etl@hpcvsnz.cv.hp.com>
Source record: 75153

FP (doug@ddwyer.demon.co.uk) wrote:
: In article <3691C989.E3C4CB88@teleport.com>, Roy Lewallen
: <w7el@teleport.com> writes
: >I haven't directly compared silver micas to polystyrenes because the
: >former vary from manufacturer to manufacturer (and maybe from lot to
: >lot). But I did compare some polystyrenes to NPOs.
: Inherrent good quality silver micas are about +40 to +100 ppm/deg c but
: for low values the fringing field means that the dylectric of the
: potting material comes in and give a worse tc and loss angle.
: NPO ceramic are specified as +-30ppm/deg/c and are doped for minimum tc.
: there are also porcelain npo that have lower loss at UHF chip caps
: because of their absence of potting could be better though low values
: will include board Tc as part of their overall performance.
: Polystyrene are also good if unencapsulated but vulmerable to solder
: damage.

Thanks for the summary, Doug! -- There's a graph in "Reference Data for Engineers" that shows mica to have a very linear variation with temperature, positive as you note. The same graph shows polystyrene as also very linear, about five times the coefficient, and negative instead of positive. Polypropylene shows as just slightly worse than polystyrene, and also very linear. Polycarbonate is positive, just slightly worse than mica, but nonlinear if it gets cold (below ~0C). Both polyester (Mylar) and oiled paper are nonlinear and have very high tempcos at most temperatures.

I'm reminded of a low-value capacitor that HP made for a very special application which went to some extremes to get stability. It seems that the capacitance of an air-dielectric capacitor will change because of changes in humidity and atmospheric pressure. So...these were sealed in glass, I believe evacuated, and spaced with ruby balls. They were roughly 3pF. Obviously that technology lent itself to being replaced by something a little less expensive. One of the fellows did some work on metalizing fused quartz "microscope slides", and by use of a guard ring could get very stable capacitance with very little effect from the air, because almost all the dielectric was fused quartz.

--
Cheers,
Tom
tom_bruhns@hp.com

254. Re: Internal Circuit for Blinking LED?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: c.c.tqbssz@InternalXC.killspam.us.com
Message-ID: <770dfocjq1@samba.rahul.net>
Source record: 75154
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

Jean-Guy Michaud (jg.michaud@sympatico.ca) wrote:
: I'm looking for the internal circuit diagram of blinking LEDs which are
: produced by several manufacturers. Please note that I don't want any
: external blinking circuits.

: Thanks,

: Jean-Guy Michaud, VE3SKJ

Try an older Telefunken, now Temic, data book. The simple chip used in
their blinking LED's used to be sold packaged by itself in a transistor
package or as a bare chip.

Stephen

255. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Ian Wade <ian@dowrmain.demon.co.uk>
Message-ID: <VP01guA4O7k2Ewze@dowrmain.demon.co.uk>
Source record: 75155

In article <76poau$7l1$1@nnrp1.dejanews.com>, red_strider@my-dejanews.com writes
> This last set of holidays has taught us a few things, one major thing is
>that cell phones are both a blessing and a curse.
>
> This last x-mas we had cell phone madness, and I want a way to make it stop
>for at least the time it takes us to have our bit of family get togethers.
>
> Ideas? Suggestions on how to accomplish this?
>

Buy a copy of "How to make friends and influence people" ??

73
Ian, G3NRW

256. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <770e1b$etl@hpcvsnz.cv.hp.com>
Source record: 75156
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

M.J.Powell (mike@pickmere.demon.co.uk) wrote:

: No laughter! 45 years ago I worked in a research lab where my boss
: required an infinitely-adjustable delay line. He took a wire wound pot,
: dismantled it, and rewound the former with 26 swg wire, then emery-
: papered off the insulation round the top and re-assembled it. He also
: added the capacitors to ground round the outside. It worked!

Hey, in my junque box, I have such a thing, I think made by Beckman.
Its nameplate says it's a variable delay line. Construction is
similar to a 10-turn pot, but the wire is copper and is wound on a
mandrel which is non-conductive and put into a helical groove to get
the capacitance. Seems like it's about 25 turns instead of 10, but
I don't remember. (It was used to trim the total delay in a system
where the main delay came from a large hunk of quartz with a
polygon perimeter...)

--
Cheers,
Tom
tom_bruhns@hp.com

257. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: Robert Macy <macy@california.com>
Message-ID: <Pine.GSO.3.96.990106121909.7028D-100000@duey>
Source record: 75157
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

On Wed, 6 Jan 1999, John Woodgate wrote:

> <369310DD.3368@csolve.net>, Mike Monett <add@csolve.net> wrote,
> preferably NOT having sent me a copy by e-mail:
> >I read somewhere that one of the reasons for higher loss with FR4 is the
> >copper is etched in order to bond to the substrate. This increases the
> >surface roughness which increases losses due to skin effect.
>
> Can anyone confirm that? The point is that if one wanted to make a very
> high-Q coil from thick copper wire or tube, would it be a good thing to
> polish it?
> --
> Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
> OOO - Own Opinions Only. You can fool all of the people some of the time, but
> you can't please some of the people any of the time.
>
>

Absolutely true! At HP we used to require plating with a surface that
would be mirrored finish in order to increase the Q of the resonant
structures. Actually, plating with silver gave the best effect.

- Robert -

258. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <770t5p$g4g$1@nnrp1.dejanews.com>
Source record: 75158

In article <3693d6c7.862630323@news.flash.net>,
xkmillerx@flash.net (Kerry Miller) wrote:
> I agree that the price for this tube is pretty steep. So, what would
> your second choice be? In the interest of lower cost and not a "lot"
> of sacrificed power, I'm now using a pair of 3-500's. I doubt the guy
> on the other end can tell a difference (assuming you're running the
> 8877 at the legal limit and not at what it will really do...)
> Kerry Miller, WD5ABC

One ought to understand the 3db change for every doubling of the output power
before he turns his amplifier ON. I once had an argument with a MM operator
who told me that I was runing ilegal power. I explained that my 8877 does
not go to ilegal power levels, and someone who spend a lot of time buildind
an amplifier, knows that between 1500 watt legal and 2200 that this tube can
put out there is litle or no diference on the receiving side and i ought to
be naive to abuse an expensive tube with out any gain. I selected the 8877
because of the small sise, my #2 amp is only 3 1/4 inches high. If I was to
try once again I would probably go with " a pull" 4cx1000. They are easy to
find and the power output, acording, the dubling of power =3 DB, makes this
tube a better choise. So either you use a 4cx1000 that will give you close to
legal power, or get a 3cx3000 and be cock on the rock. More of us (me too)
ought to study the efects good antennas tend to have to the signal strength
Having said that I will ad that to a ragchew qso an 8877 driven for 800 to
1000 watt output puts out a clean (very clean) signal that the receiving side
enjoys. 73 De WA1WLA and remember IT CAN KILL YOU

of our signals.

>
> PS Actually my last project went the other way, 4x 2n2222's!
>
> On Wed, 06 Jan 1999 02:13:24 GMT, 8877@my-dejanews.com wrote:
>
> >My second 8877 amp was in one of the magazines not long ago. In a new
> >project, i would NOT select this tube any more. when i started to build my
> >first 8877 the tube was $165 (1975) today it is more than $700, i think it is
> >rediculus
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

259. Re: Looking for a white noise generator (a better solution!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: cj <cj@boi.hp.com>
Message-ID: <3693E141.3F1F@boi.hp.com>
Source record: 75159

<SNIP (stuff about jamming cell/pagers & the legality thereof...)>

Aw heck, it's a whole lot simpler than what people are suggesting, and, perfectly legal as far as I know. Instead of jamming, try shielding! Just make your house into one big faraday cage and, shazam! No more annoying cell phones and pagers going off!

It'll take a few boxes of aluminum foil (use copper foil for really good connections, and solder the seams), but what the heck, is that such a high price to pay for some peace & quiet? And if CC&R's are a problem, you can be crafty and do all the shielding on the inside so nobody will ever notice! Doors and windows could be a problem, but if you could probably get by with copper screen. That's fairly effective at 800MHz. Of course, if you just cover them with foil, you get the added feature of far improved privacy as well! And, with this method, those super secret gov'mint snoops won't be able to tune in on what you're doing either!

-cj
KD6AEG

260. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3693b214.4365367@news.online.no>
Source record: 75160
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 6 Jan 1999 12:35:31 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
wrote:

>All the best for 1999, 2000, 2001, 2002, 2003, etc. . . . . .
and same to you

>Yes, variometers are/were nice to use - even nice to look at.
>
seems to have been popular - only in Germany...?

>BUT one big snag - Q
>
>As inductance falls the loss resistance remains the same. Result -
>when set to one tenth of max inductance the Q is only one tenth of
>what it was at max inductance. In an antenna matching/tuning
>application as much as half the transmitter power could be dissipated
>in the variometer windings. Keep a bucket of water handy.

would it be possible to have some slug tuning for transmitter tank coils
and atu's? Is variable air-gap on toroid coils a possibility?

73
Jan_Martin LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

261. Re: Icom 706MKII PL tone level?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: wb6eys@aol.com
Message-ID: <19990106173802.01054.00006812@ng-fs1.aol.com>
Source record: 75161

Hi . Stew here . It is done with suface mount resistor. My 706 MKII tone is about 800 hz or more . This adjustment would be considered a factory procedure .
There is a Service Manual available for about $70.00 with shipping . If a copy will suffice I'll copy mine and send it to you for less than a third of that !
Stew ...
rec.radio.swap

262. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <3693d889.29796968@netnews.worldnet.att.net>
Source record: 75162
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

On Wed, 6 Jan 1999 14:06:17 +0000, John Woodgate
<jmw@jmwa.demon.co.uk> wrote:

><369310DD.3368@csolve.net>, Mike Monett <add@csolve.net> wrote,
>preferably NOT having sent me a copy by e-mail:
>>I read somewhere that one of the reasons for higher loss with FR4 is the
>>copper is etched in order to bond to the substrate. This increases the
>>surface roughness which increases losses due to skin effect.
>
>Can anyone confirm that? The point is that if one wanted to make a very
>high-Q coil from thick copper wire or tube, would it be a good thing to
>polish it?

It would be a good thing to polish it and then silver plate
it. The plating doesn't need to be much thicker than the skin depth
at the frequency of interest.

Jim

263. REQ: Recipes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-06 00:00:00 UTC
From: smiffy <smiffy10@hotmail.com>
Message-ID: <770nrk$89p$1@remarQ.com>
Source record: 75163

Hello there,

Can any one send me some recipes ofr wine making please

Many thanks in advance.

smiffy10@hotmail.com

Graham

264. 398/909 fine tune mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: rickw999@aol.com
Message-ID: <19990106202254.18746.00001098@ng-ft1.aol.com>
Source record: 75023

This mod adds a much finer tuning resolution for the slow setting on sideband. I can pretty much zero beat every signal. You will lose the tuning range, but will gain a finer resolution. If you want range, just switch to the fast setting. Attach a 4.5K resistor across the left/bottom and the right solder posts on SVR5. SVR5 is the 480 Hz tuning for the sideband. Maybe somebody can describe where it's located for those who don't have a schematic.
Rick

265. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01be39dc$dac3b580$c18492d0@Bit-Net.bit-net.com>
Source record: 75024

> > This last set of holidays has taught us a few things, one major thing
is
> >that cell phones are both a blessing and a curse.
> >
> > This last x-mas we had cell phone madness, and I want a way to make it
stop
> >for at least the time it takes us to have our bit of family get
togethers.
> >
> > Ideas? Suggestions on how to accomplish this?

Have you considered confiscating them at the door and locking them in a
soundproof box? Confiscating just the batteries ... for some people they
are
like teddy bears ... even powerless? A hammer ... probably a bit too
severe ...?
:-) 73, DavidC K1YP

266. Re: 12 VOLT POWER SUPPLY XFORMERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19990106221027.22197.00008550@ng134.aol.com>
Source record: 75025

>28 VOLT AT 30 AMP CENTER TAPPED TRANSFORMERS $25.00EA. PLUS SHIPPING

Where are you?
John H. Klingelhoeffer
WB4LNMxx@aol.com (remove xx for real address)

267. Re: 398/909 fine tune mod help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: rickw999@aol.com
Message-ID: <19990106221724.18740.00001279@ng-ft1.aol.com>
Source record: 75026

The mod does not work for all side band operation. If a signal is not relativily centered or too far, requiring a lot of tuning, it's impossible to tune it in because it isn'tcontinuous. You can tune up to a point either way and then it drops off. Anybody have any suggestions on how to make the tuning mod work so that it is continuous ? It works fine for SW,MW and SSB that's relatively centered.
Ri ck

>This mod adds a much finer tuning resolution for the slow setting on
>sideband.
>I can pretty much zero beat every signal. You will lose the tuning range, but
>will gain a finer resolution. If you want range, just switch to the fast
>setting. Attach a 4.5K resistor across the left/bottom and the right solder
>posts on SVR5. SVR5 is the 480 Hz tuning for the sideband. Maybe somebody can
>describe where it's located for those who don't have a schematic.
>Rick

268. fs-"LYSCO" Panel Meter $13ppd!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990106222317.01795.00000185@ng-fx1.aol.com>
Source record: 75027

Hi Guys;
For Sale:
LYSCO panel meter, 0 to 150 Milliamperes. 0-30-60-90-120-150 mil. increments!
2-3/16" hole, 2-3/8" square bezel, exc. condx. all screws and nuts.
$13 ppd!
Thanks es 73.....RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

269. EBAY- Keys, Keyers, SWR Meters, All Cheep!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990106225033.01795.00000196@ng-fx1.aol.com>
Source record: 75028

Check em out, Theres gotta be something there that you can use!
Heres the URL, Just copy it all and paste in your browser.
If nothing else, you get to see how EBAY works. Some stuff goes quite
inexpensively, plus you get to SEE it!
URL>> Make sure that you copy it all, its long!
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?MfcISAPICommand=ViewListedItems&u
serid=rlucch2098@aol.com&include=0&since=7&sort=2&rows=25

Thanks es 73..........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

270. fs- TenTec 244 digital Display $100ppd!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990106230951.01799.00000129@ng-fx1.aol.com>
Source record: 75029

Hi All;
I have for sale a Ten Tec model 244 digital display for the triton IV xcvr's.
It came from an estate and all I have is the unit and the Manual.
The previous owner has added a two position switch on the left front panel for
watever reason, otherwise its in real nice shape! The unit is
untested and being sold for $100 ppd Conus.
I have a picture of it at my FTP sit if you wanna see it!
URL>>
http://members.aol.com/wrbl/tentec.jpg

Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

271. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <bKWk2.949$dS4.1612787@news2.mia>
Source record: 75030
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

John Woodgate wrote in message ...
><369310DD.3368@csolve.net>, Mike Monett <add@csolve.net> wrote,
>preferably NOT having sent me a copy by e-mail:
>>I read somewhere that one of the reasons for higher loss with FR4 is the
>>copper is etched in order to bond to the substrate. This increases the
>>surface roughness which increases losses due to skin effect.
>
>Can anyone confirm that? The point is that if one wanted to make a very
>high-Q coil from thick copper wire or tube, would it be a good thing to
>polish it?

Rogers Corporation
http://www.rogers-corp.com/mwu/index.html
offer a free downloadable calculator for microstrip.
Their site is not responding at the moment, so I can't give you the exact
URL, you will have to hunt for it. The calculator has an entry to specify
surface roughness. But this
seems to have a minor effect on attenuation and Q.

Regards,
Bert Douglas

272. Re: FS: 1 Mhz Freq Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: jerry r <jerryrc@pobox.com>
Message-ID: <369439A4.C579769@pobox.com>
Source record: 75031
Cross-posted to: sci.electronics.equipment,sci.electronics.components,rec.radio.swap,rec.radio.amateur.homebrew

HI Bob, how many of these do you have?

Bob Miller wrote:

> For Sale:
>
> Electronic Resources Co. (ERC) 1 Mhz Frequency Standard, model
> EROS-800-ARA3
>
> 115 AC powered Solid state source 7.5" deep, 4 Inches Wide, 4.5 inches
> tall. Output is 4 Volts P-P sine wave. OCXO with external buffer
> amplifier and regulated DC power supply.
>
> 1 Short Term Stability 1 part 10E-9/ 1000 seconds
> 2 Drift 1 part in 10E-8 per week
> 3 Fine and course adjustments available on OCXO
>
> Units are in like new condition. With full set of prints.
>
> $75 post paid conus
>
> Thanks for the read.
> Bob, KE6F

273. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <36946C20.4B4D@csolve.net>
Source record: 75032
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Bert Douglas wrote:
>
> John Woodgate wrote in message ...
> ><369310DD.3368@csolve.net>, Mike Monett <add@csolve.net> wrote,
> >preferably NOT having sent me a copy by e-mail:

> >>I read somewhere that one of the reasons for higher loss with FR4 is the [snip]

John, your post has not reached this server yet, but if I understand your reply, apparently you received a copy of my post by email.

If so, I apologize, and did not do it on purpose. The reply buttons on Netscape for "Mail", "News" and "Both" are very close together, and I may have accidentally hit the wrong one. Sorry.

I didn't do it, and I'll never do it again!

Best Regards,

Michael R. Monett,
Automated Production Test
mailto:add@csolve.net

274. Re: Looking for NICAD SUB C's to rebuild pack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Jim <electinn@flash.net>
Message-ID: <36945AA0.71D7@flash.net>
Source record: 75033

Also check the following two companies for many types of
batteries to rebuild most any battery pack. Also request a
free catalog of their replacement battery packs for many types
of H.T.'s, Laptop Computers, Camcorders, Cell Fones, ect.:

Battery-Tech, Inc.
Ph. (800) 442-4275
Fax (718) 631-5117

and

Mr. NiCd - E.H. Yost & Company
Ph. # (608) 643-3194
Fax # (608) 643-4439

They also have some "Battery Eliminators" for some equipment
using basically an empty battery pack with a "Wall Wart" (Xformer)
attached so you can eliminate the batteries all together !!

Good Luck, Jim - N5APG

Jim wrote:
>
> i saw these at rat shack two days ago.

275. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3a80$5e82ae00$953e63c3@default>
Source record: 75034
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Yes, slug-tuning is possible as in receivers. The only advantage would be a reduction in size. But when appreciable amounts of power are involved, magnetic core materials are too lossy. The greater power dissipation combined with smaller size results in over-heating.

As an extreme example, the result of using a small ferrite rod antenna with only two watts of transmitter power would be smoke.

Reg.
==========
J.-M. Noeding wrote
>
> would it be possible to have some slug tuning for transmitter tank coils
> and atu's? Is variable air-gap on toroid coils a possibility?

276. FS:Variable DC pwr supply-lower price

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: John Williams <ac6tsxx@n2.net>
Message-ID: <772e11nim1@remarQ.com>
Source record: 75035

LOWER PRICE
FS: Variable lab/industrial regulated DC power supply. LAMBDA model LH125A FM. 0-40 vdc coarse and fine voltage adjust. 0-3A current adj., all front panel. Rack mount or has feet for benchtop. Dimensions H=5"x W=8"x Depth 16". Weight=30 lbs. All solid state fully regulated. 115vac in. Current limiter max ratings 3.0A@30 deg.C,2.7A@50 deg.C,2.3A@60 deg.C,1.9A@71deg.C. MISSING front panel V & I meter covers and needles. I ran my fast scan ATV station on it for one year useing my VOM. All controls very linear-no jumps/lags. Very stable and reliable. PRICE $25.00 plus shipping ups ground 48 states=prox $30.00@30 lbs. COD add $5.00. I am down sizing my shack.
AC6TS@N2.NET

277. FS: VHF/UHF Circulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Dave S <sparvell@rftechnology.co.uk>
Message-ID: <01be3a53$da1d4340$0100a8c0@drawing>
Source record: 75036

I have a small quantity of NEW circulators for the VHF/UHF bands between 68 and 600MHz. Each unit has a nominal octave bandwidth.

Power ratings are between 25 and 50 watts depending on the exact model.

These are non-connectorised units and will require a couple of trimmers to match to 50 ohms

Anyone interested - please phone Dave on +44 1276 686889 during office hours

Regards

278. Wanted: slide-rule dial mechanism, Eddystone/Millen/etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: k5dh@rtis.ray.com
Message-ID: <772lbp$41g@news.rsc.raytheon.com>
Source record: 75037
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Looking for a large slide-rule dial mechanism, Eddystone,
James Millen, or similar, like those used in many ARRL
Handbook receiver projects back in the '60s and '70s.
Must be in decent condition, complete, and working. If
used, must be able to replace dial scale. Whatcha got?

73,
Dean / K5DH

279. getting started

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: cmcdonld@thezone.net
Message-ID: <772lru$v7d$1@nova.thezone.net>
Source record: 75038

Are there any webpages that take you step by step how a vhf
transmitter works and what each part of the transmitters circuits do.
Most of what I have seen so far just shows one part of the transmitter
dose and dosen't explane how it is connected to the rest of the
transmitter or shows a full transmitter with little or no explanation.
I have been into building electronics for a few years but I still
can't figure out how transmitters work, well except for the very
simple ones.

280. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Mark J Sandford - KF4YYE <sandford@tridsys.com>
Message-ID: <3694FB22.EAE05A8E@tridsys.com>
Source record: 75039

I'd be interested in seeing it as well if you are willing to share your results

Thanks - mark KF4YYE

John Miles wrote:

> yvon wrote:
> >
> > Richard Hosking wrote:
> > >
> > > --
> > > Richard Hosking
> > > VK6BRO
> > > http://www.iinet.net.au/~richardh/VK6BRO.htm
> > > richardh@iinet.net.au
> > > QRP/Amateur Radio/Microcontrollers
> > >
> > > Stuart Baynes <sbaynes@iafrica.com> wrote in article
> > > <76lsbj$2rt$1@nnrp01.iafrica.com>...
> > > > Looking to make a simple FM tranceiver for the 6m band, frequency steps
> > > of
> > > > either 2.5, 10 or 12.5.
> > > > Has any body seen any chips that can do this, that are self contained and
> > > > that don't need an on board computer to program it? Look forward to any
> > > > replies.
> > > > Stuart ZS6OUN @ ZS0DLD
> > >
> > > Stuart
> > >
> > > I did a 6 meter synth using the MC145170 which is a serially programmable
> > > synthesizer. The details are available on my website. The source code for a
> > > PIC16C57 is also there. I have to admit the circuit only <sortof> worked
> > > and stability was a problem
> > > However it might serve as a starting point for your deliberations. For my
> > > own education I attempted to write an article on PLL design and what I had
> > > discovered from various sources which is also on the site. Unfortunately
> > > all current designs use a microcontroller to drive the PLL. You might be
> > > able to use something like a BASIC stamp which isnt too hard to program so
> > > I understand. If you want to use a diode matrix or EPROM you have to go to
> > > one of the older PLL chips such as the MC145151 which will need a prescaler
> > > at 50 MHz (note that the MC145170 does not.) There are newer PLL chips (eg
> > > from Phillips) that even have the loop amp/filter built in Bear in mind
> > > that PLL design is not for the faint hearted but with persistence it should
> > > work.
> > >

> > > Richard
> >
> > Hi Richard! I read with interest your article on synthesisers using
> > PLL's. I would like to share my experience on this subject. The most
> > difficult type of synthesizer to build is the octave bandwidth (example
> > 500 to 1000 Mhz) In order to keep the phase noise and the phase detector
> > sideband supression over this bandwidth is not for the faint hearted
> > to use your expression. I spent hundreds of hours using design data
> > from various manufacturers (10 inches thick) Since I was using a paralel
> > (MC145151) I had to design the low pass integrator with a voltage of 28
> > volts to run the VCO over the full range. I never succeeded to get the
> > phase noise and sideband supression below 70 DB
> > as measured on a spectrum analyzer at 10 Khz from the carrier. I then
> > decided to design a charge pump using transistors; there is very little
> > design literature on this subject and I had to work hard but finally
> > it worked. The charge pump delivered 1 volt at 500 Mhz and 26 volts at
> > 1000 Mhz and I met the 70 DB specification over the whole band. The
> > filter consist of a capacitor plus a resistor/capacitor circuit for
> > damping. The charge pump must be very well balanced in order to achieve
> > these results. I have used this design at lower frequencies and narrower
> > group of frequencies, it is rock stable. When the charge pump is well
> > balanced, the filter capacitor value which had been calculated from a
> > design equation can be varied by experimentation for best results at
> > both ends of the band. Since my design used eproms and thumbwheel
> > switches, the channel switching speed was not a problem in my
> > application. Regards! Yvon
>
> I'd be interested in seeing a schematic of your transistor-based charge
> pump design... do you have anything available? I've run across similar
> problems, trying to use low-noise opamps.
>
> -- jm KE5FX
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

281. Re: Dissipation factor of FR4 at 2.5GHZ ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <ZGkFcnAVsGl2Ewqp@jmwa.demon.co.uk>
Source record: 75040
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

<36946C20.4B4D@csolve.net>, Mike Monett <add@csolve.net> wrote,
preferably NOT having sent me a copy by e-mail:
>John, your post has not reached this server yet, but if I understand your
>reply, apparently you received a copy of my post by email.

Ah! a problem. My message in the headline is a general one, to dissuade
people from sending e-mail copies. It was not directed at you
personally.

In view of the misundertanding, I will change the wording ASAP.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. You can fool all of the people some of the time, but
you can't please some of the people any of the time.

282. TFS, many different types, take a look!.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <369504C9.B5795665@herald.infi.net>
Source record: 75041
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,rec.audio.pro,alt.guitar,rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,misc.industry.electronics.marketplace

Happy New Year to all, and thanks for your business over the past year!

283. Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <3695102c.0@news.netwalk.com>
Source record: 75042

Hi, All!!

I like to tear pages out of magazines, whenever I see anything that catches my eye. This saves a lot of hassles with the XYL complaining about the size of the piles in the shack!!

Anyway, one of the 'pull outs' I have talks about a voltage controlled inductor. I am at work now, so can't look it up and will have to describe it from memory. Another thread on homebrew roller inductors made me remember it

As I recall the design used two toroid forms with three windings. Two of the windings were wound seperately on two of the forms, with opposite 'sense' (that is mirror images of each other). The two coils were then stacked and the third winding wound over both.

If I remember correctly the third winding was the control winding on which direct current was applied.

Has anyone out there ever used such a thing? Would it be usefull at RF, or would there be too much coupling into the control winding?

Jim
N8EE

284. Re: TFS, many different types, take a look!.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <36951987.17263380@news.erols.com>
Source record: 75043
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,rec.audio.pro,alt.guitar,rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,misc.industry.electronics.marketplace
Body handling: HTML body converted to readable text

Can't readyour message due to all that HTML garbage.

Recently, KEN CHAIT wrote:

>This is a multi-part message in MIME format.
>----------916DDD8D9A2B6487100122D6
>Content-Type: text/plain; charset=us-ascii
>Content-Transfer-Encoding: 7bit
>
>Happy New Year to all, and thanks for your business over the past year!
>
>
>
>----------916DDD8D9A2B6487100122D6
>Content-Type: text/html; charset=iso-8859-1; name="TFSHTML.html"
>Content-Transfer-Encoding: 8bit
>Content-Disposition: inline; filename="TFSHTML.html"
>Content-Base: "file:///C|/WINDOWS/DESKTOP/Tube%20ads/
> TFSHTML.html"
>
>
>
>
>
>TUBES FOR SALE!! All
>tubes tested, NOS or new.
>
6922s: 6 JAN 6922 $24.00 all. 1 RCA/Mullard 6922 gold pin $8.00.
>
9- 6922/E88CC gold pin Mullard Holland $6.00 ea. $50.00 all.
>
6922/6DJ8 substitution, Edicron of London 7DJ8, works great in
>
Modulus III, etc., super low noise matched pairs $45.00/mp. (orders
>over $150.00 10% discount, this item only).
>
6BQ5/7189A: Russian heavy duty 7189A/6BQ5 same as deluxe
>
Sovtek, jobber boxed $7.50 ea. 5+ $7.00 ea. 10+ $6.75 ea. 25+$6.25
>ea.
>

6SL7: Tungsram 6SN7GT 1960s excellent ruggedly constructed
>
tube. Tested and matched pairs only $15.00/mp. RCA
6SL7GT
>
1940s, smoked glass shielded $8.50 ea. Brimar
>CV1985/6SL7GT
>
original government boxes, tested and matched pairs $40.00/mp,one
>of the best of its type ever made! Super low noise selected version for
>preamps $60.00/mp.
>
6CG7/6FQ7: RCA NOS, OB black plate 1950s date codes, tested,selected
>for low noise and micro matched pairs $45.00/mp.(orders over $150.00 10%
>discount net $40.50/mp, this item only).
>
6GK5s: Improve your CJ performance! I have bulk Mullards, low
>
noise and microphony selected, then matched. Much better, and quieter
>than stock CJ tubes! $30.00/mp. (buy 5 mps and get 1 extra pair at 50%
>off, this item only).
>
12AU7s: JAN 12AU7/6189/5814/5963 original US Military boxes, tested,
>selected for low noise and micro., $20.00/mp. (5+ matched pairs 10% discount,
>this item only). RFT 12AU7, Tesla box and logo selected, low noise and
>micro., matched pairs $20.00/mp. Blackplate RCAs tested and matched pairs,
>Standard Brand boxes, $17.00/mp. (5+ mps get 10% discount, this item
only).
>
12AT7: RFT 12AU7, Micron labeled, bulk packed, tested,
selected,LN&Micro.
>Matched pairs $25.00/mp. Mullard NOS Bulk packed, CV4024/M8162 original
>Mullard logo, tested and matched pairs $35.00/mp. Super low noise and micro.
>Preamp grade $45.00/mp.
>
12BH7 US NOS Blackplate types, labeled for "Oak Electronics", jobber
>boxed, made by GE, Sylvania, Raytheon. Tested and matched $25.00/mp.
>
6AS7G Sovtek tested, $14.00 ea.
>
3- NOS, 6JB6 Sylvania $65.00 all.
>
6AJ8/ECH81s: Super Radiotron brand european type $6.00 ea.,
>
Teles $9.50 ea.
>
Add shipping to above orders. Mastecard/Visa/Discover $35.00 min.
>
Advantage Tube Services

>
To order call 1-800-273-7234
>
Checks, moneyorder, and credit cards accepted.
>
Can order from secured link, just click on any product listing and
>make notes as to price and quantity after filling in order information.
>Site administrator guarantees security, encryted while in transit.
>
http://www.biznet.maximizer.com/9605
>

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>--------------916DDD8D9A2B6487100122D6--
>

285. Jan Crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: "James D. Haas" <jdhaas@mtu.edu>
Message-ID: <369518E0.55FA@mtu.edu>
Source record: 75044
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Has anyone out there ever heard of Jan Crystal, and if so, are they still in business? I need a 69.5 MHz sinusoidal crystal oscillator (or at the very least, a 69.5 MHz crystal) and I heard that this company does this. I would appreciate any contact information, and if anyone out there can recommend a good company or three that makes crystals/crystal oscillators at 69.5 MHz, I would really appreciate it. Please follow up with an e-mail at: jdhaas@mtu.edu (preferred) or post it here.

73's, Jim Haas KG9IF

286. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <773dvi$ll8$1@nnrp1.dejanews.com>
Source record: 75045

In article <770t5p$g4g$1@nnrp1.dejanews.com>,
8877@my-dejanews.com wrote:
> In article <3693d6c7.862630323@news.flash.net>,
> xkmillerx@flash.net (Kerry Miller) wrote:
> > I agree that the price for this tube is pretty steep. So, what would
> > your second choice be? In the interest of lower cost and not a "lot"
> > of sacrificed power, I'm now using a pair of 3-500's. I doubt the guy
> > on the other end can tell a difference (assuming you're running the
> > 8877 at the legal limit and not at what it will really do...)
> > Kerry Miller, WD5ABC
>
> One ought to understand the 3db change for every doubling of the output power
> before he turns his amplifier ON. I once had an argument with a MM operator
> who told me that I was runing ilegal power. I explained that my 8877 does
> not go to ilegal power levels, and someone who spend a lot of time buildind
> an amplifier, knows that between 1500 watt legal and 2200 that this tube can
> put out there is litle or no diference on the receiving side and i ought to
> be naive to abuse an expensive tube with out any gain. I selected the 8877
> because of the small sise, my #2 amp is only 3 1/4 inches high.

My proof reading did not work this time, it is 5 1/4 inches high which is the
industry standard. Sory

If I was to
> try once again I would probably go with " a pull" 4cx1000. They are easy to
> find and the power output, acording, the dubling of power =3 DB, makes this
> tube a better choise. So either you use a 4cx1000 that will give you close to
> legal power, or get a 3cx3000 and be cock on the rock. More of us (me too)
> ought to study the efects good antennas tend to have to the signal strength
> Having said that I will ad that to a ragchew qso an 8877 driven for 800 to
> 1000 watt output puts out a clean (very clean) signal that the receiving side
> enjoys. 73 De WA1WLA and remember IT CAN KILL YOU
>
> of our signals.
>
> >
> > PS Actually my last project went the other way, 4x 2n2222's!
> >
> > On Wed, 06 Jan 1999 02:13:24 GMT, 8877@my-dejanews.com wrote:
> >
> > >My second 8877 amp was in one of the magazines not long ago. In a new
> > >project, i would NOT select this tube any more. when i started to build my
> > >first 8877 the tube was $165 (1975) today it is more than $700, i think it is
> > >rediculus
> >

>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

287. Re: Jan Crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: "Ed Hare, W1RFI" <ehare@arrl.org>
Message-ID: <369520F6.1192@arrl.org>
Source record: 75046
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

James D. Haas wrote:

> Has anyone out there ever heard of Jan Crystal, and if so, are they
> still in business? I need a 69.5 MHz sinusoidal crystal oscillator (or
> at the very least, a 69.5 MHz crystal) and I heard that this company
> does this. I would appreciate any contact information, and if anyone out
> there can recommend a good company or three that makes crystals/crystal
> oscillators at 69.5 MHz, I would really appreciate it. Please follow up
> with an e-mail at: jdhaas@mtu.edu (preferred) or post it here.

From the ARRL Technical Information Service database (see
http://www.arrl.org/tis/#Resources for info on how to download a copy):

JAN Crystals
2341 Crystal Drive
PO Box 06017
Fort Myers, FL 33906-6017
USA

Phone: 800-526-9825 (JAN-XTAL)
941-936-2397
Fax: 941-936-3750

Products/Services: APPEARS IN ARRL HANDBOOK, COMPONENT-CRYSTAL

Date of last change: July 11, 1995

73,
Ed, W1RFI
ARRL Lab

288. Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Steve Robbins <s.robbins@XXXbtinternet.com>
Message-ID: <7737kb$7e1$1@mendelevium.btinternet.com>
Source record: 75047
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Does anyone know how to construct an antenna for reception of geo-stationary satellites.
The downlinks are 1.7Ghz. I have tried a simple dipole at the centre of a 1m dish with a pre-amp, but this doesn't seem to have enough gain.

I have been told that you can make a waveguide out of a coffee tin for better gain but I don't know any dimensions to begin.

Sorry if this is a bit off-topic for these groups, if anyone has a better newsgroup suggestion please could you let me know.

Any ideas for a higher gain antenna (bigger dish not an option unfortunately), web links etc appreciated.

Thanks.

--
==========
Steve Robbins (Bristol, UK)
E-Mail : s.robbins@XXXbtinternet.com
Please remove XXX to reply via E-mail
==========

289. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36952e8f.0@news.netwalk.com>
Source record: 75048

I have had a couple of replies to this directly to me instead of the group.

Evidently there really are such things and they can be used at RF, although I would think that you would have to be careful with the mechanical design, as with all RF circuits, to use it at the higher frequencies.

One of the replies said that you need only one core, and wind the RF and DC parts on opposite sides of it.

The article I mentioned in my original post suggested using two stacked cores to get the best performance and, after pondering it for a while, I recall that it said that using two stacked cores will minimize the coupling of RF into the DC winding. Remember that the two RF windings are in opposite directions, hence will not couple (theoretically) to each other. This would be an advantage at higher frequencies I beleive. It would also keep the DC winding from looking like a shorted turn at some frequencies.

This idea intrigues me. I can think of a number of interesting uses, such as automatic antenna matching, DC control of amplifier tanks, and voltage controlled oscillators to name a few.

What properties would such a thing have? Would the inductance be linear with respect to control current? If so, it would have an advantage over capacitance diodes.

Jim
N8EE

290. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Mark J Sandford - KF4YYE <sandford@tridsys.com>
Message-ID: <3695399C.AE83A993@tridsys.com>
Source record: 75049
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

Down East Microwave sells them either dishes or loop Yagi's
http://www.downeastmicrowave.com/

Steve Robbins wrote:

> Does anyone know how to construct an antenna for reception of geo-stationary
> satellites.
> The downlinks are 1.7Ghz. I have tried a simple dipole at the centre of a 1m
> dish with a pre-amp, but this doesn't seem to have enough gain.
>
> I have been told that you can make a waveguide out of a coffee tin for
> better gain but I don't know any dimensions to begin.
>
> Sorry if this is a bit off-topic for these groups, if anyone has a better
> newsgroup suggestion please could you let me know.
>
> Any ideas for a higher gain antenna (bigger dish not an option
> unfortunately), web links etc appreciated.
>
> Thanks.
>
> --
> ==============================
> Steve Robbins (Bristol, UK)
> E-Mail : s.robbins@XXXbtinternet.com
> Please remove XXX to reply via E-mail
> ==============================

291. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3695467E.958FD6DD@teleport.com>
Source record: 75050

Tom Bruhns pointed out by email that the temperature coefficients I posted earlier were backward. The polystyrene capacitors have a negative temperature coefficient, and good inductors a positive one. I was thinking in terms of the direction of VFO frequency drift, which is of course opposite the direction of L or C value. Thanks, Tom!

Roy Lewallen, W7EL

292. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3695457D.C5D83262@teleport.com>
Source record: 75051

The only kind of "voltage-controlled inductor" I know of is one that uses a saturating core. An additional winding on the core, with DC passing through it, causes the core to saturate, reducing the permeability and therefore the inductance. I would imagine that the DC winding could be isolated with an RF choke or resistor.

This scheme should work with a high-frequency (type 60 series) ferrite core, but you'd have to be careful to make the level of RF much lower than the DC bias to reduce distortion. Even at that, I'd worry about harmonic generation because you'd be operating on a nonlinear part of the core's BH curve. Cores with a gentle saturation characteristic (round as opposed to square BH curve) should be more controllable and have less distortion. I'd think that using a gapped core would make the saturation characteristic more gentle, but then it would require a lot more DC bias to saturate it. In any case, I wouldn't one until I thoroughly checked out the resulting harmonic content. I've thought about doing this for a portable QRP tuner from time to time, but think it would be tough to keep the power requirement reasonable for this application.

Roy Lewallen, W7EL

Jim wrote:
>
> Hi, All!!
>
> I like to tear pages out of magazines, whenever I see anything that catches
> my eye. This saves a lot of hassles with the XYL complaining about the
> size of the piles in the shack!!
>
> Anyway, one of the 'pull outs' I have talks about a voltage controlled
> inductor. I am at work now, so can't look it up and will have to describe
> it from memory. Another thread on homebrew roller inductors made me
> remember it
>
> As I recall the design used two toroid forms with three windings. Two of
> the windings were wound seperately on two of the forms, with opposite
> 'sense' (that is mirror images of each other). The two coils were then
> stacked and the third winding wound over both.
>
> If I remember correctly the third winding was the control winding on which
> direct current was applied.
>
> Has anyone out there ever used such a thing? Would it be usefull at RF, or
> would there be too much coupling into the control winding?

>
> Jim
> N8EE

293. Need PL-172/8295A Power Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: "John F. Corini" <jcorini@snet.net>
Message-ID: <3695714B.6A14@snet.net>
Source record: 75052
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amature.swap

I am looking for a new or used PL-172/8295A. Please state condition and price. thanks in advanced.

John Corini
KE1IH

294. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <773l47$67t@apple.telalink.net>
Source record: 75053

>Have you considered confiscating them at the door and locking them in a
>soundproof box? Confiscating just the batteries ... for some people they
>are
>like teddy bears ... even powerless? A hammer ... probably a bit too
>severe ...?

Y'know, back in the Old Wild West, some bars used to make you leave your guns at the door..... maybe it's time to do the same thing with telephones...

73 Doug

295. 73 Magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: wayne <wayneg@ncentral.com>
Message-ID: <36955D21.21B75E59@ncentral.com>
Source record: 75054

Hello,

Anyone know where I may obtain an April 1993, 73 magazine?

Thanks.....

73, Wayne

296. Re: Voltage (or Current)Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36955DF2.79EF@pop.valley.net>
Source record: 75055

Jim wrote:
>
> Hi, All!!
<snip>...one of the 'pull outs' I have talks about a voltage controlled
> inductor. I am at work now, so can't look it up and will have to describe
> it from memory. Another thread on homebrew roller inductors made me
> remember it
>
> As I recall the design used two toroid forms with three windings. Two of
> the windings were wound seperately on two of the forms, with opposite
> 'sense' (that is mirror images of each other). The two coils were then
> stacked and the third winding wound over both.
>
> If I remember correctly the third winding was the control winding on which
> direct current was applied.
>
> Has anyone out there ever used such a thing? Would it be usefull at RF, or
> would there be too much coupling into the control winding?
>
> Jim
> N8EE

Hello--
There are (or were) commercial components called "Increductors", which
used a control current to vary inductance-- these saw application as
the swept RF oscillator tank circuits in Kay Instruments' line of RF
sweep generators of the 1950s-1960s.

You could easily build a voltage-to-current convertor to drive one of
these--Kay used a circuit based on a 6V6 tube. Dunno where you'd
find an Increductor, short of savaging an old sweep gen, but there are
probably hundreds sitting on the back shelves of better surplus shops
across the U.S.A.<g>.

A literature search in old IEEE/IRE Proceedings or Transactions might
yield design details.

73,
Brad AA1IP

297. Re: Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Russ Nixon <rcnixon@mindspring.com>
Message-ID: <36956C2E.4976@mindspring.com>
Source record: 75056

It's funny that you use ammonia and say it doesn't remove copper. I use an ammonia-based bore cleaner on my firearms and it most assuredly dissolves the copper in the gilding metal (a copper alloy) left in the bore. In fact, I wet-swab the bore and let it stand for a while and then use a dry patch. The dry patch comes out green from the copper salts formed by the ammonia. I would get a cleaner specifically for use on electrical contacts. The black is possibly from a beryllium salt, although I'm not sure.

Stephen Schiller wrote:
>
> I am wondering what others have found useful
> and effective in cleaning APC7 and GR900
> connectors. Over the years I have collected
> a number of surplus items requiring such cleaning.
> I generally resort to using concentrated
> ammonia for cleaning copper as it disolves
> grease and copper oxide but not copper itself.
> It also has the advantage of leaving no residue
> upon evaporation.
>
> However, the beryllium copper alloy used in
> GR 900 connectors seem to often have a black
> tarnish that is not easy to remove by this
> or other means I have tried.
>
> So, what works for you???
> Has anybody any opinions on polishishing the metal,
> or using an abrasive cleaner such as Bon Ami?
>
> thanks,
> Steve

--
Russ Nixon - KF4WXD Subtract 9s to e-mail me
The clock of life is wound but once and no man has the power
to say just when the hands will stop, nor at what day and hour.

298. 3cx1500c7/8938

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Bob Dodson WB5APD EM84ak <wb5apd@stc.net>
Message-ID: <369578B2.7890@stc.net>
Source record: 75057

Hi All;

Anyone know a source for that tube. Looking for good used pull.
Also what is the going rate for a good used one. Really appreciate it.
Please reply to me via e-mail I am not on the news group as much
anymore.
--
73's
Bob Dodson
Dahlonega Ga. WB5APD/EM84AK
"ex-WA4WQC, ex-WV6SKV"
mailto:wb5apd@stc.net

299. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36957BE1.8169B799@calweb.com>
Source record: 75058

Hi Folks,

Many years ago when studying the use of magnetic amps used in TWT regulated supplies I picked up a reference in the bibs that spoke to an all mag amp receiver RF/IF amplifier experiment. You might dig around in some of the university dust bins for a diss or thesis on the subject. While not that efficient, mag amps in the 60 Hz and 400 Hz range are fairly cute systems and can handle a lot of power.

Just a thought

73,

Bob, KE6f

Tom Bruhns wrote:

> Jim (jbolinger@lintek.com) wrote:
>
> : I have had a couple of replies to this directly to me instead of the group.
>
> : Evidently there really are such things and they can be used at RF, although
> : I would think that you would have to be careful with the mechanical design,
> : as with all RF circuits, to use it at the higher frequencies.
>
> : One of the replies said that you need only one core, and wind the RF and DC
> : parts on opposite sides of it.
>
> Nooooo...that won't work well at all. You can use one core, with the RF
> winding wound in the "usual" toroid way, and the DC winding never passing
> through the center, only over the outside. -- If you do it with a ferrite
> core, saturation occurs fairly suddenly; powdered iron cores would saturate
> rather slowly and at high ampere-turns, I believe.
>
> : The article I mentioned in my original post suggested using two stacked
> : cores to get the best performance and, after pondering it for a while, I
> : recall that it said that using two stacked cores will minimize the coupling
> : of RF into the DC winding. Remember that the two RF windings are in
> : opposite directions, hence will not couple (theoretically) to each other.
> : This would be an advantage at higher frequencies I beleive. It would also
> : keep the DC winding from looking like a shorted turn at some frequencies.
>
> Yeah, I'd wanna make sure the two cores (with windings) were pretty well
> matched. You want to have flux in opposite directions in the two cores.
> You can also, I think, swap the windings and use the single one for the
> RF and the other two for the DC.

>
> : This idea intrigues me. I can think of a number of interesting uses, such
> : as automatic antenna matching, DC control of amplifier tanks, and voltage
> : controlled oscillators to name a few.
>
> Some might work OK, but you may be disappointed by the nonlinearity of the
> inductor in any but low power applications. At high power, you're likely
> to generate lots of harmonics, since the RF flux will add to the DC and
> take one core or the other deeper into saturation, and the other not so
> far.
>
> : What properties would such a thing have? Would the inductance be linear
> : with respect to control current?
>
> I'd expect for ferrite cores, the inductance change would be rather abrupt,
> for small RF signals.
>
> --
> Cheers,
> Tom
> tom_bruhns@hp.com

300. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <36959121.225E@wenzel.com>
Source record: 75059

Here is an article you might find interesting:
http://www.wenzel.com/pdffiles/crvco.pdf

Jim wrote:
>
> I have had a couple of replies to this directly to me instead of the group.
>
> Evidently there really are such things and they can be used at RF, although
> I would think that you would have to be careful with the mechanical design,
> as with all RF circuits, to use it at the higher frequencies.
>
> One of the replies said that you need only one core, and wind the RF and DC
> parts on opposite sides of it.
>
> The article I mentioned in my original post suggested using two stacked
> cores to get the best performance and, after pondering it for a while, I
> recall that it said that using two stacked cores will minimize the coupling
> of RF into the DC winding. Remember that the two RF windings are in
> opposite directions, hence will not couple (theoretically) to each other.
> This would be an advantage at higher frequencies I beleive. It would also
> keep the DC winding from looking like a shorted turn at some frequencies.
>
> This idea intrigues me. I can think of a number of interesting uses, such
> as automatic antenna matching, DC control of amplifier tanks, and voltage
> controlled oscillators to name a few.
>
> What properties would such a thing have? Would the inductance be linear
> with respect to control current? If so, it would have an advantage over
> capacitance diodes.
>
> Jim
> N8EE

301. Re: FS Teflon wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: wizard@connectnet.com
Message-ID: <915767819mnewswizard@connectnet.com>
Source record: 75060

>
>
>
> --I have silver plated stranded 22AWG teflon insulated hookup wire in 50
> foot rolls, 10 rolls to a pack (500' total). Up to 10 different colors.
> shipped priority mail in the US for $20.
>

Hey Jim,

I need some of that stuff, E-Mail me your phone # and a good time to
call and I'll ring you up and make a deal. Any thing you're looking
for??? I love to barter, and have all kinds of "Junque"!!

302. Re: Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-07 00:00:00 UTC
From: wizard@connectnet.com
Message-ID: <915771005mnewswizard@connectnet.com>
Source record: 75061

>
>
> I am wondering what others have found useful
> and effective in cleaning APC7 and GR900
> connectors.

Steve,

I've found that CAIG Laboratories, Powy, CA.
(619) 486-8388 Http://www.caig.com/sb-ae.htm
makes items for doing that and far more. They
make a "liquid" called Cramolin which comes in
two colors. red and blue. Made for NASA, it is
used as follows: First apply a thin coating of
the red color which will clean corrosion off
of anything. After applied (nail polish brush
or Q-Tip) let stand for several minutes, and
then wipe off (Q-Tip) vigorously. Once this is
done, apply the blue liquid in a very very thin
coating. This will protect from further cor-
rosion and it seems that it makes all connc-
tions have negative resistance at the point of
contact. You can do this to one of the channels
of a hi-fi systsem (tuner->preamp->amp->speakers)
and anyone who is not deaf can hear the major
difference in the fidelety of the "treated"
channel.

In building sattelites, this stuff was man-
datory on every electrical/rf coupling. It
is really magic stuff. In years past, this
stuff was so secret that it went for $100
a gram and was all stolen from gov't. labs.
Caig was finally allowed to go public with
it, but for years the only way you could
get some was to go the the Consumer Elec-
tronic Show in January in Las Vegas, go to
the "Monster Cable" booth, and whisper in
the salesmans ear and slip him a $20 bill.
He would then go into the back of the booth
and come back and slip a couple of 1/5 Oz.
bottles, with instructions, in a tiny zip-
lock bag into your pocket. (Nothing was
allowed to be sold at the CES). There was
no hint on the label as to who made it or

where, but "Cramolin" was printed on the bottles. Having a set of these two bottles in your lab/tool kit/desk was the "secret sign" that you were one of the "in-crowd" in astrophysics/engineeering. A set of these will last you about 5 years, if used judiciously, it doesn't take much.

303. Re: Heath Amp user ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: chaconne@idsonline.com
Message-ID: <7743s9$7oq$1@nnrp1.dejanews.com>
Source record: 74966

In article <3693AB2E.8A70BEF4@buffnet.net>,
James Skalski <jskalski@buffnet.net> wrote:
>
> -I have two heath meters. They look like they are either from an SB-200
> or SB-220. I am wondering which they are from. I don't have either amp
>
> They are marked
>
> Plate 0-500
> Grid 1-10
> Output 0-10
>
> -
> 73,
>
They don't look like a SB-200. SB-200 has 1 amp meter (1000ma actually)
the grid is the left half in white. There is also a HV scale and and
SWR scale. The milliamperage looks too low to be on either amp. The
SB-220 is quite a bit heftier than an SB-200 (I have a 200, have not
seen a 220 recently.

Jon Teske, W3jt
> Jim N2go
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

304. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <36957A4C.5257@powerup.com.au>
Source record: 74967

I understand Philips patented this some years ago.

Jim wrote:

> One of the replies said that you need only one core, and wind the RF and DC
> parts on opposite sides of it.
>
> The article I mentioned in my original post suggested using two stacked
> cores to get the best performance and, after pondering it for a while, I
> recall that it said that using two stacked cores will minimize the coupling
> of RF into the DC winding. Remember that the two RF windings are in
> opposite directions, hence will not couple (theoretically) to each other.
> This would be an advantage at higher frequencies I beleive. It would also
> keep the DC winding from looking like a shorted turn at some frequencies.
>
--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

305. Re: FS: 1 Mhz Freq Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: jerry r <jerryrc@pobox.com>
Message-ID: <36958AC2.131F1AFB@pobox.com>
Source record: 74968
Cross-posted to: sci.electronics.equipment,sci.electronics.components,rec.radio.swap,rec.radio.amateur.homebrew

I'll take one bob, please email me with an address I can respond to you with.

Bob Miller wrote:

> For Sale:
>
> Electronic Resources Co. (ERC) 1 Mhz Frequency Standard, model
> EROS-800-ARA3
>
> 115 AC powered Solid state source 7.5" deep, 4 Inches Wide, 4.5 inches
> tall. Output is 4 Volts P-P sine wave. OCXO with external buffer
> amplifier and regulated DC power supply.
>
> 1 Short Term Stability 1 part 10E-9/ 1000 seconds
> 2 Drift 1 part in 10E-8 per week
> 3 Fine and course adjustments available on OCXO
>
> Units are in like new condition. With full set of prints.
>
> $75 post paid conus
>
> Thanks for the read.
> Bob, KE6F

306. FS: INVAR Rod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Dave S <sparvell@rftechnology.co.uk>
Message-ID: <01be3ae0$33143440$0100a8c0@drawing>
Source record: 74969

I have a small quantity of precision ground 8mm +/- 0.01mm diameter INVAR for sale.

INVAR is a Nickel-Iron Alloy with a very low temperature co-efficient.

Typical use:- A thermally stable tuning element for hi-Q cavity filters.

Anyone interested please phone Dave at + 44 1276 686889

PS Aluminium Beer Barrels make EXCELLENT filters for 2 metres.

PPS Make sure that the Barrel is empty before starting the project. Contents should be disposed of thoughtfully - the time honoured method is still preferred - although in these environmentally conscious times, care is required to avoid excessive green-house gas generation.

Also avoid peanuts - this can result in excessive pebble-dashing of the fixtures. Although this does not affect the cavity in any way - it sure hacks off the XYL!

PPPS Rumours that weak signals are the result of using kegs which contained low SG beers has not been substantiated under controlled tests. However, Real Ale is always prefered. However, traditional wooden barrels are regrettably not suited for cavity construction.

PPPPS 6 metre cavities require very large beer kegs - about 6 feet in height. Full kegs will almost invariably require the assistance of fellow amateurs to dispose of the contents. Consideration should be given to asking Dyno-Rod to be on standby and have a supply of asprins to hand.

PPPPPS Cavities are also excellent at dealing with SPAM - so beloved of a minority of Internet users.

Simply open the cavity, place a slab of dielectric material (PTFE or Teflon preferred) at the bottom of the cavity, place the SPAM on the slab, along with eggs, bacon, mushrooms etc, reassemble the cavity, apply power and adjust tuning to compensate for the capacitance of the SPAM, and - voila - the SPAM becomes Breakfast.

Cooking time depends upon power levels. It is rumoured that certain stations in Eastern England can cook a full meal in less than 10 seconds.

307. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Simon Lewis <slewis@pacsat.demon.co.uk>
Message-ID: <hXkYZFAKndl2Ew8F@pacsat.demon.co.uk>
Source record: 74970
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

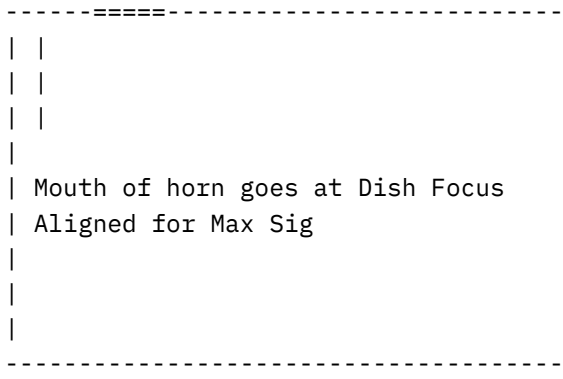
In article <7737kb$7e1$1@mendelevium.btinternet.com>, Steve Robbins
<s.robbins@XXXbtinternet.com> writes
>Does anyone know how to construct an antenna for reception of geo-stationary
>satellites.
>The downlinks are 1.7Ghz. I have tried a simple dipole at the centre of a 1m
>dish with a pre-amp, but this doesn't seem to have enough gain.
>
>I have been told that you can make a waveguide out of a coffee tin for
>better gain but I don't know any dimensions to begin.
>
>Sorry if this is a bit off-topic for these groups, if anyone has a better
>newsgroup suggestion please could you let me know.
>
>Any ideas for a higher gain antenna (bigger dish not an option
>unfortunately), web links etc appreciated.
>
>Thanks.

Hi Steve

Simply placing a dipole at the focus of a dish will not give a very good
signal. You need to place a reflector behind it so that focused FR
energy hits the dipole correctly.

You can make a coffee tin feed and these are very easy.

For 1700 MHz a baby milk can would be suitable and an N type socket is
then mounted on the wall of the can like so



Dimensions are roughly 180mm dia 430mm long with the probe located 110mm
from the back.

the probe in the tin should be 45mm long

hope thats a start!

73 Simon

+---+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+---+

308. Homebrew information & sources

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <3695f689.2112790@news.erols.com>
Source record: 74971
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

For the best in homebrew links and online schematic sources, see:

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

Also, for the massive list of PARTS SUPPLIERS, see
MEGALIST at:

http://www.mnsinc.com/bry/mega/partsupp.htm

Want MODIFICATIONS information??
http://www.mnsinc.com/bry/hamlynx/hammods.htm

309. Re: Silver Micas Vs NPOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Doug Dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <iRpjiBAVHgl2Ewsd@ddwyer.demon.co.uk>
Source record: 74972

In article <770dca$etl@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com>
writes
>One of the
>fellows did some work on metalizing fused quartz "microscope slides",
>and by use of a guard ring could get very stable capacitance with
>very little effect from the air, because almost all the dielectric was
>fused quartz.
Thanks Tom
The fused "silica" is interesting because chemically it will be similar
to crystalline quartz and a parallel electroded plate cap is what a
crystal shunt capacitance is! if you stay away from resonances a
standard crystal could be used as a capacitor.
The other relevant characteristics are loss and dilectric adsorbtion
more of a problem with plastics.
Note from my background with precision crystal oscillators I remember a
propriatry green glass piston trimmer that was specially doped to give
NPO that had dramatic increases in loss angle at certain temperatures
took me months to trace the problem apparently the curie temperature of
the dopant came into it; the lesson is good Tc does not always go with
stability etc..

--
Doug Dwyer

310. Re: Jan Crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "Hal Van Pootley III Esq." <Hal@Van>
Message-ID: <7750kq$5tb@dfw-ixnews10.ix.netcom.com>
Source record: 74973
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Try 813-936-2397. Have this # on an old invoice.

Hal

Dale R. Parfitt wrote:
>
> James D. Haas wrote:
>
> > Has anyone out there ever heard of Jan Crystal, and if so, are they
> > still in business? I need a 69.5 MHz sinusoidal crystal oscillator (or
> >
> > at the very least, a 69.5 MHz crystal) and I heard that this company
> > does this. I would appreciate any contact information, and if anyone
> > out
> > there can recommend a good company or three that makes
> > crystals/crystal
> > oscillators at 69.5 MHz, I would really appreciate it. Please follow
> > up
> > with an e-mail at: jdhaas@mtu.edu (preferred) or post it here.
> >
> > 73's, Jim Haas KG9IF
>
> To the best of my knowledge they are still in Ft. Meyers Florida.

311. keying ckts???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: aa9gg@flash.net
Message-ID: <36961d70.3024000@news.flash.net>
Source record: 74974

Does anyone know where I can find differant pinouts for differant
radio keying ckts? I am working on a device that needs to be sort of
universal.

Are most radios "positive" or "negative" keyed? e.g. TX pin to ground
or + sply?

thanks.....

73 es the Best of DX
Paul, AA9GG
NineCo
http://ninecoltd.hypermart.net

312. Re: Internal Circuit for Blinking LED?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rancho.cc.ca.us>
Message-ID: <36961F76.613D@mail.rancho.cc.ca.us>
Source record: 74975
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

Hansanter wrote:

> There is an IC called LM3909 (I think 'LM' but definitely '3909') that
> is specifically for flashing an LED. The frequency of the flash is
> determined by a capacitor on two of the IC pins. You could search around
> for a data sheet of this IC.

There's no way that you could fit the 3909, a LED and the huge capacitor
that has to be used inside of a standard plastic LED case.

He's looking for the LED that has a built-in flasher.

> Regards
> Terry Gaff

> Jean-Guy Michaud wrote:

> > I'm looking for the internal circuit diagram of blinking LEDs which are
> > produced by several manufacturers. Please note that I don't want any
> > external blinking circuits.

> > Thanks,
> > Jean-Guy Michaud, VE3SKJ

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

313. WTB - Service manual for Kenwood TS-600

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: ve6inm@my-dejanews.com
Message-ID: <775cgfanr1@nnrp1.dejanews.com>
Source record: 74976

This may not be the appropriate news group, but with all the builders out there, I was thinking that maybe someone may be able to help me out. I am looking for a copy or original of the service manual for a Kenwood TS-600. I have schematics from my Op. Manual, but need the alignment info that is in the Service manual. Anyone willing to copy or sell, please e-mail me with the details. Thank you. 73's -- VE6INM (Glenn)

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

314. Re: Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990108102726.17974.00003691@ng148.aol.com>
Source record: 74977

```
>
>>
>>
>> I am wondering what others have found useful
>> and effective in cleaning APC7 and GR900
>> connectors.
>
>Steve,
>
> I've found that CAIG Laboratories, Powy, CA.
> (619) 486-8388 Http://www.caig.com/sb-ae.htm
> makes items for doing that and far more. They
> make a "liquid" called Cramolin which comes in
> two colors. red and blue. Made for NASA, it is
> used as follows: First apply a thin coating of
> the red color which will clean corrosion off
> of anything. After applied (nail polish brush
> or Q-Tip) let stand for several minutes, and
> then wipe off (Q-Tip) vigorously. Once this is
> done, apply the blue liquid in a very very thin
> coating. This will protect from further cor-
> rosion and it seems that it makes all connc-
> tions have negative resistance at the point of
> contact. You can do this to one of the channels
> of a hi-fi systsem (tuner->preamp->amp->speakers)
> and anyone who is not deaf can hear the major
> difference in the fidelety of the "treated"
> channel.
>
> In building sattelites, this stuff was man-
> datory on every electrical/rf coupling. It
> is really magic stuff. In years past, this
> stuff was so secret that it went for $100
> a gram and was all stolen from gov't. labs.
> Caig was finally allowed to go public with
> it, but for years the only way you could
> get some was to go the the Consumer Elec-
> tronic Show in January in Las Vegas, go to
> the "Monster Cable" booth, and whisper in
> the salesmans ear and slip him a $20 bill.
> He would then go into the back of the booth
> and come back and slip a couple of 1/5 Oz.
> bottles, with instructions, in a tiny zip-
> lock bag into your pocket. (Nothing was
```

> allowed to be sold at the CES). There was
> no hint on the label as to who made it or
> where, but "Cramolin" was printed on the
> bottles. Having a set of these two bottles
> in your lab/tool kit/desk was the "secret
> sign" that you were one of the "in-crowd"
> in astrophysics/engineeering. A set of
> these will last you about 5 years, if used
> judiciously, it doesn't take much.
>
>
>
>
>
>
>

Yes this is good stuff. We had a switch failing on a 20 channel recorder and nobody wanted to replace the switch. We were able to extend the life of the switch by 2 years by using Cramolin. At this time the whole recorder was replaced with a digital one. It also kept circuit cards working that had all the gold wore off of them until new equipment was installed.

315. Re: Question about high Q inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36961FE9.83EE5FEF@mwci.net>
Source record: 74978

William E. Sabin wrote:

> Roy Lewallen wrote:
>
> > "LR Q" (Bill's "true Q") for lack of a better term. (I
> > don't like "true Q" for the following reason. A pure inductance has no
> > resistance, so by definition has infinite Q.
>
> True Q is the Q of the coil and its internal resistance when it is not
> reduced by a lumped value of internal stray Cs. I am sure I made that
> clear. This Cs reduces the true Q value to the reduced or measured Q', as
> shown by
>
> Q' = Q (1 - w^2 LCs)
>
> Q' is what the Boonton meter measures.
>
> > Finally, Bill refers to a "circuit Q" which is the Q of a
> > circuit which includes the component plus a resonating capacitor.
>
> In the resonant circuit the Cs is "absorbed" by the tuning capacitor, so
> the circuit Q is the true Q, because Cs is no longer affecting the Q
> measurement of the coil.
>
> It is a fact that the stray Cs of the coil reduces its value of measured
> Q. It does this because Cs in parallel with L increases the reactance of
> the combination, but the resistance of the circuit remains constant. When
> the coil is tuned to resonance this effect disappears.

One interesting application in which the "true" inductance is important is in the elliptic low pass or bandpass filter,
where a parallel L and C provide a "zero" of transmission at some frequency. It is important that the L be the true L
and that the C include the stray Cs of the coil (assumed to be a lumped Cs value). If we don't do this, the filter is
not as correctly constructed as it should be.

Bill W0IYH

316. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <36963853.2118@csolve.net>
Source record: 74979

Murray Kelly wrote:
>
> I understand Philips patented this some years ago.

[...]

This technique was used as the FM modulator in the AN/PRC-510 HF portable communications transciever built in the 50's.

Best Regards,

Michael R. Monett,
Automated Production Test
mailto:add@csolve.net

317. Re: Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <3696391B.670A@csolve.net>
Source record: 74980

Pete Peterson wrote:
> This will protect from further cor-
> rosion and it seems that it makes all connc-
> tions have negative resistance at the point of
> contact.

Everything was fine up to this point...

Best Regards,

Michael R. Monett,
Automated Production Test
mailto:add@csolve.net

318. Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: PSK <nobody@exit109.com>
Message-ID: <36963D2B.21E278FE@exit109.com>
Source record: 74981

Hello everyone,

Can somebody please point me to the principle of operation of
the Barlow-Wadley Loop Receivers like FRG-7 .

Also, I would like to hear about possible Homebrew approcahes
using this Wadley loop design .

Please dont autoreply, and Please reply post to NG.

Best Regards !

PSK

319. Re: Voltage (or Current)Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3b72$257b4a20$LocalHost@default>
Source record: 74982

In the early 1940's, perhaps in the late 1930's, The Cossor Radio Company, UK, produced an oscilloscope plus an attachment for the purpose of aligning radio receiver IF transformers. It was called a 'wobbulator'. It displayed the frequency response of 465 kHz IF amplifiers versus a swept frequency. I believe it was first used in the production line at Cossor's radio factory.

The IF signal generator was a Hartley oscillator frequency modulated at 50 Hz (the power supply freq.) The oscillator coil was wound (I think) on a dust-iron rod about 1/2" square. This rod replaced the I lamination in an ondinary I and U, small, laminated, iron-core power transformer. The CRT horizontal (time-base) deflector plates were supplied at 50 Hz from the equipment's HT supply transformer secondary winding.

A winding on the laminated part of the oscillator coil was fed with DC superimposed on 50 Hz AC. The DC was used to set the IF centre frequency. The magnitude of the superimposed 50 Hz AC was used to set the frequency sweep width.

The frequency sweep width was small enough not to result in non-linearity.

By the 1950's such 'clever' instruments had been replaced by even more clever devices - reactance modulators using valves (tubes) and the Miller effect. Now all we have is a pair of back-to-back diodes.
--
Reg.

320. FS 6BQ5 NOS RCA vacuum tubes.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36964330.A6D96748@herald.infi.net>
Source record: 74983
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,alt.guitar,rec.antiques.radio+phono,rec.radio.shortwave,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,misc.industry.electronics.marketplace

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321. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36964e6c.0@news.netwalk.com>
Source record: 74984

PSK wrote in message <36963D2B.21E278FE@exit109.com>...
>Hello everyone,
>
>Can somebody please point me to the principle of operation of
>the Barlow-Wadley Loop Receivers like FRG-7 .
>
>Also, I would like to hear about possible Homebrew approcahes
>using this Wadley loop design .
>
As an example, it starts out with a crystal oscillator, say at 1 MHz. This is fed into a comb generator, which will generate lots of harmonics at 1 MHz spacings and is then filtered with a 30 MHz low pass filter. There is also a VFO. For this example lets say it runs from 70 to 100 MHz. Lets say there is also a narrow filter at 70 MHz. [It is called 'comb generator' because it looks like the teeth of a comb when you look at it with a spectrum analyzer.]

The VFO is mixed with the comb generator and fed to the 70 MHz filter, which filters out all but one of the harmonics. The output of the 70 MHz filter is then mixed again with the same VFO signal to bring it back down to the original frequency (with another 30 MHz low pass filter).

The result is, allegedly, a nice clean signal that can be switched in 1 MHz steps by tuning the VFO.

It sounds neat, but there must be some catch or it would be used more often. I can think of a couple of possible problems. One is that the 70 MHz filter, in my example, would have to be pretty darn good to eliminate the unwanted parts of the comb signal. The second is that any crud on the VFO signal will show up on the output, destroying the nice clean crystal purity.

Don't give up hope yet. I think that it still has some use for the homebrewer if you are aware of the potenial problems.

Jim
N8EE

322. Re: Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36964f7f.0@news.netwalk.com>
Source record: 74985

Pete Peterson wrote in message <915771005mnewswizard@connectnet.com>...
>........This will protect from further cor-
> rosion and it seems that it makes all connc-
> tions have negative resistance at the point of
> contact.

Did you have any trouble with the contacts oscillating by themselves?

323. Re: TV card as VHF/UHF receiver!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990108135811.15379B-100000@Stratus.CAM.ORG>
Source record: 74986

On 8 Jan 1999, MervinS wrote:

> I now have three different TV cards in my computers. Since TV tuners can be
> used to make excellent VHF/UHF receivers, has anyone done so with a TV computer
> card? Has anyone ideas as to how this might be done in software?? Scotty
>
>
One problem with this is that TV is very wideband. If you can retune
them, you'll find that there isn't much that is so wide, so you'll get a
large number of signals in the passband. Not too useful.

In addition, TV signals in North America are AM, and there wouldn't be
much to hear apart from the bandwidth problem. The audio is FM, but it's
a subcarrier to the video signal. Without the video signal, any FM signal
in the passband will not reach the FM detector (note: I've seen some
schemes to reduce the buzz you get when there's a lot of white in the
picture, and some of them might not need the video signal for the audio
detector to work, but these schems aren't common and I would think
unlikely to appear in a TV card). Even if there was no problem with the
FM detector, it's bandwidth is still fairly wide compared to two-way
signals commonly found in the VHF/UHF spectrum.

Someone once posted a long and interesting article about using an FM
tuner card for extended use, I think to this newsgroup. Sadly I can't
remember any of the details of the contents or the headers. Doing some
searching at http://www.dejanews.com might turn something up, if you can
figure out the proper keywords.

He never addressed the issue of the tuner's widebandwidth compared to most
two-way FM signals, however.

Michael VE2BVW

324. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36965965.49A0A3FA@certco.com>
Source record: 74987

Jim wrote:

> PSK wrote in message <36963D2B.21E278FE@exit109.com>...
> >Hello everyone,
> >
> >Can somebody please point me to the principle of operation of
> >the Barlow-Wadley Loop Receivers like FRG-7 .
> >
> >Also, I would like to hear about possible Homebrew approcahes
> >using this Wadley loop design .
> >
> As an example, it starts out with a crystal oscillator, say at 1 MHz. This
> is fed into a comb generator, which will generate lots of harmonics at 1 MHz
> spacings and is then filtered with a 30 MHz low pass filter. There is also
> a VFO. For this example lets say it runs from 70 to 100 MHz. Lets say
> there is also a narrow filter at 70 MHz. [It is called 'comb generator'
> because it looks like the teeth of a comb when you look at it with a
> spectrum analyzer.]

This is a cool idea.

Can you describe the operating principle of a comb generator? I've always been curious about this
but haven't seen an explanation anywhere. Perhaps it's that the harmonics all have an equal amount of power in them, as opposed to falling off as in a multiplier?

OK, I'm curious now. Anyone have a circuit for a comb generator online?

73

nick caruso KB1DEJ

325. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <36965FF5.FE1D1F13@up.net>
Source record: 74988

Nah...just make eveyone check all their batteries
at the door..that'll take care of all the little
annoying bleeps,blaps, & buzzes.
Of course, that will mean talking face to face
with real people, and will scare them away.

Doug Smith wrote:

> >Have you considered confiscating them at the door and locking them in a
> >soundproof box? Confiscating just the batteries ... for some people they
> >are
> >like teddy bears ... even powerless? A hammer ... probably a bit too
> >severe ...?
>
> Y'know, back in the Old Wild West, some bars used to make you leave your
> guns at the door..... maybe it's time to do the same thing with
> telephones...
>
> 73 Doug

326. Re: CW Keyer with Basic Stamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: alw@al-williams.com
Message-ID: <775usisbd1@nnrp1.dejanews.com>
Source record: 74989

In article <76fq3kicm1@news3.isdnet.net>,
"F5IYJ" <iyj@usa.net> wrote:
> Anyone have build a CW Keyer with Basic Stamp ?
>
> 72/73 de Phil.
>
>

Take a look at my article on an iambic keyer with the Basic Stamp I in the July/August 1998 QEX. Hard to do sidetone and iambic keying without interrupts but it is possible. The article has the PCB layout and all the details.

Regards,

Al Williams
AWC

Basic Stamps: http://www.al-williams.com/awce.htm
Ham: http://www.al-williams.com/wd5gnr
Computer: http://www.al-williams.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

327. Re: TV card as VHF/UHF receiver!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: mervins@aol.com
Message-ID: <19990108153139.02305.00001297@ng139.aol.com>
Source record: 74990

Thanks for the input. I have a couple of magazine articles on using a TV tuner for a VHF/UHF receiver and already had assumed that narrow-band filtering would be the least of my problems.

You realize that there are many TV-band radios that receive TV audio without the video.

My biggest problem is that I have not been able to uncover schematics or programming guidance for these TV cards. With these, at least I could blindly experiment! Since these cards are selling for as little as $29 now, I imagine many older ones will start showing up at fests, computer shows and thrift shops for a dollar or so. Scotty

>> I now have three different TV cards in my computers. Since TV tuners can
>be
>> used to make excellent VHF/UHF receivers, has anyone done so with a TV
>computer
>> card? Has anyone ideas as to how this might be done in software?? Scotty
>>
>>
>One problem with this is that TV is very wideband. If you can retune
>them, you'll find that there isn't much that is so wide, so you'll get a
>large number of signals in the passband. Not too useful.
>
>In addition, TV signals in North America are AM, and there wouldn't be
>much to hear apart from the bandwidth problem. The audio is FM, but it's
>a subcarrier to the video signal. Without the video signal, any FM signal
>in the passband will not reach the FM detector (note: I've seen some
>schemes to reduce the buzz you get when there's a lot of white in the
>picture, and some of them might not need the video signal for the audio
>detector to work, but these schems aren't common and I would think
>unlikely to appear in a TV card). Even if there was no problem with the
>FM detector, it's bandwidth is still fairly wide compared to two-way
>signals commonly found in the VHF/UHF spectrum.
>
>Someone once posted a long and interesting article about using an FM
>tuner card for extended use, I think to this newsgroup. Sadly I can't
>remember any of the details of the contents or the headers. Doing some
>searching at http://www.dejanews.com might turn something up, if you can
>figure out the proper keywords.
>
>He never addressed the issue of the tuner's widebandwidth compared to most
>two-way FM signals, however.
>
> Michael VE2BVW

328. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <3696678d.12060520@news.prestel.co.uk>
Source record: 74991
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

On Fri, 8 Jan 1999 10:11:22 +0000, Simon Lewis <slewis@pacsat.demon.co.uk>
wrote:

>In article <7737kb$7e1$1@mendelevium.btinternet.com>, Steve Robbins
><s.robbins@XXXbtinternet.com> writes
>>Does anyone know how to construct an antenna for reception of geo-stationary
>>satellites.
>>The downlinks are 1.7Ghz. I have tried a simple dipole at the centre of a 1m
>>dish with a pre-amp, but this doesn't seem to have enough gain.

>For 1700 MHz a baby milk can would be suitable and an N type socket is
>then mounted on the wall of the can like so

Interesting tip Simon, but what if he doesn't
have a baby?

--
- 73 de Jim, g(m)4rga | In the British aristocracy, the
olympus%jimdee.prestel.co.uk | gene pool has always had a shallow
dynastic%cwcom.net | end.
marula%zdnetmail.com | - Former US Ambassador,
g4rga@gb7tjf.#45.gbr.eu | Raymond Seitz.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

329. Re: TV card as VHF/UHF receiver!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <369630CF.4244@naples.infi.net>
Source record: 74992

MervinS wrote:
>
> Thanks for the input. I have a couple of magazine articles on using a TV tuner
> for a VHF/UHF receiver and already had assumed that narrow-band filtering would
> be the least of my problems.
>
> You realize that there are many TV-band radios that receive TV audio without
> the video.
>
> My biggest problem is that I have not been able to uncover schematics or
> programming guidance for these TV cards. With these, at least I could blindly
> experiment! Since these cards are selling for as little as $29 now, I imagine
> many older ones will start showing up at fests, computer shows and thrift shops
> for a dollar or so. Scotty
>
> >> I now have three different TV cards in my computers. Since TV tuners can
> >be
> >> used to make excellent VHF/UHF receivers, has anyone done so with a TV
> >computer
> >> card? Has anyone ideas as to how this might be done in software?? Scotty
> >>
> >>
> >One problem with this is that TV is very wideband. If you can retune
> >them, you'll find that there isn't much that is so wide, so you'll get a
> >large number of signals in the passband. Not too useful.
> >
> >In addition, TV signals in North America are AM, and there wouldn't be
> >much to hear apart from the bandwidth problem. The audio is FM, but it's
> >a subcarrier to the video signal. Without the video signal, any FM signal
> >in the passband will not reach the FM detector (note: I've seen some
> >schemes to reduce the buzz you get when there's a lot of white in the
> >picture, and some of them might not need the video signal for the audio
> >detector to work, but these schems aren't common and I would think
> >unlikely to appear in a TV card). Even if there was no problem with the
> >FM detector, it's bandwidth is still fairly wide compared to two-way
> >signals commonly found in the VHF/UHF spectrum.
> >
> >Someone once posted a long and interesting article about using an FM
> >tuner card for extended use, I think to this newsgroup. Sadly I can't
> >remember any of the details of the contents or the headers. Doing some
> >searching at http://www.dejanews.com might turn something up, if you can
> >figure out the proper keywords.
> >
> >He never addressed the issue of the tuner's widebandwidth compared to most

> >two-way FM signals, however.
> >
> > Michael VE2BVW

I am most interested to know which magazine carried information about this kind of receiver. Thanks! Yvon. VE2AUC

330. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Steve Robbins <s.robbins@XXXbtinternet.com>
Message-ID: <77601vndk1@plutonium.btinternet.com>
Source record: 74993
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

I haven't got a baby Jim, but I will quite happily donate it's contents to a neighbours baby if it gives me good reception (the can, not the baby).
Thanks for the suggestion Simon, I will give it a try.

--
==========
Steve Robbins (Bristol, UK)
E-Mail : s.robbins@XXXbtinternet.com
Please remove XXX to reply via E-mail
==========

Jim Dunnett wrote in message <3696678d.12060520@news.prestel.co.uk>...
>On Fri, 8 Jan 1999 10:11:22 +0000, Simon Lewis <slewis@pacsat.demon.co.uk>
>wrote:
>
>>In article <7737kb$7e1$1@mendelevium.btinternet.com>, Steve Robbins
>><s.robbins@XXXbtinternet.com> writes
>>>Does anyone know how to construct an antenna for reception of
geo-stationary
>>>satellites.
>>>The downlinks are 1.7Ghz. I have tried a simple dipole at the centre of a
1m
>>>dish with a pre-amp, but this doesn't seem to have enough gain.
>
>>For 1700 MHz a baby milk can would be suitable and an N type socket is
>>then mounted on the wall of the can like so
>
>Interesting tip Simon, but what if he doesn't
>have a baby?
>
>--
>- 73 de Jim, g(m)4rga | In the British aristocracy, the
>olympus%jimdee.prestel.co.uk | gene pool has always had a shallow
>dynastic%cwcom.net | end.
>marula%zdnetmail.com | - Former US Ambassador,
>g4rga@gb7tjf.#45.gbr.eu | Raymond Seitz.
>Rallies Info: www2.prestel.co.uk/jimdee
>Pgp key: wwwkeys.uk.pgp.net:11371

331. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Simon Lewis <slewis@pacsat.demon.co.uk>
Message-ID: <MiyD0AASLol2EwqK@pacsat.demon.co.uk>
Source record: 74994
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,uk.radio.amateur

```
In article <3696678d.12060520@news.prestel.co.uk>, Jim Dunnett
<olympus@0spam.prestel.co.uk> writes
>On Fri, 8 Jan 1999 10:11:22 +0000, Simon Lewis <slewis@pacsat.demon.co.uk>
>wrote:
>
>>In article <7737kb$7e1$1@mendelevium.btinternet.com>, Steve Robbins
>><s.robbins@XXXbtinternet.com> writes
>>>Does anyone know how to construct an antenna for reception of geo-stationary
>>>satellites.
>>>The downlinks are 1.7Ghz. I have tried a simple dipole at the centre of a 1m
>>>dish with a pre-amp, but this doesn't seem to have enough gain.
>
>>For 1700 MHz a baby milk can would be suitable and an N type socket is
>>then mounted on the wall of the can like so
>
>Interesting tip Simon, but what if he doesn't
>have a baby?
>

Buy the milk for the can and throw the contents?

Oh yes - as someone rightly pointed out - the probe needs to be aligned
for the correct polarisation.

Horizontal polarisation needs the probe to be horizontal and vertical
needs it to be vertical.

Does not matter whether the probe is at the top/bottom - left or right
side as long as its orientation matches your required polarisation.

Good luck!

73 Simon
+--------------------------------------------------------------------+
| Simon Lewis GM4PLM Editor - EMN |
| European Microwave News - Supporting Microwave Radio Across Europe |
| Homepage - www.pacsat.demon.co.uk Email emn@pacsat.demon.co.uk |
+--------------------------------------------------------------------+
```

332. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19990108174215.16504.00009478@ng115.aol.com>
Source record: 74995

Unless that satellite has a rather energetic downlink, a one meter dish at that frequency won't do a whole lot . . . But, perhaps, it does have a hot signal on the ground. You didn't say . . .

Regards,

Bill

333. TS-790E ATV info ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: achilles <apa159@mail.otenet.gr>
Message-ID: <01be3b59$630124a0$c27da7c3@sv7apq>
Source record: 74996

I have the ts 790e with 1200 unit and want to make atv via the if input,
any experience anybody ?
email:apa159@otenet.gr
many thanks
Achilles sv7apq

334. Re: WYB Barker & Williamson shielded links

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: wa4uso@aol.com
Message-ID: <19990108174823.26496.00009620@ng31.aol.com>
Source record: 74997

Paul, do you still need the b/w
links? I may have one left.

73 WA4USO
Darrell

335. Re: REQ: Recipes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7762s5$h65$1@spock.tinet.ie>
Source record: 74998

>smiffy wrote:
>>
>> Can any one send me some recipes ofr wine making please
>

This newsgroup is for radio homebrewers. Have a look at
Harry's Homebrew Homepage. There is a link to it on my
web page (see sig, below.)
You will find information about both kinds of home brew.

The best wine recipe book I have seen is:
First Steps in Winemaking by C.J.J. Berry.

I wonder how many radio homebrewers have an interest
in winemaking/beer brewing?.

73, Ed. EI9GQ.

--

****

Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

www.nettaxi.com/citizens/ei9gq/

****

336. T & Pi Matching and Phase-shifting Network design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3ba3$3f520340$ee5fac3e@default>
Source record: 74999

ROLL-UP, ROLL-UP, ROLL-UP, ROLL-UP, ROLL-UP

ALL YOU HOME-BREWERS, GATHER ROUND -

AN ANNOUNCEMENT

A brand new, original piece of design software for T and pi impedance-transforming networks having either leading or lagging specifiable phase shifts.

==========
============ Program TPINET.exe =============
==========

Applications: PA pi-tank output circuits, amplifier interstage coupling, phasing networks for beam antenna elements, artificial delay lines, etc.

Input data: frequency, input ohms, terminating ohms, phase shift degrees, coil Q.

Output data: L and C component values, operating Q and bandwidth, loss as percentage of input power and in dBs.

Available by downloading from my website at the usual, genuine give-away price.

****
Reg, G4FGQ CLICK URL BELOW
http://www.btinternet.com/~g4fgq.regp

****

PS. I would be interested to hear of suggestions about additional input data and additional output data. The design of coils, number of turns of what gauge wire etc., is covered by program SOLENOID.exe

337. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36969064.3587341@news.online.no>
Source record: 75000
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 7 Jan 1999 12:54:52 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
wrote:

>Yes, slug-tuning is possible as in receivers. The only advantage
>would be a reduction in size. But when appreciable amounts of power
>are involved, magnetic core materials are too lossy. The greater
>power dissipation combined with smaller size results in over-heating.
>
>As an extreme example, the result of using a small ferrite rod
>antenna with only two watts of transmitter power would be smoke.
>
saturation may come before smoke?

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

338. Re: FS: VHF/UHF Circulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3696990d.5804676@news.online.no>
Source record: 75001

On 7 Jan 1999 15:43:51 GMT, "Dave S" <sparvell@rftechnology.co.uk>
wrote:

>I have a small quantity of NEW circulators for the VHF/UHF bands between 68
>and 600MHz. Each unit has a nominal octave bandwidth.
>
>Power ratings are between 25 and 50 watts depending on the exact model.
>
>These are non-connectorised units and will require a couple of trimmers to
>match to 50 ohms
>
with the need for trimmer capacitors it could be isoductors?
type LB-1 and similar?

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

339. Re: FS: Transmitter Tubes and parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <3696ADBE.50B9BC6F@lucent.com>
Source record: 75002

Victor Panzica wrote:
>
> Pair of used 813's $ 15 each + shipping
> 813 Fialment XFMR 10V 10 Amps $20 + shipping
> Also: Roller Inductors (2), Variable XMTR Capacitors

Do you have any 813 sockets for sale?

Dennis

#12

340. Re: FS 160-10 meter amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <3696B012.2C1A9EEA@lucent.com>
Source record: 75003

KB5MER wrote:
>
> For Sale -Solid State Linear Amplifier 160-10 meters
> Amplifier built by Henry +low pass filter
> 28 volt power supply
> Internal TR switching /keyed by rig/radio
> H=6.5" X W=15.25" X D=18.25"
> Drive 35 to 40 watts input
> Power output 250 watts
> AM,FM,CW,SSB
> $ 395.00 + Shipping from 78641 Austin,Texas
>

Are you the same KB5EMR that has been advertising all those
amplifiers on the CB newsgroup?

Dennis

#12

341. Re: Help with SSB RF Sensing

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <3696B857.9C87D0F6@lucent.com>
Source record: 75004

ve6inm@my-dejanews.com wrote:
>
> I just want to post a quick note to thank all the folks who replied to my
> request for some help. I now have several options to try out. From an R-C
> circuit to "hold" the relay in during breathing time, to a simple voltage
> divider to sense the RF voltage and drive a logic circuit. And of course, the
> most fail safe method, using the PTT line from the rig. Thanx to all again,
> and may 1999 see all your wishes come true. 73 de VE6INM (Glenn Inman)
>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

I don't know why no one mentioned using your original circuit, (with
the chatter problem), to switch a pin diode bridge instead of a relay
and simply go QSK!

Dennis

#12

342. Re: 6 meter amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <3696B8FC.49D03CFD@lucent.com>
Source record: 75005

Rexford T. Hound wrote:
>
> Wow!!! You still have that gem of an amp your trying to pawn off? I thought
> it would have been sold the first day you advertised it. Doesn't it make
> you want to scratch your ass in total bewilderment and wonder why no fool
> has taken you up on your attempt to sell scrap metal.
> If you want us to take you seriously, please post with a price that you
> think would be fair for everyone. Look at it another way, would you
> honestly pay $600 for it. I think not.
> Oh! Look! I haven't included your advertisement in my response. Ever
> wonder why? I'm too embarrassed to ask that much for a piece of crap and I
> won't advertise it for you. Wouldn't you be if you had any sense?
> --
> From the paws of,
> Rexford T. Hound
> >If you tag your note on to this listing it
> >will show everyone how low ham radio
> >has to go to find the bottom._________
> >and there you will be.
>
> No, it just shows that some ham's aren't as stupid as you would like them to
> be. Haven't you ever wondered why your adds aren't taken seriously? Son,
> look in the mirror and you'll see the culprit, it sure and hell isn't use
> honest hard working hams that don't want to get screwed.

I guess the CBr's he was trying to sell the amps to aren't that
stupid either because he was not able to sell anything on the CB
newsgroup no matter how hard he tried...

Dennis

#12

343. Re: Frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <3696B985.72A3BDA8@lucent.com>
Source record: 75006

Freeland wrote:
>
> Hello, I've been trying to find some schemetics for a frequency
> counter good for 100Hz to 30MHz. Anybody know where? Thanks. 73
> from KD5FES.

1) Heathkit
2) Davis Electronics
3) Wawasee Electronics

Dennis

#12

344. i'm looking for radio control sites!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: WebMonkey <usethelink@below.com>
Message-ID: <3696C69D.2F4B@below.com>
Source record: 75007
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

anyone out there using the radio control freqs in 6m?
i want to convert my gas r/c car over to 6m and get out of
the 'too close to cb band' the radio equip is on now.

every time a cb'er calls his/her spouse, the base on the other end
sends my car careening into a ditch at 50+ mph.
[a little exageration on the ditch maybe, most times it circles wide
open close to top speed from a cranked servo, but it is a pain]

finally got the engine tuned nice and spent xtra $$ on the 2 speed
tranny but 3 to 4 minutes of uninterupted play is it.

any sites on r/c gear for the ham 6m band would be appreciated.
i've a ton of info, just not r/c gear for the ham band.

thanks
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

345. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <3696775E.5CE4@naples.infi.net>
Source record: 75008

```
Mark J Sandford - KF4YYE wrote:
>
> I'd be interested in seeing it as well if you are willing to share your results
>
> Thanks - mark KF4YYE
>
> John Miles wrote:
>
> > yvon wrote:
> > >
> > > Richard Hosking wrote:
> > > >
> > > > --
> > > > Richard Hosking
> > > > VK6BRO
> > > > http://www.iinet.net.au/~richardh/VK6BRO.htm
> > > > richardh@iinet.net.au
> > > > QRP/Amateur Radio/Microcontrollers
> > > >
> > > > Stuart Baynes <sbaynes@iafrica.com> wrote in article
> > > > <76lsbj$2rt$1@nnrp01.iafrica.com>...
> > > > > Looking to make a simple FM tranceiver for the 6m band, frequency steps
> > > > of
> > > > > either 2.5, 10 or 12.5.
> > > > > Has any body seen any chips that can do this, that are self contained and
> > > > > that don't need an on board computer to program it? Look forward to any
> > > > > replies.
> > > > > Stuart ZS6OUN @ ZS0DLD
> > > >
> > > > Stuart
> > > >
> > > > I did a 6 meter synth using the MC145170 which is a serially programmable
> > > > synthesizer. The details are available on my website. The source code for a
> > > > PIC16C57 is also there. I have to admit the circuit only <sortof> worked
> > > > and stability was a problem
> > > > However it might serve as a starting point for your deliberations. For my
> > > > own education I attempted to write an article on PLL design and what I had
> > > > discovered from various sources which is also on the site. Unfortunately
> > > > all current designs use a microcontroller to drive the PLL. You might be
> > > > able to use something like a BASIC stamp which isnt too hard to program so
> > > > I understand. If you want to use a diode matrix or EPROM you have to go to
> > > > one of the older PLL chips such as the MC145151 which will need a prescaler
> > > > at 50 MHz (note that the MC145170 does not.) There are newer PLL chips (eg
> > > > from Phillips) that even have the loop amp/filter built in Bear in mind
```

> > > > that PLL design is not for the faint hearted but with persistence it should
> > > > work.
> > > >
> > > > Richard
> > >
> > > Hi Richard! I read with interest your article on synthesisers using
> > > PLL's. I would like to share my experience on this subject. The most
> > > difficult type of synthesizer to build is the octave bandwidth (example
> > > 500 to 1000 Mhz) In order to keep the phase noise and the phase detector
> > > sideband supression over this bandwidth is not for the faint hearted
> > > to use your expression. I spent hundreds of hours using design data
> > > from various manufacturers (10 inches thick) Since I was using a paralel
> > > (MC145151) I had to design the low pass integrator with a voltage of 28
> > > volts to run the VCO over the full range. I never succeeded to get the
> > > phase noise and sideband supression below 70 DB
> > > as measured on a spectrum analyzer at 10 Khz from the carrier. I then
> > > decided to design a charge pump using transistors; there is very little
> > > design literature on this subject and I had to work hard but finally
> > > it worked. The charge pump delivered 1 volt at 500 Mhz and 26 volts at
> > > 1000 Mhz and I met the 70 DB specification over the whole band. The
> > > filter consist of a capacitor plus a resistor/capacitor circuit for
> > > damping. The charge pump must be very well balanced in order to achieve
> > > these results. I have used this design at lower frequencies and narrower
> > > group of frequencies, it is rock stable. When the charge pump is well
> > > balanced, the filter capacitor value which had been calculated from a
> > > design equation can be varied by experimentation for best results at
> > > both ends of the band. Since my design used eproms and thumbwheel
> > > switches, the channel switching speed was not a problem in my
> > > application. Regards! Yvon
> >
> > I'd be interested in seeing a schematic of your transistor-based charge
> > pump design... do you have anything available? I've run across similar
> > problems, trying to use low-noise opamps.
> >
> > -- jm KE5FX
> >
> > --
> > Note: My E-mail address has been altered to avoid spam
> > --

I have made a request to my client for whom I developed this system if
he is willing to let me disclose the information. Regards! Yvon

346. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3696E283.16BE@pop.removethistomailme.net>
Source record: 75009

yvon wrote:
>
> <snip>
>
> I have made a request to my client for whom I developed this system if
> he is willing to let me disclose the information. Regards! Yvon

That'd be great, thanks for checking.

-- jm

Note: My E-mail address has been altered to avoid spam
---

347. FS: Collins 70K9 PTO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <3696F1F6.6DDB8BAB@calweb.com>
Source record: 75010
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.amateur.radio.boatanchors

For Sale:

Collins 70K9 PTO. Solid State PTO tuning 2.5 - 3.5 Mhz. Provisions
for oven stabilizer and electronic trimming or phase locking. With all
documents, tested. 3 1/4"W by 3 1/4 deep by 1 1/2 inches high. Has ten
turn over crank protection cog system and an oldham style shaft coupler.
Removed from Collins 618T avionics gear.

$50 post paid conus

Tnx for the read

Bob, KE6F

348. Re: i'm looking for radio control sites!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Dan <n7wpd@xxmission.com>
Message-ID: <776u3arog1@news.xmission.com>
Source record: 75011
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Please correct me if I am wrong, but weren't the 6m freqs. set aside for r/c specifically for r/c aircraft use? Seems I had heard that somewhere.

I love my Kyosho Inferno!! Mated with a Picco P5 is screams. We've clocked it at over 60mph!

Dan / N7WPD

WebMonkey <usethelink@below.com> wrote in message news:3696C69D.2F4B@below.com...
>anyone out there using the radio control freqs in 6m?
>i want to convert my gas r/c car over to 6m and get out of
>the 'too close to cb band' the radio equip is on now.
>
>every time a cb'er calls his/her spouse, the base on the other end
>sends my car careening into a ditch at 50+ mph.
>[a little exageration on the ditch maybe, most times it circles wide
>open close to top speed from a cranked servo, but it is a pain]
>
>finally got the engine tuned nice and spent xtra $$ on the 2 speed
>tranny but 3 to 4 minutes of uninterupted play is it.
>
>any sites on r/c gear for the ham 6m band would be appreciated.
>i've a ton of info, just not r/c gear for the ham band.
>
>thanks
>--
>A.C. Curtis
>KBWLF
>53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
>mailto:demoman@rollanet.org
>http://www.rollanet.org/~demoman

349. Re: REQ: Recipes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <3696DCEB.752D@megsinet.net>
Source record: 75012

Eamon Skelton wrote:
> I wonder how many radio homebrewers have an interest
> in winemaking/beer brewing?.

I've had a few 807's in my day... never made my own, though.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

350. Re: Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <3696E041.42B8@megsinet.net>
Source record: 75013

Pete Peterson wrote:
> I've found that CAIG Laboratories, Powy, CA.
> (619) 486-8388 Http://www.caig.com/sb-ae.htm
> makes items for doing that and far more. They
> make a "liquid" called Cramolin which comes in
> two colors. red and blue. Made for NASA, it is

They may still make it for NASA and special customers, but you're not likely to find it on the shelves any more. They have an alternate formula called DeOxit that I've found to be quite good for contacts. It appears expensive until you start using it; I've had a 25 ml bottle for 3-1/2 years now and I've been putting it on virtually every contact I touch. (About 10 ml left.)

It smells very much like Tinkertoys. I haven't found anything that it harms yet (but it's too expensive to taste-test :-).

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

351. Re: Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF5AzyB.7H8@netcom.com>
Source record: 75014

In article <915771005mnewswizard@connectnet.com>,
Pete Peterson <wizard@connectnet.com> wrote:
>> I am wondering what others have found useful
>> and effective in cleaning APC7 and GR900
>> connectors.
> I've found that CAIG Laboratories, Powy, CA.
> (619) 486-8388 Http://www.caig.com/sb-ae.htm
> makes items for doing that and far more. They
> make a "liquid" called Cramolin which comes in
> two colors. red and blue. Made for NASA,

Caig no longer sells Cramolin. Their replacment products are Deoxit
and Renuzit (spelling?).

From a posting last spring back in one of the newsgroups, Cramolin
is a product of a german company of that name and they were seriously
pissed off that 1) Caig claimed to be the manufacturer, and 2) that
Caig was claiming that they could no longer sell it because of the ban
on chlorofluorocarbons. It's still available, somewhere.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

352. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <773kma$6m6@hpcvsnz.cv.hp.com>
Source record: 75062

Jim (jbolinger@lintek.com) wrote:

: I have had a couple of replies to this directly to me instead of the group.

: Evidently there really are such things and they can be used at RF, although
: I would think that you would have to be careful with the mechanical design,
: as with all RF circuits, to use it at the higher frequencies.

: One of the replies said that you need only one core, and wind the RF and DC
: parts on opposite sides of it.

Nooooo...that won't work well at all. You can use one core, with the RF winding wound in the "usual" toroid way, and the DC winding never passing through the center, only over the outside. -- If you do it with a ferrite core, saturation occurs fairly suddenly; powdered iron cores would saturate rather slowly and at high ampere-turns, I believe.

: The article I mentioned in my original post suggested using two stacked
: cores to get the best performance and, after pondering it for a while, I
: recall that it said that using two stacked cores will minimize the coupling
: of RF into the DC winding. Remember that the two RF windings are in
: opposite directions, hence will not couple (theoretically) to each other.
: This would be an advantage at higher frequencies I beleive. It would also
: keep the DC winding from looking like a shorted turn at some frequencies.

Yeah, I'd wanna make sure the two cores (with windings) were pretty well matched. You want to have flux in opposite directions in the two cores. You can also, I think, swap the windings and use the single one for the RF and the other two for the DC.

: This idea intrigues me. I can think of a number of interesting uses, such
: as automatic antenna matching, DC control of amplifier tanks, and voltage
: controlled oscillators to name a few.

Some might work OK, but you may be disappointed by the nonlinearity of the inductor in any but low power applications. At high power, you're likely to generate lots of harmonics, since the RF flux will add to the DC and take one core or the other deeper into saturation, and the other not so far.

: What properties would such a thing have? Would the inductance be linear
: with respect to control current?

I'd expect for ferrite cores, the inductance change would be rather abrupt, for small RF signals.

--
Cheers,

Tom
tom_bruhns@hp.com

353. TV card as VHF/UHF receiver!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: mervins@aol.com
Message-ID: <19990107200558.02305.00000880@ng139.aol.com>
Source record: 75063

I now have three different TV cards in my computers. Since TV tuners can be used to make excellent VHF/UHF receivers, has anyone done so with a TV computer card? Has anyone ideas as to how this might be done in software?? Scotty

354. Re: Jan Crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: "Dale R. Parfitt" <parinc@bellsouth.net>
Message-ID: <369563CD.2F2787E1@bellsouth.net>
Source record: 75064
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

James D. Haas wrote:

> Has anyone out there ever heard of Jan Crystal, and if so, are they
> still in business? I need a 69.5 MHz sinusoidal crystal oscillator (or
>
> at the very least, a 69.5 MHz crystal) and I heard that this company
> does this. I would appreciate any contact information, and if anyone
> out
> there can recommend a good company or three that makes
> crystals/crystal
> oscillators at 69.5 MHz, I would really appreciate it. Please follow
> up
> with an e-mail at: jdhaas@mtu.edu (preferred) or post it here.
>
> 73's, Jim Haas KG9IF

To the best of my knowledge they are still in Ft. Meyers Florida.

355. Wanted: tips for cleaning precision connectors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-08 00:00:00 UTC
From: Stephen Schiller <polytope@prado.com>
Message-ID: <773pm5$ea1$0@209.66.82.22>
Source record: 75065

I am wondering what others have found useful
and effective in cleaning APC7 and GR900
connectors. Over the years I have collected
a number of surplus items requiring such cleaning.
I generally resort to using concentrated
ammonia for cleaning copper as it disolves
grease and copper oxide but not copper itself.
It also has the advantage of leaving no residue
upon evaporation.

However, the beryllium copper alloy used in
GR 900 connectors seem to often have a black
tarnish that is not easy to remove by this
or other means I have tried.

So, what works for you???
Has anybody any opinions on polishishing the metal,
or using an abrasive cleaner such as Bon Ami?

thanks,
Steve

356. Wanted: Info on an Astro Link receiver and company

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <369712df.0@192.168.1.2>
Source record: 74916

have aquired a survelliance receiver made by a company called
Astro Link. The reciever is an MTR-209.

Does anyone know where this company is located or
have information on this receiver.

Norman

norman@pcseng.com

357. AGC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: fredrik &#65533;berg <fredrik.oberg@telia.com>
Message-ID: <36971633.F20E3074@telia.com>
Source record: 74917

how do i build a agc for ca 150mhz with min 20 mhz bandwhidth ?

Fredde

358. Re: more free software 4u

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: pit0@aol.com
Message-ID: <19990109034133.05093.00010299@ng94.aol.com>
Source record: 74918

Thank you for the becon file

take a look at my sight
http://welcome.to/kf6eyt
73's kf6eyt

359. Re: TV card as VHF/UHF receiver!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: davem@zeppo.cs.ubc.ca
Message-ID: <7777nj$knt@zeppo.cs.ubc.ca>
Source record: 74919

mervins@aol.com (MervinS) writes:
>You realize that there are many TV-band radios that receive TV audio without
>the video.

A TV transmitter actually has two separate transmitters with carriers
4.5 MHz apart - one big AM transmitter with lots of bandwidth for the
video, and a lower-power FM transmitter for audio. The signals are
independent, and you can receive them independently with two separate
receivers, or receive the audio alone.

But many tuners designed specifically for TV have a single local oscillator
and a single IF that is used for both video and audio. The two signals
are split later in the receiver. In some designs, the video signal needs
to be present to extract the audio.

So a communications receiver intended for audio can receive TV sound
as long as it is prepared to deal with the relatively wide deviation
(25 kHz). But a receiver designed as a TV tuner may not be able to
receive FM voice audio if there is no video carrier 4.5 MHz away.

Dave

360. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Steve Robbins <s.robbins@XXXbtinternet.com>
Message-ID: <7779a4$3i4$1@plutonium.btinternet.com>
Source record: 74920

Sorry Bill, I forgot to mention it's the geo-stationary weather sats, that should be able to be received with a 90cm dish (well that's the size you get when you buy a proper system)
--
==========
Steve Robbins (Bristol, UK)
E-Mail : s.robbins@XXXbtinternet.com
Please remove XXX to reply via E-mail
==========

ACI6 wrote in message <19990108174215.16504.00009478@ng115.aol.com>...
>Unless that satellite has a rather energetic downlink, a one meter dish at that
>frequency won't do a whole lot . . . But, perhaps, it does have a hot signal on
>the ground. You didn't say . . .
>
>Regards,
>
>Bill

361. k2riw 432mhz amp plus mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: grogon <grogon@hotmail.com>
Message-ID: <777b1u$f8r$1@reader1.reader.news.ozemail.net>
Source record: 74921

Where can i get complete info on the k2riw amps plus the mods, is this still the best 432 mhz amp to build,

thanks
Craig

362. new oil filled caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: grogon <grogon@hotmail.com>
Message-ID: <777b4n$s5a$1@reader1.reader.news.ozemail.net>
Source record: 74922

What is the best source for new oiled filled caps, not pulse or flash rated ones. preferrably someone who holds
stock, Westinghouse makes them but its a special order item

Thanks
Craig

363. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.000000cd.0187faed@gto.gto.net.om>
Source record: 74923

Re: Wadley Loop

Hi,

This was of course the basis of the famous Racal RA17 receiver that was made in England and sold in its tens of thousands in the 60/70s (a large number went to or were made in Canada I seem to remember). There was a version with U.S. equivalent tubes/valves and with a meter calibrated in S-points for use by the well-heeled ham.

Anyone who has seen one of these sets will know that it used a very substantial diecast chassis with lots of compartments to keep potential spurs at bay. Legend has it that Racal nearly gave up on it until someone thought of hacksawing through selected parts of the chassis to isolate and ultimately eliminate the problem.

Wadley-Barlow (or was it Barlow-Wadley) was a South African company if I remember correctly, as I think was Wadley himself. One of his most striking inventions was the microwave Tellurometer which could measure distance to a fraction of a metre over several kilometres.

73 de Joe, G3LLV

Muaskar Al Murtafa'a
Sultanate of Oman

364. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <36970E26.5C21@atl.org>
Source record: 74924

I believe the National HRO500 employes the same scheme as RA-17,
Barlow-Wadley, and the FRG-7. If I recall, one selling point
for the BW and the FRG7 was that by using the same osc any
drift cancels in the two conversions and a mess of crystal references
could be eliminated.

-bob

365. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <3697574C.D128AC9C@bellsouth.net>
Source record: 74925

Check out the 23rd edition of the Radio Handbook by bill orr it has what your looking for.

bbwolf@my-dejanews.com wrote:

> Wanted: *Complete Detailed* amplifier plans for a 10m-80m (160m is a plus)
> using an 8877 triode. I prefer a straightforward amplifier sans the bells and
> whistles (although w/adequate protection to ensure long tube life).
>
> Any assistance will be greatly appreciated,
>
> 73s
> RH
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

366. Re: new oil filled caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990109082347.05189.00003428@ng50.aol.com>
Source record: 74926

>
>What is the best source for new oiled filled caps, not pulse or flash rated
>ones. preferrably someone who holds
>stock, Westinghouse makes them but its a special order item
>
>Thanks
>Craig
>
>

Condenser Products. Brooksville, FL

W4ZCB

367. FA: 6DJ8/ECC88 Siemens w/ "Falcon" logo on Ebay.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36975D1D.6DA9AB18@herald.infi.net>
Source record: 74927
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,rec.audio.pro,rec.radio.swap,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.antiques.radio+phono

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=55203432

368. Re: Frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <777mo4$47g$1@news5.svr.pol.co.uk>
Source record: 74928

Try ARRL Handbook 1990 chapter 25-13, all you need is there. really simple
to build

--
=== Mike W mike@corn2.freeserve.co.uk ===
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
dennis W. Ostrowski wrote in message <3696B985.72A3BDA8@lucent.com>...
>Freeland wrote:
>>
>> Hello, I've been trying to find some schemetics for a frequency
>> counter good for 100Hz to 30MHz. Anybody know where? Thanks. 73
>> from KD5FES.
>
> 1) Heathkit
> 2) Davis Electronics
> 3) Wawasee Electronics
>
>Dennis
>
>#12
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

369. Re: Jan Crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: "Richard D. Reese" <richardr@sssnet.com>
Message-ID: <369763B4.999FAA4B@sssnet.com>
Source record: 74929
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"James D. Haas" wrote:

> Has anyone out there ever heard of Jan Crystal, and if so, are they
> still in business?

1-800-JAN-XTAL to order or request a free catalog.
Jan Crystals
P.O. Box 60017
Fort Myers, Florida 33906
941-936-2397

--
Richard D. Reese WA8DBW
http://www.wa8dbw.ifip.com

370. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: c.c.tqbssz@QXHomebrew.killspam.us.com
Message-ID: <777vbusln1@samba.rahul.net>
Source record: 74930

Joe McElvenney (joemac@gto.net.om) wrote:
: Re: Wadley Loop

: This was of course the basis of the famous Racal RA17 receiver
: that was made in England and sold in its tens of thousands in the
: 60/70s (a large number went to or were made in Canada I seem to
: remember). There was a version with U.S. equivalent tubes/valves and
: with a meter calibrated in S-points for use by the well-heeled ham.
:
: Anyone who has seen one of these sets will know that it used a
: very substantial diecast chassis with lots of compartments to keep
: potential spurs at bay. Legend has it that Racal nearly gave up on it
: until someone thought of hacksawing through selected parts of the
: chassis to isolate and ultimately eliminate the problem.

This is true, Racal used to have the original on show (maybe they still
do). What's not so commonly known is that before Ray and Cal got hold of
it, the design was previously offered to Eddystone, who turned it down
thereby missing a lot of business and a bigger place in history.

Stephen

: Wadley-Barlow (or was it Barlow-Wadley) was a South African
: company if I remember correctly, as I think was Wadley himself. One
: of his most striking inventions was the microwave Tellurometer which
: could measure distance to a fraction of a metre over several
: kilometres.
:
:
: 73 de Joe, G3LLV
:
: Muaskar Al Murtafa'a
: Sultanate of Oman
:

371. Re: Frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Freeland <Freeland@chickasaw.com>
Message-ID: <iDLI2.1492$lz1.6189747@news.goodnet.com>
Source record: 74931

Thanks, do you have a scanner?
Mike W wrote in message <777mo4$47g$1@news5.svr.pol.co.uk>...
>Try ARRL Handbook 1990 chapter 25-13, all you need is there.
really simple
>to build
>
>--
>=== Mike W mike@corn2.freeserve.co.uk ===
>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
>dennis W. Ostrowski wrote in message
<3696B985.72A3BDA8@lucent.com>...
>>Freeland wrote:
>>>
>>> Hello, I've been trying to find some schemetics for a
frequency
>>> counter good for 100Hz to 30MHz. Anybody know where? Thanks.
73
>>> from KD5FES.
>>
>> 1) Heathkit
>> 2) Davis Electronics
>> 3) Wawasee Electronics
>>
>>Dennis
>>
>>#12
>
>

372. Re: i'm looking for radio control sites!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: bowman <bowman@montana.com>
Message-ID: <36978CE1.A57245C7@montana.com>
Source record: 74932
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dan wrote:
>
> Please correct me if I am wrong, but weren't the 6m freqs. set aside for r/c
> specifically for r/c aircraft use? Seems I had heard that somewhere.

The 1994 ARRL Handbook mentions aircraft, vehicles, and sailboats, and
cautions that you might want to work out a bandplan with a local club.

373. FA Homemade 40 mtr transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <36978E23.4035@sympatico.ca>
Source record: 74933

Homemade 40 meter CW transmitter on EBay - if you are a Heathkit fan,
then you might be able to use the meter in it.

<http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=55104712>

374. Re: Wanted: Info on an Astro Link receiver and company

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Glen Ross <ross@zetnet.co.uk>
Message-ID: <19990109104732802 94@zetnet.co.uk>
Source record: 74934

The message <369712df.0@192.168.1.2>
from "Norman Gillaspie" <norman@pcseng.com> contains these words:

> have aquired a survelliance receiver made by a company called
> Astro Link. The reciever is an MTR-209.

> Does anyone know where this company is located or
> have information on this receiver.

> Norman

> norman@pcseng.com

I did some design work for this outfit some 15 years ago. Astro were
taken over by Norlin Communications at Alexandria, just outside
Washington DC. I do not know if they are still there or if they
would still have the old Astro data available.

Glen G8MWR

375. Re: k2riw 432mhz amp plus mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <8OSAGFAiU3l2Ew$G@ifwtech.demon.co.uk>
Source record: 74935

grogon wrote:
>Where can i get complete info on the k2riw amps plus the mods, is this still
>the best 432 mhz amp to build,

It's probably the best design using a pair of 4CX250Bs or 4CX250Rs.
The most up-to-date mods are in 'The VHF/UHF DX Book' - see my web pages
below.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

376. Measure? Loop loss resistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be3bf4$0c03fec0$66874d0c@default>
Source record: 74936

Problem: Measuring Q of high Q loop (Q=700 to 1000)
Proposed method: find R loss---- Q=Xl/R
(yes there are other {better ways?} please bear with me)
The model is a source with a series resistance.
I will be inducing a voltage into the loop from a source several
feet away.
To find R loss I want to insert a transformer pri in series with
the loop. The pri will look like 2 ohms reflected from 50 ohm sec.
Measure an induced voltage. I can measure this on a spectrum analyzer.
Then change the transformer to 4 ohms reflected from 50 ohm sec
Measure an induced voltage.
From these two voltages and known resistance change, R source
(R loss) can be calculated.

Now the Question--By adding 4 ohms I have lowered the Q, does that
lower the voltage induced in the loop? (Meaning the source voltage has
changed) If so, is there still a mathematical way to calculated the R loss?

In the end I want a transformer with a pri that matches the R loss when
the sec is terminated into 50 ohms.

Mike

377. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: c.c.tqbssz@QXHomebrew.killspam.us.com
Message-ID: <77844u$a5$1@samba.rahul.net>
Source record: 74937

Jim (jbolinger@lintek.com) wrote:

<A confusing and not very correct description of the Wadley loop>

The RX can be separated into two functional blocks;

The simple part is the back end which is a conventional tunable IF, in other words a superhet tuning a fixed 1 MHz range. Tuned by the second (KHz) VFO which needs to be high stability. There is no drift cancellation for this VFO.

The front end converts the HF band down to the tunable IF range in 1 MHz steps, controlled by the first (MHz) VFO. The first VFO runs above signal frequency and is used in 2 conversions;

a) By itself as the local oscillator in an up conversion to a wide band (> 1MHz) high frequency IF (45 MHz in the RA 17) first IF.

b) Mixed with harmonics generated from a 1 MHz reference (the comb generator) and filtered to provide the local oscillator for the second conversion down the tunable IF range.

Mixing the first VFO up and down cancels any drift in this section of the RX.

Here how it works;

Suppose the first IF is 44 to 45 MHz.

The first VFO will tune 46 to 74 MHz for a 1 to 30 MHz signal range.

Suppose the second IF tunes 4 to 5 MHz

The local oscillator needed for the first to second coversion will be 40 Mhz.

This 40 MHz comes from the first VFO mixed with harmonics from a 1MHz xtal and fed to a 40 MHz filter. This combination can only produce an output at 40 MHz when the VFO is at some multiple of 1 MHz.

Eg VFO 60 MHz, - 20th harmonic of xtal = 40 MHz
VFO 61 MHz, - 21st harmonic of xtal = 40 MHz

If the VFO is at say 60.5 MHz there's no mixing product at 40 MHz and therefore no injection to the second mixer. As you tune the MHz VFO you can hear increases in noise as it passes thru each MHz point and the second mixer gets a local oscillator signal.

To cover 14 to 15 MHz, the MHz VFO is set at 59 MHz, this mixes with 19th harmonic of the xtal to generate the 40 MHz injection signal.

Suppose the signal is at 14.2 MHz, mixed with 59 MHz gives a 1st IF of 44.8, mixed again with 40 MHz gives the second IF of 4.8 MHz.

If the MHz VFO drifts to 59.05, the 1st IF will become 44.85, but the LO injection will also change, from 40 to 40.05. 44.85 - 40.05 = 4.8. Bingo! the second IF frequency is unchanged, the drift has been cancelled out.

Stephen

378. Re: new oil filled caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <3697a184.4818646@news.semaphore.net>
Source record: 74938

Check with Peter Dahl in El Paso or Surplus Sales of Nebraska in
Omaha. Both have a reasonable selection of oil filled capacitors for
dc applications at reasonable prices. Both are on the Internet. Sorry
I don't have their exact URL handy, but they're easy to find.

73 de K9GXC, Jim

johnsonhe@aol.com (JohnsonHE) wrote:

>>
>>What is the best source for new oiled filled caps, not pulse or flash rated
>>ones. preferrably someone who holds
>>stock, Westinghouse makes them but its a special order item
>>
>>Thanks
>>Craig
>>
>>
>
>Condenser Products. Brooksville, FL
>
>W4ZCB

379. Help:ID Motorola Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Rainsberger <rainsbe@gte.net>
Message-ID: <778a49$p7j$1@news-2.news.gte.net>
Source record: 74939

I picked up a Motorola radio a while back that does not have an ID plate on it. I tried the Motorola web site with not lock. Maybe someone out there can ID it for me from some of the part numbers. It is a one channel radio with the mike connector on the left side and a UHF connector on the right side of the front panel. On the rear is a six (6) pin cannon connector and a heat sink. On the from panel are the following controls from left to right: Volume, on/off, PL on/off, Squelch.
The following modules are in the plastic case mounted to a metal chassis. NLB10332ASP2, NLN6591A. Also connected to the unit is what looks like a power converter labeled 24-72V, NPN6044A. Any help ID'ing this unit is appreciated. I can be e-mailed at rainsbe@gte.net.

73

KD4CBD, Ed Rainsberger

380. WTB: RAT SHACK DIGITAL SOUND LEVEL METER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: vichath@aol.com
Message-ID: <19990109145248.18732.00002878@ng-ft1.aol.com>
Source record: 74940

If you have one collecting dust and would like to turn it into cash, email me directly.

Thanks

381. radio mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: kf6eyt@aol.comnoQspam
Message-ID: <19990109154932.01070.00008880@ng-cf1.aol.com>
Source record: 74941

try this
PLEASE VISIT MY WEB SIGHT
http://www.welcome.to/kf6eyt
73's KF6EYT

382. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990109153639.21691C-100000@Stratus.CAM.ORG>
Source record: 74942

On Sat, 9 Jan 1999, BOB DUCKWORTH wrote:

> I believe the National HRO500 employes the same scheme as RA-17,
> Barlow-Wadley, and the FRG-7. If I recall, one selling point
> for the BW and the FRG7 was that by using the same osc any
> drift cancels in the two conversions and a mess of crystal references
> could be eliminated.
>
> -bob
>
>
The HRO-500 used a PLL to get the injection to the first mixer, At first glance it might appear similar to the Wadley loop because the phase comparator took it's inputs from the VCO and a crystal oscillator with high harmonic contents, in effect locking the VCO to a harmonic of the crystal. And you did tune the VCO manually to get it to the next lock point. But if the hardware had been up to it at the time (early sixties), the synthesizer would have looked like what we are used to now, with a VCO feeding a divider chain and then the phase comparator.

Radio Shack had a shortwave receiver that used the Wadley loop, though I can't remember the model number.

And Barlow-Wadley themselves had a transistorized portable that used the loop, in the early seventies. Undoubtedly it was alot cheaper than the Racal, and so perhaps it made the loop more prominent. I'm still not sure if it's the Wadley loop or the Barlow-Wadley loop, and I think perhaps this confusion comes from the populariztion of the loop in that portable.

Michael VE2BVW

383. Radio Control Interface?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Michael Blake <k9jri@worldnet.att.net>
Message-ID: <778is7$c2u@bgtnsc02.worldnet.att.net>
Source record: 74943

Has anyone developed any hardware/software that allows controlling the frequency of any of the low cost 10M only SSB rigs for the RS birds?

It would look like only the three least significant digits would need to be controlled. I am using The Station control program with my IC-821H and it would be nice if I could also control the RCI-2950 that I use as the 10M receiver.

Mike - K9JRI

384. Re: AGC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <36978F23.35B9@naples.infi.net>
Source record: 74944

fredrik ï¿½berg wrote:
>
> how do i build a agc for ca 150mhz with min 20 mhz bandwhidth ?
>
> Fredde

Are you looking for the AGC amplifier only or if you want also the AGC detector which will control the said AGC Amplifier. Is this for an FM signal or an AM signal. AGC detectors are simple for FM because the amplitude of the signal is constant. For AM, it is more complex if the AGC detector must respond to the peak level of the signal. Regards! Yvon

385. Problems with a Kenwood 430s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: maxedout <maxedout@wilkes.net>
Message-ID: <7790df$j5e$1@news3.infoave.net>
Source record: 74945

Hello to all.
I need help with a problem I am having with a TS-430s.
Sometimes when tuning the Main VFO it does not wont to change frequencies or it hangs up and if I turn it slow and backwards then forwards it corrects itself. I am thinking the encoder is going bad. The rig works perfect using the mic up/down buttons and works on memory with out the glitch.
If you have and Ideal please let me know at ke4cij@qsl.net

Thank You

386. Re: i'm looking for radio control sites!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: munsch@ibm.net
Message-ID: <36980a35.0@news1.ibm.net>
Source record: 74946
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi:
It seems to me with the proliferation of 6 meter operation and legality of a kilowatt on the band, that you would be better on one of the 72 MHz frequencies. I guess they are still available, maybe I'm behind the times.
Good luck anyway.
Crazy George

WebMonkey wrote in message <3696C69D.2F4B@below.com>...
>anyone out there using the radio control freqs in 6m?
>i want to convert my gas r/c car over to 6m and get out of
>the 'too close to cb band' the radio equip is on now.

<snip>
>A.C. Curtis
>KB�WLF
>53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
>mailto:demoman@rollanet.org
>http://www.rollanet.org/~demoman

387. Re: Problems with a Kenwood 430s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Rick Miller <spamfree.rdmiller@bit-net.com>
Message-ID: <3698146C.4B06@bit-net.com>
Source record: 74947

I don't know anything about the TS-430, but this sounds just like a
problem I experienced with a digital readout on an X-Y table. The fix
was quite simple. It turned out that debris would get in between the
"encoder", which was a glass bar with a pattern etched in it, and the
sensor. And a bit of disassembly and carefull cleaning was all that it
needed.

I suspect that your fix may be similar: just a little cleaning required.
But unless you're confident that you can get it back together correctly,
once you take it apart, you may want to have a service shop do the work.

maxedout wrote:
>
> Hello to all.
> I need help with a problem I am having with a TS-430s.
> Sometimes when tuning the Main VFO it does not wont to change frequencies or
> it hangs up and if I turn it slow and backwards then forwards it corrects
> itself. I am thinking the encoder is going bad. The rig works perfect using
> the mic up/down buttons and works on memory with out the glitch.
> If you have and Ideal please let me know at ke4cij@qsl.net
>
> Thank You

--

===
| Rick Miller | rdmiller @bit-net.com |
| KA3BZX/1 | http://www.bit-net.com/~rdmiller |
===

388. Cheap Repeater Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Roger <n0yox@iland.net>
Message-ID: <7799cv$hi0$1@remarQ.com>
Source record: 74948

If you are looking for a simple controller this might be for you ....

http://www.iland.net/~n0yox

389. FS/Trade: Toshiba T4900CT Notebook Computer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: Rick Riverman <rbriver@cybcon.com>
Message-ID: <779c59$jk5$1@remarQ.com>
Source record: 74949

I have a notebook computer for sale at $600 or trade for an HF transceiver
of equivalent
value, perhaps a Kenwood TS-440SAT or TS-830S in mint condition or similar:

Toshiba T4900CT Notebook Computer
Pentium P-75 CPU
Active Matrix Color VGA with SVGA output for optional external monitor
Expansion sockets for external keyboard and mouse
24 MEG RAM
2.0GB HD
ESS Audio/Mic built in
28K MegaHertz PCMCIA Modem
Xircom CE2 PCMCIA Ethernet Credit Card
WIN95 OSR2
Carrying case
Extra Battery

Please let me know if you are interested.

Thanks,
Rick Riverman W7RBR
Aloha, Oregon
503-629-5135

390. Re: Help: Geo-stationary satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF5Cx30.91G@netcom.com>
Source record: 74950

In article <7779a4$3i4$1@plutonium.btinternet.com>,
Steve Robbins <s.robbins@XXXbtinternet.com> wrote:
>Sorry Bill, I forgot to mention it's the geo-stationary weather sats, that
>should be able to be received with a 90cm dish (well that's the size you get
>when you buy a proper system)

You might check to see if the "Weather Satellite Handbook" by Taggart is
still in print from the ARRL.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

391. Re: WATKINS-JOHNSON

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: jenal_com@xoommail.com
Message-ID: <36979f30.7500878@news.m.iinet.net.au>
Source record: 74951
Cross-posted to:
alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.homebrew,uk.radio.amateur

Sorry - Can't help you with a manual but when I worked fpr WJ in the
UK they were based in Windsor and may still be around there. Perhaps
they may be able to help you.

Regards

Alan

On Sun, 10 Jan 1999 15:29:05 -0000, "ERNIE"
<etco@trojen.freeserve.co.uk> wrote:

>I NEED CIRCUIT DIAGRAM / MANUAL FOR WATKINS-JOHNSON
>UHF RECEIVER MODEL W-J 8730A. EXPENSES WILL BE MET. THANKS
>
>

****
Jenal Communications
P O Box 1108
MORLEY 6943
West Australia
Tel: +61 8 9370 5533
Fax: +61 8 9370 5106
e-mail: alan@jenal.com
http://www.jenal.com
****

392. WTB-a low power fm xmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-09 00:00:00 UTC
From: slimg29@webtv.net
Message-ID: <18324-3696E394-106@newsd-241.iap.bryant.webtv.net>
Source record: 75015

e-mail me with item and price! <glenn>

393. Re: Using a high powered stereo audio amp as a HF amp - Yes/No??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <36bb901f.1121735940@news.sci.fi>
Source record: 74816

On Sun, 10 Jan 1999 04:33:42 GMT, sda@bellsouth.net.SPAMFREE (sda)
wrote:

: I have a Heathkit AA-1800 Stereo power amp 250watts per channel
: that I built a long time ago, and it's just sitting around. Works like
: a charm and has very low noise (low THD) and it kicks hard.

Depending of the bandwidth of the output transistors, this may be
sufficient for the 135 kHz amateur band, which is currently available
in some European countries. Some (FET) audio amplifiers with large
bandwidths are used on this band (and on the 73 kHz band in UK), some
may need some tweaking in the frequency response of the feedback path.

: I heard someone talking the other day on 40 meters about using
: a stereo amp as a HF amateur radio amp. Is this possible?
: Anyone know if it can be "converted"?

Not directly, the output transistors would be far too slow, but it
could be used as the speech amplifier to drive a modulation
transformer to produce A3E modulation with a class-C transmitter.

Paul OH3LWR

394. Re: Using a high powered stereo audio amp as a HF amp - Yes/No??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: exray@caribe.net
Message-ID: <77adlc$f0e$1@nnrp1.dejanews.com>
Source record: 74817

Uhh, the chassis might work.
-ex

In article <G4Wl2.5365$EC3.3561787@news3.mia>,
sda@bellsouth.net.SPAMFREE (sda) wrote:
> I have a Heathkit AA-1800 Stereo power amp 250watts per channel
> that I built a long time ago, and it's just sitting around. Works like
> a charm and has very low noise (low THD) and it kicks hard.
>
> I heard someone talking the other day on 40 meters about using
> a stereo amp as a HF amateur radio amp. Is this possible?
> Anyone know if it can be "converted"?
>
> This sucker is 60lbs and the 2 main caps are HUGE and it's
> got huge heat sinks on each side.
>
> thanks,
>
> sda
>

-exray
WX4A
Vieques Island, PR

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

395. Re: Ceramic resonators in RX filter applications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36989b80.137523615@news.online.no>
Source record: 74818

On Sun, 10 Jan 1999 15:58:28 GMT, wmeara@erols.com (Bill Meara) wrote:

>I picked up a bunch of these little two pole 455 kc ceramic resonators
>from DIGIKEY. I'm thinking about doing some experiments to see if I
>can use them to narrow down the IF bandpass on my HB receiver for 80
>and 40 (selectivity currently provided by only 2 IF cans)
>
>Anyone have any experience using these things as filters? Should I
>look at them as series resonant or parallel resonant devices? Any
>thoughts on optimal impedances in/out? Any suggested circuits?
>
>Ideas appreciated. Thanks, 73 Bill N2CQR
>
>
a variety of filters are available (240, 280, 480, 960khz.....). Might
be interesting to try to find a circuit, possibly using some series
trimmer capacitors to tune the series resonnance frequency.
The only application I have seen is using 7040kHz resonnators to improve
40m front-end selectivity, using two resonnators the receiver just
covered 7-7.1MHz ham-band, and rejected the very strong bc stations
above 7.1MHz

73 Jan-Martin LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

396. Need hard-to-get basic info on...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: leili
Message-ID: <36989925.15589552@enews.newsguy.com>
Source record: 74819
Cross-posted to: rec.radio.shortwave,nyc.general,rec.radio.amateur.homebrew

anyone know what some frequencies are for chinese language
programming? i'm in the nyc area, heard about people converting
radios to be to receive non am freq, and charging a high price.

i want to do this for free for myself if i can.

but i don't have even the basic info, can anyone help???
thanks

397. Re: Need hard-to-get basic info on...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: dannyb@panix.com
Message-ID: <77adlh$4ak$1@news1.panix.com>
Source record: 74820
Cross-posted to: rec.radio.shortwave,nyc.general,rec.radio.amateur.homebrew

In <36989925.15589552@enews.newsguy.com> leili (snowbird8@hotmail.com.nospammz) writes:

>anyone know what some frequencies are for chinese language
>programming? i'm in the nyc area, heard about people converting
>radios to be to receive non am freq, and charging a high price.

>i want to do this for free for myself if i can.

>but i don't have even the basic info, can anyone help???
>thanks

Most of these programs use what's called the SCA (which stands for something like "secondary carrier audio" - I'm sure someone will correct me since I'm probably wrong on that...I've simply used the abbreviation for years) which is a kind of hidden channel available on FM frequencies.

In other words, an FM radio station can, if it chooses, add in this second channel to its regular broadcast. This programming requires a _special_ radio tuner to decode it.

Most listeners to these SCA broadcasts lease/buy the tuners from the broadcaster, but you can find/build them yourself with a bit of searching.

Many of the local FM stations use this channel. Some, as you noted, for ethnic special programming, others use it for similar niche targets (i.e. reading books for the blind).

Why don't all of the broadcasters do this? After all, it sounds like an almost free way for them to get additional revenue... Aside from the equipment/power costs (which aren't that huge...) The reason is, that in theory, using this SCA reduces the quality and range of the primary FM channel

(Although I've never noticed any differnece myself when listening to stations that do, as opposed to stations that don't, run SCA).

Oh, the quality of the SCA itself is dramatically lower than you get on the main channel.
--

____
Knowledge may be power, but communications is the key
dannyb@panix.com
[to foil spammers, my address has been double rot-13 encoded]

398. WTB Surplus Gears

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@jps.net>
Message-ID: <3698BDF6.BFF@jps.net>
Source record: 74821

I am looking for a source of surplus small precision gears to step the input revolutions to a optical encoder(1/4 inch shaft) by a ratio of abt 10.Gears need to be anti backlash type.Ken W6GHV

399. Re: Ceramic resonators in RX filter applications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: abcd <abcd@efgh.com>
Message-ID: <36993246.7E306C2B@efgh.com>
Source record: 74822

Hello Bill,

The Zi, Zo = about 2.2K (I think)

Incidentally, a normal RC coupled Comm Emitter Audio AMP will work perfectly
well as a IF amplifier at 455 Khz with about the same amount of gain as at audio.
(AGC might be acheivable with a shunt BJT NPN transistor as attenuator).

To narrow the bandpass, I think(shoot me if I am wrong), U should build a ladder
filter like they do with crystals, a 4 resonator + 2 IF can should give decent (4 Khz)
bandwidth with fair skirts.

Best luck with that IF amp.

Bill Meara wrote:

> I picked up a bunch of these little two pole 455 kc ceramic resonators
> from DIGIKEY. I'm thinking about doing some experiments to see if I
> can use them to narrow down the IF bandpass on my HB receiver for 80
> and 40 (selectivity currently provided by only 2 IF cans)
>
> Anyone have any experience using these things as filters? Should I
> look at them as series resonant or parallel resonant devices? Any
> thoughts on optimal impedances in/out? Any suggested circuits?
>
> Ideas appreciated. Thanks, 73 Bill N2CQR

400. WTB: Heathkit HD-1410 Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: tje@usol.com
Message-ID: <3698bed3.2821918@news.usol.com>
Source record: 74823
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.boatanchors

Looking for a Heathkit HD-1410 iambic keyer. This was the keyer with
the built in paddles and sidetone. Physical condition not important as
long as it works well. Please reply via email and let me know you have
and your asking price please.
--
Tim, K8TJ

401. WTB: Kenwood TS-130 or Similar HF RIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: tje@usol.com
Message-ID: <3699c132.3428789@news.usol.com>
Source record: 74824
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.boatanchors

Looking for a good used Kenwood TS-130 or similar HF rig. Physical condition not all that important as long as it works well. CW fiilter would be a plus bot not necessary. Please reply via email with what you and asking price.
--
Tim, K8TJ

402. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: abcd <abcd@efgh.com>
Message-ID: <36993731.1CE9EF58@efgh.com>
Source record: 74825

Thanks for the very clear explanation of the Wadley Loop,
It seems that cleaner and easier way to generate the second IF
conversion oscilator at 40 MHZ would be to use a analog translation
PLL-VCO for filtering and translating it, instead of the
mixer + sharp 40 MHZ filter .

U would still need the COMB generator ,unless,
U decide to replace that with another PLL.

```
1St Mixer 2ndMixer
--------------X1--------X2--------(4-5 Mhz Variable IF )----------
| |
VCO1 VCO2 <-LPF
| APLL |
| | |
---------- X3 ---P1 <<<< APLL Mixer
|
|
1Mhz Comb----------------------|
```

X1 = 1st Mixer
X2 = 2nd Mixer
X3 = Translation Mixer
P1 = APLL phase detector
LPF= Low Pass filter that effectively replaces the 40 Mhz BPF

Thanks again !

c.c.tqbssz@QXHomebrew.killspam.us.com wrote:

> Jim (jbolinger@lintek.com) wrote:
>
> <A confusing and not very correct description of the Wadley loop>
>
> The RX can be separated into two functional blocks;
>
> The simple part is the back end which is a conventional tunable IF, in
> other words a superhet tuning a fixed 1 MHz range. Tuned by the second
> (KHz) VFO which needs to be high stability. There is no drift cancellation
> for this VFO.
>
> The front end converts the HF band down to the tunable IF range in 1 MHz
> steps, controlled by the first (MHz) VFO. The first VFO runs above signal
> frequency and is used in 2 conversions;
>
> a) By itself as the local oscillator in an up conversion to a wide band (>

> 1MHz) high frequency IF (45 MHz in the RA 17) first IF.
>
> b) Mixed with harmonics generated from a 1 MHz reference (the comb
> generator) and filtered to provide the local oscillator for the second
> conversion down the tunable IF range.
>
> Mixing the first VFO up and down cancels any drift in this section of the
> RX.
>
> Here how it works;
>
> Suppose the first IF is 44 to 45 MHz.
>
> The first VFO will tune 46 to 74 MHz for a 1 to 30 MHz signal
> range.
>
> Suppose the second IF tunes 4 to 5 MHz
>
> The local oscillator needed for the first to second coversion will be 40
> Mhz.
>
> This 40 MHz comes from the first VFO mixed with harmonics from a 1MHz
> xtal and fed to a 40 MHz filter. This combination can only produce an
> output at 40 MHz when the VFO is at some multiple of 1 MHz.
>
> Eg VFO 60 MHz, - 20th harmonic of xtal = 40 MHz
> VFO 61 MHz, - 21st harmonic of xtal = 40 MHz
>
> If the VFO is at say 60.5 MHz there's no mixing product at 40 MHz and
> therefore no injection to the second mixer. As you tune the MHz VFO you
> can hear increases in noise as it passes thru each MHz point and the
> second mixer gets a local oscillator signal.
>
> To cover 14 to 15 MHz, the MHz VFO is set at 59 MHz, this mixes with 19th
> harmonic of the xtal to generate the 40 MHz injection signal.
>
> Suppose the signal is at 14.2 MHz, mixed with 59 MHz gives a 1st IF of
> 44.8, mixed again with 40 MHz gives the second IF of 4.8 MHz.
>
> If the MHz VFO drifts to 59.05, the 1st IF will become 44.85, but the LO
> injection will also change, from 40 to 40.05. 44.85 - 40.05 = 4.8. Bingo!
> the second IF frequency is unchanged, the drift has been cancelled out.
>
> Stephen

403. Re: Need hard-to-get basic info on...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: adjno-spam@dclink.com
Message-ID: <369ac735.78358996@news.supernews.com>
Source record: 74826
Cross-posted to: rec.radio.shortwave,nyc.general,rec.radio.amateur.homebrew

On Sun, 10 Jan 1999 12:28:54 GMT, leili On Sun, 10 Jan 1999 12:28:54 GMT, leili (snowbird8@hotmail.com.nospammz) wrote:
> i'm in the nyc area, heard about people converting
>radios to be to receive non am freq, and charging a high price.
>
>i want to do this for free for myself if i can.
>
>but i don't have even the basic info, can anyone help???
>thanks

What in the world are you talking about ??

As for your Chinese freqs question....check out ILG's page @:

http://www.ilg.de/index.html

Al

al dudley ,wash dc area
535d,r1000,c3g,m1200
adj at dclink dot com

404. Re: Using a high powered stereo audio amp as a HF amp - Yes/No??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <77amk8$m15$1@nnrp1.dejanews.com>
Source record: 74827

In article <G4Wl2.5365$EC3.3561787@news3.mia>,
sda@bellsouth.net.SPAMFREE (sda) wrote:
> I have a Heathkit AA-1800 Stereo power amp 250watts per channel
> that I built a long time ago, and it's just sitting around. Works like
> a charm and has very low noise (low THD) and it kicks hard.
>
> I heard someone talking the other day on 40 meters about using
> a stereo amp as a HF amateur radio amp. Is this possible?
> Anyone know if it can be "converted"?

The operator you heard on 40 meters probably bought his lisnce from
the local club (in my area, they sell them cheap to increase club membership)
ANY one knows!? to operate an amp on HF you need a TANK circuit, or else!
Do you have a TANK sircuit in your HEATHKIT stereo amplifier?
C T.
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

405. Re: Need hard-to-get basic info on...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: schuster_@at_panix_.dot_com
Message-ID: <77aepb$j3j@news3.newsguy.com>
Source record: 74828
Cross-posted to: rec.radio.shortwave,nyc.general,rec.radio.amateur.homebrew

In article <77adlh$4ak$1@news1.panix.com>,
danny burstein <dannyb@panix.com> wrote:
>In <36989925.15589552@enews.newsguy.com> leili
>(snowbird8@hotmail.com.nospammz) writes:
>
>>anyone know what some frequencies are for chinese language
>>programming? i'm in the nyc area, heard about people converting
>>radios to be to receive non am freq, and charging a high price.
>
>>i want to do this for free for myself if i can.
>
>>but i don't have even the basic info, can anyone help???
>>thanks
>
>Most of these programs use what's called the SCA (which stands for
>something like "secondary carrier audio" - I'm sure someone will correct
>me since I'm probably wrong on that...I've simply used the abbreviation
>for years) which is a kind of hidden channel available on FM frequencies.
>
>In other words, an FM radio station can, if it chooses, add in this second
>channel to its regular broadcast. This programming requires a _special_
>radio tuner to decode it.
>
>Most listeners to these SCA broadcasts lease/buy the tuners from the
>broadcaster, but you can find/build them yourself with a bit of searching.
>
>Many of the local FM stations use this channel. Some, as you noted, for
>ethnic special programming, others use it for similar niche targets (i.e.
>reading books for the blind).
>
>Why don't all of the broadcasters do this? After all, it sounds like an
>almost free way for them to get additional revenue... Aside from the
>equipment/power costs (which aren't that huge...) The reason is, that in
>theory, using this SCA reduces the quality and range of the primary FM
>channel
>
>(Although I've never noticed any differnece myself when listening to
>stations that do, as opposed to stations that don't, run SCA).
>
>Oh, the quality of the SCA itself is dramatically lower than you get on
>the main channel.

To add to Danny's comments - if the original poster lives close enough to NYC to visit Chinatown, it should be pretty easy to get an SCA-equipped radio. The problem with these is that they are pretty much single channel jobs and this deprives you of the ability to go exploring the band through the ears of an SCA decoder. There are SCA kits out there, and an outfit that can retrofit the GE SuperRadio series with high quaality demodulators. However, the novelty wears off quickly unless you have a particular interest in some of the speciality programming - which is diminishing all the time.

--
Mike Schuster | 70346.1745 at CompuServe dot COM
schuster at panix dot com | schuster at pol dot net

406. Re: Using a high powered stereo audio amp as a HF amp - Yes[No]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3698c3b1.147814045@news.online.no>
Source record: 74829

On Sun, 10 Jan 1999 14:32:11 GMT, exray@caribe.net wrote:

>Uhh, the chassis might work.

I've saved this note received via packet network:
Fra : G0MRF
Til : 136KHZ@EU
Sendt : 15-Nov 16:39
Mottatt : 17-Nov 00:31
Type/status : B$
BID (MID) : 6702_GB7DEO
Meldingsnr. : 395155
Tittel : 136kHz Amplifiers.

From: G0MRF@GB7DEO.#32.GBR.EU
To : 136KHZ@EU

Power Amplifiers for 136 kHz.

The 136 kHz band is in a portion of the spectrum where it should be possible to use "normal" RF amplifiers, or high performance audio amplifiers.
The following notes on amplifier performance may be of interest to anyone considering building transmitting equipment for the new allocation.

Maplin 150 Watt MOSFET audio amplifier kit.

This kit has been a good starting point for operators on 73 kHz and easily produces 100 Watts on that band. Some quick tests have shown that the amp will produce power to greater than 150kHz.
When using on 136k, the zobel network across the output dissipates excessive power. The existing 4.7 Ohms and series 0.1uF should be replaced to prevent "fires"! A 2 Watt carbon film around 10 Ohms and a 47nF ceramic appears to work well.
At 136kHz the amplifier has similar gain but is less efficient with the FETs increasing their dissipation. Even so, an output of 70 to 75 Watts is achievable, slightly more if you're prepared to push the transistors.
The Maplin amp seems to be based on a Hitachi application note. This shows two pairs of FETs in parallel which could give us 150 W on 136 kHz.

A 100W HF amplifier using low cost MOSFETS. Rad Com Feb / March 93.

This conventional amplifier uses a pair of 2SK413 FETs. The Rad Com article shows the lower -3dB point as 225kHz. Following publication, a commercial company based an MF navigational beacon (1kW PEP) on a much

modified version of this amplifier.
The lower -3dB of the published design is limited by the RF coupling and decoupling capacitors.

The following changes allow the amplifier to operate on 135kHz at 100 Watts.
C3,4,9,10 FROM 47n TO 0.47uF (INPUT COUPLING)
C19,20,21,22 FROM 10n TO 0.47uF (OUTPUT COUPLING)
C7,13 FROM 47n TO 0.47uF (BIAS DECOUPLING)

The disadvantage of this amp is that it requires about 5W drive power (not just Voltage as the Maplin amp). Also, a severe mismatch into the antenna will not be appreciated by the FETs.- Tune up on reduced power.

Additional possibilities.
1) Replace the 2SK413's with some higher Power/ Voltage FETs. (2SK1120?)
2) Add two more FETs in parallel to produce 200 W
3) Bias to class C and increase the efficiency
4) Replace the output transformer with an easier to use 3c85 ferrite toroid

Low power PA's or Drive Amps.
There are several easy to use audio power amp IC's which operate above 136kHz.

TDA2006 12 W to 150k
TDA7052A 1 W to 300k
TDA2030 18 W to 140k
All available from Maplin

Thanks.....David G0MRF

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

407. FoxTango Newsletter: Improving Receiver Noise floor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3698d1d0.151429923@news.online.no>
Source record: 74830

KY0A wrote an article in FT-Newsletter about "Mesh diodes offer vast improvements in most rigs" using such diodes in mixers and productdetectors to improve receiver noise floor..
Is it just fantacy?

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

408. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Niko G Shepherd <niko@coastside.net>
Message-ID: <3698d979$0$19110@nntp1.ba.best.com>
Source record: 74831

abcd wrote in message <36993731.1CE9EF58@efgh.com>...
>Thanks for the very clear explanation of the Wadley Loop,
>It seems that cleaner and easier way to generate the second IF
>conversion oscilator at 40 MHZ would be to use a analog translation
>PLL-VCO for filtering and translating it, instead of the
>mixer + sharp 40 MHZ filter .

True today, but remember it was devised almost 50 years ago.

Stephen

>
>U would still need the COMB generator ,unless,
>U decide to replace that with another PLL.
>
>
>
> 1St Mixer 2ndMixer
>--------------X1--------X2--------(4-5 Mhz Variable IF)----------
> | |
> VCO1 VCO2 <-LPF
> | APLL |
> | | |
> ---------- X3 ---P1 <<<< APLL Mixer
> |
> |
>1Mhz Comb----------------------|
>
>
>X1 = 1st Mixer
>X2 = 2nd Mixer
>X3 = Translation Mixer
>P1 = APLL phase detector
>LPF= Low Pass filter that effectively replaces the 40 Mhz BPF
>
>
>Thanks again !
>
>
>
>c.c.tqbssz@QXHomebrew.killspam.us.com wrote:
>
>> Jim (jbolinger@lintek.com) wrote:
>>
>> <A confusing and not very correct description of the Wadley loop>

>>
>> The RX can be separated into two functional blocks;
>>
>> The simple part is the back end which is a conventional tunable IF, in
>> other words a superhet tuning a fixed 1 MHz range. Tuned by the second
>> (KHz) VFO which needs to be high stability. There is no drift
cancellation
>> for this VFO.
>>
>> The front end converts the HF band down to the tunable IF range in 1 MHz
>> steps, controlled by the first (MHz) VFO. The first VFO runs above signal
>> frequency and is used in 2 conversions;
>>
>> a) By itself as the local oscillator in an up conversion to a wide band
(>
>> 1MHz) high frequency IF (45 MHz in the RA 17) first IF.
>>
>> b) Mixed with harmonics generated from a 1 MHz reference (the comb
>> generator) and filtered to provide the local oscillator for the second
>> conversion down the tunable IF range.
>>
>> Mixing the first VFO up and down cancels any drift in this section of the
>> RX.
>>
>> Here how it works;
>>
>> Suppose the first IF is 44 to 45 MHz.
>>
>> The first VFO will tune 46 to 74 MHz for a 1 to 30 MHz signal
>> range.
>>
>> Suppose the second IF tunes 4 to 5 MHz
>>
>> The local oscillator needed for the first to second coversion will be 40
>> Mhz.
>>
>> This 40 MHz comes from the first VFO mixed with harmonics from a 1MHz
>> xtal and fed to a 40 MHz filter. This combination can only produce an
>> output at 40 MHz when the VFO is at some multiple of 1 MHz.
>>
>> Eg VFO 60 MHz, - 20th harmonic of xtal = 40 MHz
>> VFO 61 MHz, - 21st harmonic of xtal = 40 MHz
>>
>> If the VFO is at say 60.5 MHz there's no mixing product at 40 MHz and
>> therefore no injection to the second mixer. As you tune the MHz VFO you
>> can hear increases in noise as it passes thru each MHz point and the
>> second mixer gets a local oscillator signal.
>>
>> To cover 14 to 15 MHz, the MHz VFO is set at 59 MHz, this mixes with 19th
>> harmonic of the xtal to generate the 40 MHz injection signal.

>>
>> Suppose the signal is at 14.2 MHz, mixed with 59 MHz gives a 1st IF of
>> 44.8, mixed again with 40 MHz gives the second IF of 4.8 MHz.
>>
>> If the MHz VFO drifts to 59.05, the 1st IF will become 44.85, but the LO
>> injection will also change, from 40 to 40.05. 44.85 - 40.05 = 4.8. Bingo!
>> the second IF frequency is unchanged, the drift has been cancelled out.
>>
>> Stephen
>
>
>

409. source for HV Capacitors ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: jmorphet@asys.com
Message-ID: <3698dfe4.3690571@news.rmi.net>
Source record: 74832

Anyone know of a vendor that sells high voltage capacitors at a reasonable price. I need something in the .0015 microfarad; 15 KV or better range. Surplus would be fine.

Thanks
jmorphet@asys.com

410. Re: Heathkit HD-1410 Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Hillbilly_1943 <daves@oztech.com>
Message-ID: <77annq$65b$1@news1.alltel.net>
Source record: 74833
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.amateur.boatanchors

i built one of them and used it for many years. sweet keyer, just loved it.
dave, KG5XR

CW-Man wrote in message <3698bed3.2821918@news.usol.com>...
>Looking for a Heathkit HD-1410 iambic keyer. This was the keyer with
>the built in paddles and sidetone. Physical condition not important as
>long as it works well. Please reply via email and let me know you have
>and your asking price please.
>--
>Tim, K8TJ
>

411. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3698fbd5.60846184@news.buller.se>
Source record: 74834
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

412. Re: Looking for a white noise generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: jsoft@MCS.COM
Message-ID: <77aitj$7d1$1@Jupiter.mcs.net>
Source record: 74835

Many Texas bars still require you to leave your firearms :)

413. Re: Problems with a Kenwood 430s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3698F832.1EF5@onramp.net>
Source record: 74836

maxedout wrote:
>
> Hello to all.
> I need help with a problem I am having with a TS-430s.
> Sometimes when tuning the Main VFO it does not wont to change frequencies or
> it hangs up and if I turn it slow and backwards then forwards it corrects
> itself. I am thinking the encoder is going bad. The rig works perfect using
> the mic up/down buttons and works on memory with out the glitch.
> If you have and Ideal please let me know at ke4cij@qsl.net
>
> Thank You

The encoder needs alignment. Check the SM for the procedure...
--
Clif Holland KA5IPF
Owner of AVVid, an Authorized Kenwood and Icom Service Center
Click on the following or call 1-800-214-5779
http://rampages.onramp.net/~avvid

414. Uniden 700 receiver and DDS Dish

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: KD4FRU <NOSPAMtracklwl@sgi.net>
Message-ID: <IE7m2.2241$l03.276324@news.sgi.net>
Source record: 74837

I'm trying to set up some sort of ground link on microwave, and I was wondering if a Uniden 700 receiver can power up an RCA DDS Dish?

I understand the DDS dish is quite broadband, but I don't want to blow the brains outta either piece of equipment, ya know?

I don't have spec sheets on the DDS to help me, or I think I would have had a head start.

Thanks for your reading this an help!

Remove NOSPAM to reply directly or just post it. Thanks again!

tracklwlNOSPAM@sgi.net

415. Electrical Interference in 1995 Saturn SW-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: wayne_ve3jet@hotmail.com
Message-ID: <77b30f$8r8$1@mur2.odyssey.on.ca>
Source record: 74838

Hi
Does anyone have a suggestion on how to cure electrical noise in a 1995 Saturn Sw-1? It varies in rate of pulses to the rpm of the engine. I have grounded the engine hood and put filters in the dc line which is hooked directlty to the battery.

Wayne VE3JET

416. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: "Randy L. Henderson" <randylh@flash.net>
Message-ID: <369911F1.6A11@flash.net>
Source record: 74839

```
yvon wrote:
>
> > > >
> > > > Hi Richard! I read with interest your article on synthesisers using
> > > > PLL's. I would like to share my experience on this subject. The most
> > > > difficult type of synthesizer to build is the octave bandwidth (example
> > > > 500 to 1000 Mhz) In order to keep the phase noise and the phase detector
> > > > sideband supression over this bandwidth is not for the faint hearted
> > > > to use your expression. I spent hundreds of hours using design data
> > > > from various manufacturers (10 inches thick) Since I was using a paralel
> > > > (MC145151) I had to design the low pass integrator with a voltage of 28
> > > > volts to run the VCO over the full range. I never succeeded to get the
> > > > phase noise and sideband supression below 70 DB
> > > > as measured on a spectrum analyzer at 10 Khz from the carrier. I then
> > > > decided to design a charge pump using transistors; there is very little
> > > > design literature on this subject and I had to work hard but finally
> > > > it worked. The charge pump delivered 1 volt at 500 Mhz and 26 volts at
> > > > 1000 Mhz and I met the 70 DB specification over the whole band. The
> > > > filter consist of a capacitor plus a resistor/capacitor circuit for
> > > > damping. The charge pump must be very well balanced in order to achieve
> > > > these results. I have used this design at lower frequencies and narrower
> > > > group of frequencies, it is rock stable. When the charge pump is well
> > > > balanced, the filter capacitor value which had been calculated from a
> > > > design equation can be varied by experimentation for best results at
> > > > both ends of the band. Since my design used eproms and thumbwheel
> > > > switches, the channel switching speed was not a problem in my
> > > > application. Regards! Yvon
> > >
> > > I'd be interested in seeing a schematic of your transistor-based charge
> > > pump design... do you have anything available? I've run across similar
> > > problems, trying to use low-noise opamps.
> > >
> > > -- jm KE5FX
> > >
> > > ------------------------------------------------------
> > > Note: My E-mail address has been altered to avoid spam
> > > ------------------------------------------------------
>
> I have made a request to my client for whom I developed this system if
> he is willing to let me disclose the information. Regards! Yvon

Yvon,

It is interesting to read of the challenges you encountered in designing
a synthesizer that covers a full octave bandwidth. I ran into similar
```

difficulties in trying to produce a very clean, low-noise signal from a synthesizer covering a range of 72 to 102 MHz. I finally circumvented most of the problem by not using a varactor diode to cover the large tuning range.

My homebuilt HF transceiver uses a small mechanical motor-driven variable capacitor for coarse tuning the loop. A varactor diode is used in a conventional way to complete the remainder of the loop and has a capture range of only a few percent of the range covered by the motor-driven cap. Perhaps this is not the most elegant solution, but it may be of interest to amateur builders who want want to use a single 12-volt supply. No voltage converter or high-voltage integrator is needed.

The small tuning range means the varactor diode circuit is less subject to unintended modulation by diode noise, switching circuits and other noise sources. Of course your design would also be less affected by such problems because of the large voltage changes used to tune the diode.

Reduced reliability is a possibility in a mechanical system. It's also harder to protect the motor-tuned VCO (voltage controlled oscillator) from mechanical disturbances or vibrations. PLLs and other synthesizers are interesting. The charge pump circuit sounds like a neat solution.
I have more info about my project at:
http//:www.flash.net/~randylh/
Regards,
Randy, WI5W

417. NN1G info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Jim Porter <jkporter@compuserve.com>
Message-ID: <36992747.87CAB4E6@compuserve.com>
Source record: 74840

I would like to build a NN1G txer. Where is the best source if info on these projects? Parts, etc?

Jim K2NAX

418. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Nethack <nethack99@yahoo.com>
Message-ID: <369932b9.0@news3.ibm.net>
Source record: 74841
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Chris, something I've noticed about the LOSA is that there are quite a few links that are 404's. Thus, there's a brief description in the LOSA about something that sounds interesting, but only a link to the website for more details. Click on the link, and you get 404 not found. This is annoying. Is there a way to ensure that the details for a specific application mentioned in the list are also included in the list, so as not to have so many not found's?

Christer Johansson wrote in message <3698fbd5.60846184@news.buller.se>...
>List Of Stamp Applications (L.O.S.A for short)
>==
>
>If you have done something (big or small) with the BASIC Stamp
>that you are willing to tell others please use the form below and
>write a short description, nothing fancy is needed just a simple
>explanation. If you have source code to share that's even better but
>it's not necessary.
>
>Then e-mail the form to:
>
> cj@hth.com
>
>With the following as the subject:
>
> L.O.S.A Contribution
>
>Or you could point your Web-browser to the following URL and fill in
>the L.O.S.A form on the Web-page...
>
> http://www.hth.com/losa.htm
>
>The latest version of L.O.S.A is always available at the above
>mentioned both in ASCII and in ZIP-file format for easy download.
>An index of L.O.S.A is posted to the following mailing lists and
>news groups, I will update it approx. once a month.
>
>Mailing lists:
>
>BASIC Stamp Mailing List
>
>News groups:
>
>comp.robotics.misc

>comp.home.automation
>sci.electronics
>sci.electronics.misc
>rec.radio.amateur.homebrew
>
>FTP-site:
>
> ftp://ftp.parallaxinc.com/pub/text/losa.txt
>
>You can also find the latest version on the following URL...
>
> http://www.hth.com/losa.htm
>
>
>[--- cut ---]
>
>===
> - L.O.S.A Contribution Form -
>===
> New Contribution [ ] Update [ ]
>---
>
> Title :
> Author: Date:
>
> E-mail: (optional)
>---
>
> Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
> Code available: YES/NO
> Filename : (optional)
> URL : (optional)
>---
> Description : (5-50 rows describing your application)
>
>
>===
>
>[--- cut ---]
>
>Regards,
>
>/Christer
>
>[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]
>
>-=-
> * High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
>-=-
> Send and receive serial data over the power lines... For more info

> about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
>-=-

419. WATKINS-JOHNSON

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: ERNIE <etco@trojen.freeserve.co.uk>
Message-ID: <77bhjb$k6f$1@news5.svr.pol.co.uk>
Source record: 74842
Cross-posted to:
alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.homebrew,uk.radio.amateur

I NEED CIRCUIT DIAGRAM / MANUAL FOR WATKINS-JOHNSON
UHF RECEIVER MODEL W-J 8730A. EXPENSES WILL BE MET. THANKS

420. Re: Powdered Iron Core data needed for #7 mix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Tim Groat KR0U <tmgroatNOJUNK@peakpeak.com>
Message-ID: <369951E3.1FB@peakpeak.com>
Source record: 74843

You can find data on Powdered Iron cores at http://www.micrometals.com

Jenna Tashley wrote:
>
> If you have the following data, please post it to the NG
>
> Permeability of #7 mix core (u = ?)
> Design Frequency range
(snip)

421. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36995F3E.67CB155F@teleport.com>
Source record: 74844
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

This isn't true of the low-frequency ferrites commonly used at HF for broadband transformers and baluns. They'll go up in flames at flux densities well below saturation. Saturation is by no means the only cause of loss in ferrites or other magnetic materials; otherwise, none of the materials would be lossy at low signal levels.

Roy Lewallen, W7EL

Reg Edwards wrote:
>
> Saturation always comes just before smoke. It is the cause of smoke.
> Or the ferrite shatters with a loud crack in all directions in the
> same way as does a brittle glass when boiling water is poured over
> it.
> --
> ******************************
> Reg, G4FGQ Click below.
> http://www.btinternet.com/~g4fgq.regp
>
> ******************************

422. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36996D8F.5F85@ibm.net>
Source record: 74845
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Roy Lewallen wrote:
>
> This isn't true of the low-frequency ferrites commonly used at HF for
> broadband transformers and baluns.

Hi Roy, how about powdered iron cores? For instance #2 (Red) material.
--
73, Cecil, W6RCA http://people.delphi.com/CecilMoore

423. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Graeme Zimmer <gzimmer@vic.bigpond.net.au>
Message-ID: <777qv9$gf2$1@m2.c2.telstra-mm.net.au>
Source record: 74952

>I believe the National HRO500 employes the same scheme as RA-17,
>Barlow-Wadley, and the FRG-7.

And "Electronics Australia" magazine had a Wadley loop RX design
called the "Deltahet".

About 20 years ago........

Cheers .... Zim

424. Re: CW Keyer with Basic Stamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: John Miller <jayem@alphalink.com.au>
Message-ID: <779plttll1@news.alphalink.com.au>
Source record: 74953

You could also try http://www.nettaxi.com/citizens/ei9gq/iambic.html,
although it just uses the 16C84 PIC not the Basic Stamp.

John Miller, VK3DJM

alw@al-williams.com wrote
> "F5IYJ" <iyj@usa.net> wrote:
>> Anyone have build a CW Keyer with Basic Stamp ?
>>
>> 72/73 de Phil.
>
>Take a look at my article on an iambic keyer with the Basic Stamp I in the
>July/August 1998 QEX. Hard to do sidetone and iambic keying without
interrupts
>but it is possible. The article has the PCB layout and all the details.
>
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

425. Re: AGC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: fredrik &#65533;berg <fredrik.oberg@telia.com>
Message-ID: <3697F3D7.DC2890C2@telia.com>
Source record: 74954

yvon wrote:

> fredrik ï¿½berg wrote:
> >
> > how do i build a agc for ca 150mhz with min 20 mhz bandwhidth ?
> >
> > Fredde
>
> Are you looking for the AGC amplifier only or if you want also the AGC
>
> detector which will control the said AGC Amplifier.

Yes amp and detector

> Is this for an FM
> signal or an AM signal. AGC detectors are simple for FM because the
> amplitude of the signal is constant. For AM, it is more complex if the
>
> AGC detector must respond to the peak level of the signal. Regards!
> Yvon

Is for a FM signal with 30 to 77 dBmV

to constant ca 0dBm

426. Re: k2riw 432mhz amp plus mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: k9bct@aol.com
Message-ID: <19990109195602.00800.00009571@ng-fv1.aol.com>
Source record: 74955

You may want to contact Steve at DownEast Microwave. Believe he's just about ready to put out a kit version of the amplfier.

Have used one of the old K2RIW units for years and it's been an extremely good and reliable amp for me.

Good Luck

427. Re: AGC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3697f854.95745253@news.online.no>
Source record: 74956

On Sun, 10 Jan 1999 01:27:03 +0100, "fredrik &#65533;berg"
<fredrik.oberg@telia.com> wrote:

>yvon wrote:
>
>> fredrik &#65533;berg wrote:
>> >
>> > how do i build a agc for ca 150mhz with min 20 mhz bandwhidth ?
>> >
>> > Fredde
>>
>> Are you looking for the AGC amplifier only or if you want also the AGC
>>
>> detector which will control the said AGC Amplifier.
>
>Yes amp and detector
>
>> Is this for an FM
>> signal or an AM signal. AGC detectors are simple for FM because the
>> amplitude of the signal is constant. For AM, it is more complex if the
>>
>> AGC detector must respond to the peak level of the signal. Regards!
>> Yvon
>
>Is for a FM signal with 30 to 77 dBmV
>
>to constant ca 0dBm
>
>
why use AGC when a limiter is perfectly ok as long as you don't use
PLL-detection in receiver?

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

428. Re: FS: 1 Mhz Freq Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: jerry r <jerryrc@pobox.com>
Message-ID: <36982526.7B191673@pobox.com>
Source record: 74957
Cross-posted to: sci.electronics.equipment,sci.electronics.components,rec.radio.swap,rec.radio.amateur.homebrew

HI Bob, sent a check today, Your email address won't work for me, I keep
getting returned mail.

Bob Miller wrote:

> For Sale:
>
> Electronic Resources Co. (ERC) 1 Mhz Frequency Standard, model
> EROS-800-ARA3
>
> 115 AC powered Solid state source 7.5" deep, 4 Inches Wide, 4.5 inches
> tall. Output is 4 Volts P-P sine wave. OCXO with external buffer
> amplifier and regulated DC power supply.
>
> 1 Short Term Stability 1 part 10E-9/ 1000 seconds
> 2 Drift 1 part in 10E-8 per week
> 3 Fine and course adjustments available on OCXO
>
> Units are in like new condition. With full set of prints.
>
> $75 post paid conus
>
> Thanks for the read.
> Bob, KE6F

429. Using a high powered stereo audio amp as a HF amp - Yes/No??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: sda@bellsouth.net.SPAMFREE
Message-ID: <G4Wl2.5365$EC3.3561787@news3.mia>
Source record: 74958

I have a Heathkit AA-1800 Stereo power amp 250watts per channel
that I built a long time ago, and it's just sitting around. Works like
a charm and has very low noise (low THD) and it kicks hard.

I heard someone talking the other day on 40 meters about using
a stereo amp as a HF amateur radio amp. Is this possible?
Anyone know if it can be "converted"?

This sucker is 60lbs and the 2 main caps are HUGE and it's
got huge heat sinks on each side.

thanks,

sda

430. chip resistor assortments fs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: baggybob@execpc.com
Message-ID: <779bee$qp0@newsops.execpc.com>
Source record: 74959

For sale :
Surface mount 1/8 watt resistor assortment 1206 size. Tape strips of 20 each of 50 different values = 1000 resistors. All parts marked $10.00 each assortment +$1 shipping/ea

Stealth chip resistor assortment. Mil spec JAN-M55342 resistors surplus to Northrup packaged in anti-static trays and bags. Over 230 different values all 1% tolerance. About 22,000 pieces total with no single value more than 300 pcs. Only one lot available. $25 plus $8 shipping (big box).

.24 ohm 1/2 watt resistor size 2010 30/$1

Full reels of resistors. 5000 parts per reel.
220 Ohm 5% 9 reels 1206 size
475 Ohm 1% 8 reels 1206 size
2740 Ohm 1% 20 reels 0805 size
$3 each reel or trade for other 5% value reels. $3 shipping

baggybob@execpc.com

431. Homebrewing away from home?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.000000d2.0022e3d5@gto.gto.net.om>
Source record: 74960

Hi,

Need to build a radio - here's how to do it with what's at hand.

http://chide.museum.org.uk/chide/r.g.wells.html

Cheers - Joe, G3LLV

Muaskar Al Murtafa'a
Sultanate of Oman

432. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: ignitron@my-dejanews.com
Message-ID: <779lb4$sc5$1@nnrp1.dejanews.com>
Source record: 74961
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

As an example of what has been done: For some years I used an L match made from a variable ribbon inductor that was originally part of a Collins autotuner. The original construction of the inductor featured an approx. 1.5 inch diameter fixed core of something (I assume ferrite) inside the active part of the cylindrical coil. I ran typical 200 Watt output and never bothered taking the ferrite's temperature. Maybe it caused losses for both me and the original application. Your opinion please: would you have worried about that core?

For those not familiar with the equipment, the coil changed inductance by winding or unwinding turns off of a brass cylinder and onto a ceramic cylinder having helical grooves so the silver ribbon conductor formed a solenoid. The mechanism was motor driven of course, so inductance could be automatically varied. And although we are interested in homebrew, I would not dream of home-building THAT inductor. (chuckle)
--Don

"Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:
> Yes, slug-tuning is possible as in receivers. The only advantage
> would be a reduction in size. But when appreciable amounts of power
> are involved, magnetic core materials are too lossy. The greater
> power dissipation combined with smaller size results in over-heating.
>
> As an extreme example, the result of using a small ferrite rod
> antenna with only two watts of transmitter power would be smoke.
>
> Reg.
> ==========
> J.-M. Noeding wrote
> >
> > would it be possible to have some slug tuning for transmitter tank
> coils
> > and atu's? Is variable air-gap on toroid coils a possibility?
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

433. Powdered Iron Core data needed for #7 mix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: not@all.real
Message-ID: <rtYI2.289$9P6.936823@newsgate.direct.ca>
Source record: 74962

If you have the following data, please post it to the NG

Permeability of #7 mix core (u = ?)
Design Frequency range

AL for the following core sizes if they exist:
T25
T80
T94
T106

many thanks and regards

Jenna Tashley
QRP HomeBuilder Site
http://qrp.pops.net/qrp/default.htm

434. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <36b864eb.1110675737@news.sci.fi>
Source record: 74963

On Fri, 8 Jan 1999 13:22:19 -0500, "Jim" <jbolinger@lintek.com> wrote:

: As an example, it starts out with a crystal oscillator, say at 1 MHz. This
: is fed into a comb generator, which will generate lots of harmonics at 1 MHz
: spacings and is then filtered with a 30 MHz low pass filter. There is also
: a VFO. For this example lets say it runs from 70 to 100 MHz. Lets say
: there is also a narrow filter at 70 MHz. [It is called 'comb generator'
: because it looks like the teeth of a comb when you look at it with a
: spectrum analyzer.]

: The VFO is mixed with the comb generator and fed to the 70 MHz filter, which
: filters out all but one of the harmonics. The output of the 70 MHz filter
: is then mixed again with the same VFO signal to bring it back down to the
: original frequency (with another 30 MHz low pass filter).

: The result is, allegedly, a nice clean signal that can be switched in 1 MHz
: steps by tuning the VFO.

I have seen this wave analyzer type of circuit in some microwave
systems and also for selecting the desired harmonic of a pseudo-random
noise generators that produces a thick forest of discrete frequency
lines.

However, I do not think this is known as the Wadley loop described in
some other postings in this thread.

Since both the wave analyzer circuit and the Wadley loop require about
the same amount of hardware, why is the Wadley loop used instead of
the wave analyzer circuit in receivers ?

: It sounds neat, but there must be some catch or it would be used more often.
: I can think of a couple of possible problems. One is that the 70 MHz
: filter, in my example, would have to be pretty darn good to eliminate the
: unwanted parts of the comb signal.

The first unwanted signals are at 69 and 71 MHz, so fixed notches at
those frequencies should go a long way without using crystal filters
(expensive or not available for these frequencies in those days).

: The second is that any crud on the VFO
: signal will show up on the output, destroying the nice clean crystal purity.

The narrow filter between the mixers will produce a delay
(microseconds in this case) into the signal and if the VFO frequency
is rapidly changing (phase noise etc.), the signal is not remixed with
exactly the same frequency it was mixed before the filter, thus
producing a frequency error at the output. However, if the VFO signal

going to the second mixer could be delayed by the same amount as the wanted signal through the filter, this error could be reduced.

Paul OH3LWR

435. Re: Powdered Iron Core data needed for #7 mix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be3c83$9b87c060$8f864d0c@default>
Source record: 74964

From the Amidon 1995 book
T25 =29 uh/100 turns
T37 =32uh/100
T50 = 43uh/100
T68 =52uh/100
Other sizes not listed.
Permeability = 9
Freq range 3 Mhz to 35Mhz--- However in another part of it says
Freq range 5 Mhz to 35 Mhz
Try www.bytemark.com they may have more info online

436. Ceramic resonators in RX filter applications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-10 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3698cd59.42490694@news.erols.com>
Source record: 74965

I picked up a bunch of these little two pole 455 kc ceramic resonators from DIGIKEY. I'm thinking about doing some experiments to see if I can use them to narrow down the IF bandpass on my HB receiver for 80 and 40 (selectivity currently provided by only 2 IF cans)

Anyone have any experience using these things as filters? Should I look at them as series resonant or parallel resonant devices? Any thoughts on optimal impedances in/out? Any suggested circuits?

Ideas appreciated. Thanks, 73 Bill N2CQR

437. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Alan.Peake@dsto.defence.gov.au
Message-ID: <Alan.Peake.94.06D769C9@dsto.defence.gov.au>
Source record: 74846

><A confusing and not very correct description of the Wadley loop>
...snip...
>Stephen

That's basically what's in my Drake SSR-1 receiver. The mfrs blurb is a classic case of marketing however. The 1MHz comb generator put out harmonics at all multiples of 1 MHz which of course, get back into the front end. The designers apparently couldn't get rid of them so marketing proudly announce that they have included a 1MHz marker signal at no extra cost!!!

Despite that, it's not a bad little HF rx.

Alan

438. 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990110191016.05848.00010689@ng-fr1.aol.com>
Source record: 74847

4-1000 3-1000

ANYONE KNOW MAX PLATE VOLTAGE ...DRIVE...OUTPUT..

FOR THESE TWO TUBES HAVE BOTH AND TRING TO DECIDE

WHICH ONE TO HOME BREW

WHICH WOULD BE THE BEST AT 4500 VDC WITH 150 DRIVE ?

INTO A DUMMYLOAD !!!
JOE

439. Re: Cheap Repeater Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: John in Roseville CA 95678 <nospam@nospam.net>
Message-ID: <xobm2.89$3u.1350678@nnrp2.ni.net>
Source record: 74848

Roger wrote in message <7799cv$hi0$1@remarQ.com>...
>If you are looking for a simple controller this might be for you ....
>
>http://www.iland.net/~n0yox

But if you want a phone patch try:
http://www.freeyellow.com/members2/n3yyy/index.html

440. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3d44$ca8c10c0$49fbabc3@default>
Source record: 74849
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

```
Saturation always comes just before smoke. It is the cause of smoke.
Or the ferrite shatters with a loud crack in all directions in the
same way as does a brittle glass when boiling water is poured over
it.
--
******************************
Reg, G4FGQ Click below.
http://www.btinternet.com/~g4fgq.regp

******************************
```

441. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "Randy L. Henderson" <randylh@flash.net>
Message-ID: <369939AC.34B0@flash.net>
Source record: 74850

Oops, make that:
http://www.flash.net/~randylh/

442. Re: Using a high powered stereo audio amp as a HF amp - Yes/No??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01be3d17$3efd91a0$e08492d0@Bit-Net.bit-net.com>
Source record: 74851

> I have a Heathkit AA-1800 Stereo power amp 250watts per channel
> that I built a long time ago, and it's just sitting around. Works like
> a charm and has very low noise (low THD) and it kicks hard.
> I heard someone talking the other day on 40 meters about using
> a stereo amp as a HF amateur radio amp. Is this possible?
> Anyone know if it can be "converted"?
> This sucker is 60lbs and the 2 main caps are HUGE and it's
> got huge heat sinks on each side.
> thanks, sda

160m occurs as a logical possibility ... possibly not worth the
re-engineering effort above that.

Now as a modulator for a 75m AM rig ... hmmm. :-)

73, DavidC K1YP

443. Re: 12AX7A tubes f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: MJROD99@prodigy.net
Message-ID: <77c4e0$rs2$1@nnrp1.dejanews.com>
Source record: 74852
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

In article <76mf1e$769$1@news.ispn.net>,
"Ron Ostman" <w0nyq@minntaccdp.com> wrote:
> For Sale:
>
> (4) new-in-box Amperex 12AX7A/ECC 83 tubes.
>
> $7.50 ea. or $28.00 for all 4. (plus shipping)
>
> Thanks,
>
> Ron Ostman, W0NYQ
> Mt. Iron, MN
>
> I would like to purchase these 4 tubes
Michael Redus
MJROD99@prodigy.net
h615-298-1267
w615-859-4100

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

444. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: kb9sikk@aol.com
Message-ID: <19990111023453.06891.00010784@ng07.aol.com>
Source record: 74853

4-1000

445. Need a varactor multiplier 70cm->23cm

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "Guenter Koellner (DL4MEA)" <dl4mea@amsat.org>
Message-ID: <3699A4AA.BE9DD1A0@amsat.org>
Source record: 74854

Hello,

please help me: I am in need for a tripler, which gives the chance of converting a 5W-7W signal on 70cm band to 23cm.

I guess thats the easiest way to get a nicely strong signal on 23cm for test purposes, not cosidering cleanness or harmonics.

Thanks a lot in advance!

vy 73, Guenter, DL4MEA, JN58jd

http://www.qsl.net/dl4mea

446. Re: 6 meter amplifier FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Keith Brigode <brigode@ibm.net>
Message-ID: <3699D65E.5063C708@ibm.net>
Source record: 74855

Has the 6 meter amp sold?

KB5MER wrote:

> For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
> Power input 25 to 75 watts
> Power output 250 to 650 watts
> AC Power 115 volts / 15 amps
> RF Deck 19"X10.5"X14" 60 lbs.
> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
> Internal Relay & Low Pass Filter
> RF Deck can be seen at (inetport.com/~arl)
> Under - items for sale - RF Amplifiers
> Price $600.00 + Shipping

447. SITE UP-DATE: http://www.qsl.net/yo4aul/

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: CORNELIU@USA.NET
Message-ID: <3699F01C.BD373479@USA.NET>
Source record: 74856

Please be advised that my site with information on :

* Amateur Radio: 50 MHz, Antennas, VHF /UHF,
DX info, Contests, Propagation;
* Software: Amateur Radio, Satellite, Logs, etc;
* Ham radio activity from Romania & YO callbook on-line;
* Interesting articles about Hams from Europe, Asia,
Africa and America.
* Huge collection of amateur radio super links;
* QRP & Homebrew pages;
* Second hand amateur equipement for sale;
* Total Solar Eclipse of 1999 in Romania;

has been recently up-dated. http://www.qsl.net/yo4aul/

73 de YO4AUL

448. Re: source for HV Capacitors ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: martyt@pobox.com
Message-ID: <369b158e.261621832@news.supernews.net>
Source record: 74857

I don't know what a good price is for something that size, but Surplus Sales of Nebraska has tons of capacitors, etc.

See:
www.surplussales.com

On Sun, 10 Jan 1999 17:16:29 GMT, jmorphet@asys.com (J. Morphet) wrote:

>Anyone know of a vendor that sells high voltage capacitors at a
>reasonable price. I need something in the .0015 microfarad; 15 KV or
>better range. Surplus would be fine.
>
>Thanks
>jmorphet@asys.com

73,

-Marty KIï¿½LO
martyt@pobox.com

449. Re: CONCLUSIVE EVIDENCE: Jesus *is* King of the Jews !!!! ! !! !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19990111105143.03155.00010984@ng-fc1.aol.com>
Source record: 74858

>He's not even brave enough to have his name attached to his work.

What is in a name if the message has meaning?
Bill (AF4LE)

450. Re: Voltage Controlled Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: charlos.potma@rivm.nl
Message-ID: <77d67i$7d$1@mississippi.rivm.nl>
Source record: 74859

L.S.,
make sure you read:
"Constant Reactance Voltage Controlled Oscillator",
a PDF file in:
http://www.wenzel.com/documents/rfdesign.html

This site is altogether very interesting for
the homebrewer.

Charlos Potma, PA3CKR
charlos.potma@rivm.nl

451. Regulated Power Supply Experts out there?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Doug Snowden <dsnowden@ncdc.noaa.gov>
Message-ID: <369A1E5E.7614C2E2@ncdc.noaa.gov>
Source record: 74860

I have been intermittently working on an older Astron RS-20A power
supply that folds back at about 1/2 current (about 10 amps). I started
intelligently troubleshooting this p/s and have now resorted to
wholesale
parts replacement. It still folds back and the output voltage drops to
around
11.5 volts at this time. I replaced the 2N3771 pass transistors with
2N3055
xsistors (they have about 1/2 the current rating of the 2N3771). I
figure
they should still be able to handle 18 amps of current at full load
(right?).
Over a period of time I have replaced all of the active components and
one
1N4002 diode. I don't know if a bit of RF might be getting into the p/s
and
causing problems, or if one or more of the resistors that determine the
foldback
current is out of range. That is a question I have - which resitors are
involved
in determining this? I have removed the SCR that is for overvoltage
protection
temporarily just to take it out of the picture. If I measure the
voltages on
the 723 regulator when the p/s is operating until less load, things seem
normal
according to the voltage chart on the schematic... Any ideas ?

Doug Snowden

452. For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990111112728.07323.00010796@ng113.aol.com>
Source record: 74861

> For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
> Power input 25 to 75 watts
> Power output 250 to 650 watts
> AC Power 115 volts / 15 amps
> RF Deck 19"X10.5"X14" 60 lbs.
> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
> Internal Relay & Low Pass Filter
> RF Deck can be seen at (inetport.com/~arl)
> Under - items for sale - RF Amplifiers
> Price $600.00 + Shipping

453. Re: Need hard-to-get basic info on...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF5Entn.3JD@netcom.com>
Source record: 74862
Cross-posted to: rec.radio.shortwave,nyc.general,rec.radio.amateur.homebrew

In article <77adlh$4ak$1@news1.panix.com>,
danny burstein <dannyb@panix.com> wrote:
>In <36989925.15589552@enews.newsguy.com> leili (snowbird8@hotmail.com.nospammz) writes:
>>anyone know what some frequencies are for chinese language
>>programming? i'm in the nyc area, heard about people converting
>>radios to be to receive non am freq, and charging a high price.
>
>>i want to do this for free for myself if i can.

ftp://ftp.eskimo.com/u/m/mzenier/sca.txt

>Most of these programs use what's called the SCA (which stands for
>something like "secondary carrier audio" - I'm sure someone will correct
>me since I'm probably wrong on that...I've simply used the abbreviation
>for years) which is a kind of hidden channel available on FM frequencies.

Originally "Subsidary Communications Authorisation".

...
>Why don't all of the broadcasters do this? After all, it sounds like an
>almost free way for them to get additional revenue... Aside from the
>equipment/power costs (which aren't that huge...) The reason is, that in
>theory, using this SCA reduces the quality and range of the primary FM
>channel
>
>(Although I've never noticed any differnece myself when listening to
>stations that do, as opposed to stations that don't, run SCA).

Back when I had a running decoder (about 10 years ago), if they had any
(audio) SCA, they usuallly had 3 seperate subcarriers, 67, 75 and 92 kHz,
as I remember. The data signals, pagers and stuff, was less standardized.
Mostly elevator music, but I've picked up talking books for the blind,
southeast asian (Seattle), and greek (on a US station, for the Vancouver,
BC area).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

454. HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be3d85$d01a93e0$LocalHost@simoncox>
Source record: 74863
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Wanted, brief operating instructions for above rf sig gen.
I've looked at one with a view to purchase but no manuals can
be supplied although the set seems straight forward enough. I've
looked at the HP website but the set is not listed in their T&M
section of documents for download, a request to there help section
got no response, is it a military variant ?

simon.cox@breathe.co.uk

455. Re: Regulated Power Supply Experts out there?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Clif Holland <avvid@onramp.net>
Message-ID: <369A34C3.116F@onramp.net>
Source record: 74864

Doug Snowden wrote:
>
> I have been intermittently working on an older Astron RS-20A power
> supply that folds back at about 1/2 current (about 10 amps). I started
> intelligently troubleshooting this p/s and have now resorted to
> wholesale
> parts replacement. It still folds back and the output voltage drops to
> around
> 11.5 volts at this time. I replaced the 2N3771 pass transistors with
> 2N3055
> xsistors (they have about 1/2 the current rating of the 2N3771). I
> figure
> they should still be able to handle 18 amps of current at full load
> (right?).
> Over a period of time I have replaced all of the active components and
> one
> 1N4002 diode. I don't know if a bit of RF might be getting into the p/s
> and
> causing problems, or if one or more of the resistors that determine the
> foldback
> current is out of range. That is a question I have - which resitors are
> involved
> in determining this? I have removed the SCR that is for overvoltage
> protection
> temporarily just to take it out of the picture. If I measure the
> voltages on
> the 723 regulator when the p/s is operating until less load, things seem
> normal
> according to the voltage chart on the schematic... Any ideas ?
>
> Doug Snowden

The entire regulator board is abt $25 from Astron. Thats how I do it.
--
Clif Holland, KA5IPF
Owner of AVVid, an Authorized Kenwood and Icom Service Center
For more info click on the following
http://rampages.onramp.net/~avvid
or call 1-800-214-5779

456. ubc120xlt

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: mikele <misel@eunet.yu>
Message-ID: <77dcqv$5dv$1@SOLAIR2.EUnet.yu>
Source record: 74865

I need mod's for my uniden bc120xlt europe version with 9 band ,to listen
29-55Mhz ,actualy a have 66-88 mhz, USA ver. cover 29-55mhz
can someone help me
misel@eunet.yu

457. Re: CONCLUSIVE EVIDENCE: Jesus *is* King of the Jews !!!! ! !! !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: jaevans@codenet.net
Message-ID: <77dk93$56r$1@nnrp1.dejanews.com>
Source record: 74866

Sorry folks, but the newsgroup is homebrew NOT hebrew !!!!!

john - n0hj

In article <19990111105143.03155.00010984@ng-fc1.aol.com>,
n4mxf@aol.com (N4MXF) wrote:
> >He's not even brave enough to have his name attached to his work.
>
> What is in a name if the message has meaning?
> Bill (AF4LE)
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

458. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369a437f.0@news.netwalk.com>
Source record: 74867

nicholas charles caruso wrote in message <36965965.49A0A3FA@certco.com>...
>This is a cool idea.
>
>Can you describe the operating principle of a comb generator? I've always
been
>curious about this
>but haven't seen an explanation anywhere. Perhaps it's that the harmonics
all
>have an equal amount of power in them, as opposed to falling off as in a
>multiplier?

It is partly physics and partly careful design.

If you have a 'square' pulse you will have lots of harmonics and the amplitude of the harmonics will fall off as sin(x)/x, with x being proportional to the width of the square wave.

When you make the pulse very narrow the harmonics will be relatively flat to a higher frequency. You can never get them completely flat for all frequencies (unless you use zero pulse width!), but you can get them 'good enough' over a limited frequency range, particularly if you use some type of filtering (the 'careful design' part).

Jim

459. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: cjX@hth.com
Message-ID: <369a44ef.30111350@news.buller.se>
Source record: 74868
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Hi,

"Nethack" <nethack99@yahoo.com> wrote:

>Chris, something I've noticed about the LOSA is that there are quite a few
>links that are 404's. Thus, there's a brief description in the LOSA about
>something that sounds interesting, but only a link to the website for more
>details. Click on the link, and you get 404 not found. This is annoying.
>Is there a way to ensure that the details for a specific application
>mentioned in the list are also included in the list, so as not to have so
>many not found's?

I'm aware of the problem but I'm sorry to say that due to time
limit I'm not able to test and verify the URL's more than once when
it's submitted. Since some of the submissions is pretty old (going
on the fourth year with L.O.S.A) people changes URL and e-mail
addresses over the time.

My suggestion is that if you (or someone else) find a 404-link in
L.O.S.A e-mail the URL and the index number to me and I will double
check and make the URL N/A if it doesn't work.

Best regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

460. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <369A4BC1.C465050F@teleport.com>
Source record: 74869
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I really don't know about the HF powdered irons. On the one hand, they have very low loss, so you could get a whole lot more flux density before they heat up. On the other, they can handle a whole lot more flux density before they saturate. It would also depend on several other factors. For a given applied voltage, the flux density increases in inverse proportion to frequency. The loss, on the other hand, is a somewhat complex function of the core size and shape, frequency, and number of turns. It might be possible to come up with a rule of thumb, but I've never done the exercise. I'll put that on my lengthy list of things to do when I have time.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> >
> > This isn't true of the low-frequency ferrites commonly used at HF for
> > broadband transformers and baluns.
>
> Hi Roy, how about powdered iron cores? For instance #2 (Red) material.
> --
> 73, Cecil, W6RCA http://people.delphi.com/CecilMoore

461. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19990111.1943.9900191snz@microvest.demon.co.uk>
Source record: 74870
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On 11 Jan, in article <01be3d85$d01a93e0$LocalHost@simoncox>
simon.cox@breathe.co.uk "Simon Cox" wrote:

> Wanted, brief operating instructions for above rf sig gen.
> I've looked at one with a view to purchase but no manuals can
> be supplied although the set seems straight forward enough. I've
> looked at the HP website but the set is not listed in their T&M
> section of documents for download, a request to there help section
> got no response, is it a military variant ?

No, the 8640A is not a military set, just an obsolete discontinued
one. I bought one at Donnington Park (Leicester Rally) last
September with a known power supply fault in order to canabalise it
for an 8640B that I wanted to fix and improve. I only needed one
thick film amplifier module, the variable frequency modulator and
some knobs and front panel trim, so the major components are all
still intact. If you buy one and need something, let me know.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

462. FA: WW II Radio Telephone Handset

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: iv091@cleveland.Freenet.Edu
Message-ID: <77dlmb$e4m$1@alexander.INS.CWRU.Edu>
Source record: 74871

For Auction at Ebay:
One pair of WW II Radio Telephone Handsets model# TS-10-H. Marked
Signal Crops U.S. Army, order no. 4240-phila-43, made by American
Automatic Electric Sales Co., Chicago, U.S.A.. Serial #' 64 & 76,
manufactured in Jan. 1943. Overall very good condition.
Buyer pays $7.50 S&H.
It's URL is:
http://cgi.ebay.co/aw-cgi/eBayISAPI.dll?ViewItem&item=54937700
Check out my web page at:
http://members.tripod.com/~wahkeena/zsale.htm

463. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <369A0FA1.2808@naples.infi.net>
Source record: 74872

Randy L. Henderson wrote:
>
> yvon wrote:
> >
> > > > > >
> > > > > > Hi Richard! I read with interest your article on synthesisers using
> > > > > > PLL's. I would like to share my experience on this subject. The most
> > > > > > difficult type of synthesizer to build is the octave bandwidth (example
> > > > > > 500 to 1000 Mhz) In order to keep the phase noise and the phase detector
> > > > > > sideband supression over this bandwidth is not for the faint hearted
> > > > > > to use your expression. I spent hundreds of hours using design data
> > > > > > from various manufacturers (10 inches thick) Since I was using a paralel
> > > > > > (MC145151) I had to design the low pass integrator with a voltage of 28
> > > > > > volts to run the VCO over the full range. I never succeeded to get the
> > > > > > phase noise and sideband supression below 70 DB
> > > > > > as measured on a spectrum analyzer at 10 Khz from the carrier. I then
> > > > > > decided to design a charge pump using transistors; there is very little
> > > > > > design literature on this subject and I had to work hard but finally
> > > > > > it worked. The charge pump delivered 1 volt at 500 Mhz and 26 volts at
> > > > > > 1000 Mhz and I met the 70 DB specification over the whole band. The
> > > > > > filter consist of a capacitor plus a resistor/capacitor circuit for
> > > > > > damping. The charge pump must be very well balanced in order to achieve
> > > > > > these results. I have used this design at lower frequencies and narrower
> > > > > > group of frequencies, it is rock stable. When the charge pump is well
> > > > > > balanced, the filter capacitor value which had been calculated from a
> > > > > > design equation can be varied by experimentation for best results at
> > > > > > both ends of the band. Since my design used eproms and thumbwheel
> > > > > > switches, the channel switching speed was not a problem in my
> > > > > > application. Regards! Yvon
> > > > >
> > > > > I'd be interested in seeing a schematic of your transistor-based charge
> > > > > pump design... do you have anything available? I've run across similar
> > > > > problems, trying to use low-noise opamps.
> > > > >
> > > > > -- jm KE5FX
> > > > >
> > > > > --
> > > > > Note: My E-mail address has been altered to avoid spam
> > > > > --
> > >
> > > I have made a request to my client for whom I developed this system if
> > > he is willing to let me disclose the information. Regards! Yvon
> >
> Yvon,

>
> It is interesting to read of the challenges you encountered in designing
> a synthesizer that covers a full octave bandwidth. I ran into similar
> difficulties in trying to produce a very clean, low-noise signal from a
> synthesizer covering a range of 72 to 102 MHz. I finally circumvented
> most of the problem by not using a varactor diode to cover the large
> tuning range.
>
> My homebuilt HF transceiver uses a small mechanical motor-driven
> variable capacitor for coarse tuning the loop. A varactor diode is used
> in a conventional way to complete the remainder of the loop and has a
> capture range of only a few percent of the range covered by the
> motor-driven cap. Perhaps this is not the most elegant solution, but it
> may be of interest to amateur builders who want want to use a single
> 12-volt supply. No voltage converter or high-voltage integrator is
> needed.
>
> The small tuning range means the varactor diode circuit is less subject
> to unintended modulation by diode noise, switching circuits and other
> noise sources. Of course your design would also be less affected by
> such problems because of the large voltage changes used to tune the
> diode.
>
> Reduced reliability is a possibility in a mechanical system. It's also
> harder to protect the motor-tuned VCO (voltage controlled oscillator)
> from mechanical disturbances or vibrations. PLLs and other synthesizers
> are interesting. The charge pump circuit sounds like a neat solution.
> I have more info about my project at:
> http//:www.flash.net/~randylh/
> Regards,
> Randy, WI5W

Regards Randy!

I have built a similar system using a mechanical TV UHF tuner. The AFC veractor on these units can swing the frequency plus/minus 1 mhz. The tuners have a frequency coverage of 514 to 931 Mhz. (Channel 14 to 83) I installed 2 small loops inside the cavity, one for the RF output and one for the pre-scaler. The RF output gives approximately 100 millivolts into 75 ohm. I use a MATV amplifier OM360 to raise the level to plus 7 DBM min.to feed a hot carrier diode balanced mixer. I also use it with a divide by 2/4/8 as a signal generator which is very useful. Further dividers can generate very interested signals to be used as VFO The variable capacitor is used as a course tuning and the AFC input is adjusted for fine tuning and for locking through a PLL system.

Yvon VE2AUC

464. Re: Measure? Loop loss resistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <916085878.391747@cs1.sdd.hp.com>
Source record: 74873

Mike OM,

Why not measure the -3 dB bandwidth of the antenna? You can measure this by receiving a steady signal after having matched the loop at that frequency. Then tune the receiver either side until you see 3 dB loss in signal. The operating
Q of the loop is then F/BW (freq divided by -3dB bandwidth). The unloaded Q
of the loop is twice this value, if perfectly matched.
You can then calculate the loss resistance if you want, knowing what the theoretical radiation resistance is. (Radiation resistance is closely approximated by
Rr = 197 * (circumfrence in wavelengths)^4. See either edition of Kraus's book, "Antennas").

Example: if F = 7000 KHz, and -3 dB bandwidth is 7 KHz, then the Q is 7000/7 = 1000. Q= Xl or Xc divided by (Rrad + Rloss), from which Rloss can be calculated.

73 and GL,
Don, W6JL

465. Re: Powdered Iron Core data needed for #7 mix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <916085994.4044@cs1.sdd.hp.com>
Source record: 74874

H Jenna,

Did you try Amidon's web page (do a search)? All the data
is available there.

73,
Don, W6JL

Jenna Tashley wrote in message ...
>If you have the following data, please post it to the NG
>
>Permeability of #7 mix core (u = ?)
>Design Frequency range
>
>AL for the following core sizes if they exist:
>T25
>T80
>T94
>T106
>
>
>many thanks and regards
>
>Jenna Tashley
>QRP HomeBuilder Site
>http://qrp.pops.net/qrp/default.htm
>
>
>
>

466. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: cj <cj@boi.hp.com>
Message-ID: <369A5EBA.369C@boi.hp.com>
Source record: 74875
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Simon Cox wrote:
>
> Wanted, brief operating instructions for above rf sig gen.
> I've looked at one with a view to purchase but no manuals can
> be supplied although the set seems straight forward enough. I've
> looked at the HP website but the set is not listed in their T&M
> section of documents for download, a request to there help section
> got no response, is it a military variant ?
>
> simon.cox@breathe.co.uk

No, just old. Looks like the last year it was made was 1991 for the 8640B. I doubt I can find a manual for one here (we do disk & laser printer stuff here), but I'll look around.

It is pretty straightforward, 0.5 to 612 MHz (with option 002 it can be doubled and go to 1024 MHz, look on the serial number label for option info, probably). Built in freq counter, can do AM or FM modulation. This info is from my 1991 HP catalog, list price was a mere $14,600 (+ $1255 for option 002). The service manual is listed as part number 08640-90215, operator manual looks like it has part number 08640-90208. I don't know if you can still order them though.

-cj

467. Re: WATKINS-JOHNSON

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <369a5314.18839358@news.prestel.co.uk>
Source record: 74876
Cross-posted to:
alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,aus.radio.amateur.misc,rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 09 Jan 1999 18:27:24 GMT, jenal_com@xoommail.com wrote:

>Sorry - Can't help you with a manual but when I worked fpr WJ in the
>UK they were based in Windsor and may still be around there. Perhaps
>they may be able to help you.
>

Watkins-Johnson (UK) Ltd
Dedworth Road
Oakley Green
WINDSOR
SL4 4LH

Tel: 01753-869241

--
- 73 de Jim, g(m)4rga | You cannot imagine the French awarding
olympus%jimdee.prestel.co.uk | the L&#65533;gion d'Honeur (even 5th class) for
dynastic%cwcom.net | "services to caravanning"
marula%zdnetmail.com |
g4rga@gb7tjf.#45.gbr.eu | - Roy Hattersley.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

468. Re: NN1G info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: xhduff@ica.net
Message-ID: <369a697a.0@lightning.ica.net>
Source record: 74877

The BEST source !?!
See NN1G kits on Web page: http://www.fix.net/~jparker/sml.html

gl de Hugh VA3TO

Jim Porter <jkporter@compuserve.com> wrote:

>I would like to build a NN1G txer. Where is the best source if info
>on these projects? Parts, etc?

>Jim K2NAX

469. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19990111.2115.9900193snz@microvest.demon.co.uk>
Source record: 74878
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Monday, in article <369A5EBA.369C@boi.hp.com>
cj@boi.hp.com "cj" wrote:

> Built in freq counter,

That's not in the 8640A.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

470. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <77dr1d$pn3$1@news7.svr.pol.co.uk>
Source record: 74879
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

The following two sites have a big selection of manuals including HP and Tek

http://www.surplussales.com/Manuals/ManTestEqpt.html

http://www.w7fg.com/manuals.txt

John G3UGY

Simon Cox wrote in message <01be3d85$d01a93e0$LocalHost@simoncox>...
>Wanted, brief operating instructions for above rf sig gen.
>I've looked at one with a view to purchase but no manuals can
>be supplied although the set seems straight forward enough. I've
>looked at the HP website but the set is not listed in their T&M
>section of documents for download, a request to there help section
>got no response, is it a military variant ?
>
>
>simon.cox@breathe.co.uk

471. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3ded$88d422e0$503e63c3@default>
Source record: 74880
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Someone wrote - -

> - - - - - I really don't know - - - -

472. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: geoff@nospam.demon.co.uk
Message-ID: <F5Ew6D.p6z@nospam.demon.co.uk>
Source record: 74881
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Simon Cox (simon.cox@breathe.co.uk) wrote:
: Wanted, brief operating instructions for above rf sig gen.
: I've looked at one with a view to purchase but no manuals can
: be supplied although the set seems straight forward enough. I've
: looked at the HP website but the set is not listed in their T&M
: section of documents for download, a request to there help section
: got no response, is it a military variant ?

The HP 8640A is a commercial signal generator - no doubt used by the
military too.

IIRC the 8640A is a free-running device, the 8640B is a phase locked version
using a tuning motor and varicap to drive the cavity tuned oscillator. The
basic frequency coverage is 256-512MHz with some overlap at the ends. For
frequencies down to 1 MHz the 256-512MHz output is divided by 2^n before the
output amplifier. I think that there was a frequency doubler to increase the
range to 1024MHz

IIRC the instrument was manufactured in the early '80's and was (and still
is) a pretty good signal generator - particularly for those who can drive an
instrument that doesn't have a key-pad.

Geoff
--
--
Geoff Blake geoff@palaemon.demon.co.uk linux 2.0.31
Chelmsford g8gnz@g8gnz.ampr.org i586
Intel create faster processors - Microsoft create slower processes

473. Re: Problems with a Kenwood 430s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990111164513.13903.00010812@ng98.aol.com>
Source record: 74882

Hello Maxedout, this is not a common problem with 430.. you may have dirty pots in encoder circuit{ there are two} you would need a service man, and a good scope to adj encoder, the man gives good details but theres no way to" tweek" the pots and get it right you must follow their procedure .. Good Luck Harold W4PQW

474. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be3dab$07c1dcc0$36eeb094@simoncox>
Source record: 74883
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I didn't want to mention that as he'd taken the trouble to reply
but now that you mention it no it isn't.

Simon, G1DRY

"Anthony R. Gold" <tgold@microvest.demon.co.uk> wrote in article
<19990111.2115.9900193snz@microvest.demon.co.uk>...
> On Monday, in article <369A5EBA.369C@boi.hp.com>
> cj@boi.hp.com "cj" wrote:
>
> > Built in freq counter,
>
> That's not in the 8640A.
>
> Regards,
> --
> Tony - G3SKR / W2TG email: tgold@panix.com
>

475. YAESU 757 How many channels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Stuart <SBUC@FREENET.CO.UK>
Message-ID: <77dsftrc1@news1.cableinet.co.uk>
Source record: 74884

Hello all and thanks for anwering all my other questions i have sent out but i have a query, can you buy a memory expansion for the FT757 mark 1 as i am sure i have seen them with 100 channels before and the one have only has 8 channels if so does anyone know where they are avalable from please.

Many Thanks

Stuart 2E1FXW

476. VLF receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: MAC <fbmac@ipr.nl>
Message-ID: <77dtdf$25p$1@news.news-service.com>
Source record: 74885

Are there still people experimenting with VLF/ELF receivers?
I would like to come in contact. A specially people in the Netherlands.

73's
PE1CAF
fbmac@ipr.nl

BTW: I found already most of the site on the web.

477. Re: Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <12255-369A78BF-24@newsd-123.bryant.webtv.net>
Source record: 74886

i am not qualified to have an opinion, however this is what my dear departed dad [an old time ham, w9klm] did with every new crystal he bought. he had a set-up that he put every crystal into that ran it hot for a couple of days. he said this was to age the crystal to a stable value so that he wouldnt have to worry about it changing later as he used it. i dont remember what the % of over voltage was, even though he had said at the time, but the crystals got warm to the touch. i had also asked him if you could do this in the oven. he said no, because the crystal had to be in operation as the heat worked on it. he ocasionly ruined a crystal doing this but not too often. he blamed them on bad crystals anyway. i dont know why i remember this odd thing but my memory is very specific about it. HOWEVER..... i am not a technition or ham radio guy so if you blow up the place then i will be very sorry, but it wont be my fault.

478. need specs on rca DDS dish

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: KD4FRU <NOSPAMtracklwl@sgi.net>
Message-ID: <iRvm2.2732$l03.339521@news.sgi.net>
Source record: 74887
Cross-posted to: alt.dss,alt.dss.tech,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I'm trying to work a project, and was wondering what does the RCA DDS dish
expect in voltages and what does it give up in freqs?
What also is the input and gain?

I'm trying to create a ground link for some commo.

Thanks for your help.
Remove the NOSPAM to mail me direct if you want.

NOSPAMtracklwl@sgi.net
KD4FRU

479. Re: FS Teflon wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369A9B72.CBD9CE11@lucent.com>
Source record: 74888

James Skalski wrote:
>
> --I have silver plated stranded 22AWG teflon insulated hookup wire in 50
> foot rolls, 10 rolls to a pack (500' total). Up to 10 different colors.
> shipped priority mail in the US for $20.
>
> 1000' rolls of one color each roll for $27 plus UPS charges
> The 1000' rolls are available in 22,24 and 26AWG (you save since the
> labor is reduced)
>
> This is very nice (new) wire at a very low price.
>
>
> 73,
>
> Jim N2go

Where are you located?

I like to buy such stuff in large quantities and know how much it can
cost to ship it...

Dennis

#12

480. Re: 1.85 Mhz transformer design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369A9CEB.A9158829@lucent.com>
Source record: 74889

AMDX wrote:
>
> I'm making a transformer to match a .43 ohm (43/100) source
> to a 50 ohm load to operate at 1.85 Mhz.
> The amateur handbook talks about broadband transformers
> and says "The reactance of the windings should be at least
> four times the impedance the winding is designed to look into."
> This is not a broadband transformer so do I follow the same
> formula or is there another for narrowband transformers.
>
> Mike

Ten turns on one of the standard transformers used for broadband
linears.

The kind with the ferrite beads on the brass tubes where the brass
tube becomes a one-turn winding and the impedance at frequency is
determinad by the ferrite mix...

They are available from RF parts.

Dennis

#12

481. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369AA091.13E58F1D@lucent.com>
Source record: 74890

8877@my-dejanews.com wrote:

> From the nickname i selected, one can tell i have something to do with the
> 8877. I would say this tube has made my ham radio activities a real pleasure.
> My second 8877 amp was in one of the magazines not long ago. In a new
> project, i would NOT select this tube any more. when i started to build my
> first 8877 the tube was $165 (1975) today it is more than $700, i think it is
> rediculus. Send me a personal, with your call and i will inondate you with
> info. 73 De WA1WLA and remember IT CAN KILL YOU.

If you can find a contact who works on MRI machines, you can get some
'like new-used' tubes for about $100.00.

Dennis

#12

482. Re: Wanted: 8877 Amplifier Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369AA17D.358FEA53@lucent.com>
Source record: 74891

8877@my-dejanews.com wrote:

> One ought to understand the 3db change for every doubling of the output power
> before he turns his amplifier ON. I once had an argument with a MM operator
> who told me that I was runing ilegal power. I explained that my 8877 does
> not go to ilegal power levels, and someone who spend a lot of time buildind
> an amplifier, knows that between 1500 watt legal and 2200 that this tube can
> put out there is litle or no diference on the receiving side and i ought to
> be naive to abuse an expensive tube with out any gain. I selected the 8877
> because of the small sise, my #2 amp is only 3 1/4 inches high. If I was to
> try once again I would probably go with " a pull" 4cx1000. They are easy to
> find and the power output, acording, the dubling of power =3 DB, makes this
> tube a better choise.

The tube sockets can get really expensive for new construction on
those 4CX1000A (or B) tubes.

A better choice would be a 3CX1200A7 which will plug into an old
3-500Z or 4-400A socket!

Dennis

#12

483. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369AA28F.1EB4F080@lucent.com>
Source record: 74892
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Rexford T. Hound wrote:
>
> Many have noticed the countless posting of adds by KB5MER trying to sell his
> $600 six meter amp without any success. Several of us have responded to him
> in a professional manor with serious questions about his amp and were
> greeted with smart ass comments and the like. He feels it necessary to post
> constantly to the newsgroups thinking that some fool will purchase this amp
> from him. He should realize by now that it's counterproductive at this
> point to constantly harass the good reader's of these newsgroups since we
> feel that he has no intentions of ever selling his merchandise. If he would
> have responded to my questions in an adult manor he probably would be
> shipping this amp to me right now. But, we know now that his intentions are
> to spam the newsgroups and not sell his merchandise.
>
> If he truly is the "good ham" that he claims he is he will respond to
> people's questions and comments in an adult fashion and post his adds in a
> manor that is not considered spamming. A good ham wouldn't post several
> hundred posts and harass all the people that respond to his adds.
>
> He is also listed in the news.admin.abuse list if anyone cares.
>
> --
> From the paws of,
> Rexford T. Hound
>
> ..

He also SPAMS the CB newsgroups trying to sell them ham and CB
equipment!

Can't anyone turn him into the FCC?

Dennis

#12

484. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369AA5F9.AD83577E@lucent.com>
Source record: 74893

Jim wrote:

> It is partly physics and partly careful design.
>
> If you have a 'square' pulse you will have lots of harmonics and the
> amplitude of the harmonics will fall off as sin(x)/x, with x being
> proportional to the width of the square wave.
>
> When you make the pulse very narrow the harmonics will be relatively flat to
> a higher frequency. You can never get them completely flat for all
> frequencies (unless you use zero pulse width!), but you can get them 'good
> enough' over a limited frequency range, particularly if you use some type of
> filtering (the 'careful design' part).
>
> Jim

Using a square wave, wouldn't you only get the ODD harmonics?

Dennis

#12

485. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369AA90C.2825F2F5@lucent.com>
Source record: 74894

Kb9sikk wrote:
>
> 4-1000

Grounded grid the 3-1000Z would run rings around the 4-1000 with 150 watts max drive...

But for future replacement of the tube, the 4-1000 will be cheaper and easier to find.

Or if you want to run the 4-1000 as the true tetrode that it is and grid drive it, then the 4-1000 would also be the better choice..

Dennis

#12

486. FS NOS #26 & #46 Electron radio tubes....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <369AA576.FDBAEFCA@herald.infi.net>
Source record: 74895
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.antiques.radio+phono,rec.audio.marketplace,rec.audio.tubes

NOS Fordom RCA's #26 and #46 NOS tubes. Original boxes. All tubes tested before shipment, 90 day warranty. $14.00 ea. + shipping. Min. Credit card order $35.00.

4- #46's available
20- #26's available.

Thanks for looking.

Ken Chait
Advantage Tube Services
Plantation, Fl.

http://www.electron-tubes-audio.com

487. Re: Regulated Power Supply Experts out there?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369AAAAC.97807EA4@lucent.com>
Source record: 74896

Doug Snowden wrote:

> If I measure the
> voltages on
> the 723 regulator when the p/s is operating until less load, things seem
> normal
> according to the voltage chart on the schematic... Any ideas ?
>
> Doug Snowden

Doug,

I'm not familiar with the Astron, but all 723 supplies are basically
the same....

Sounds like your current sensing resistor has changed in value.

It connects between pins 1 and 10 on the metal can package or between
pins 2 and 3 on the dual in-line package.

For a 20 amp supply this resistor would have a value of about .03
ohms....

Dennis

#12

488. Re: need specs on rca DDS dish

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Marcus2@idt.net
Message-ID: <369a4904.14908842@NEWS.IDT.NET>
Source record: 74897
Cross-posted to: alt.dss,alt.dss.tech,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

The DSS expects voltages of 13 and 18 +/- 1.0 volt. These voltages are used to switch the LNB between Left and Right Hand Circular Polarization. The feed receives 12.2-12.7 ghz (K-band) and down converts that frequency to 950-1450 mhz which is then used for tunning the IRD. The feed alone produces appox .5 - 1.1 db of gain the dish provides appox 24 db of gain.

Marcus

Lockheed Martin Missiles & Space
Satellite Payload Integration & Test Engineer

489. Tek 7704A Parts Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Gene Marcus <mmarcus@hiwaay.net>
Message-ID: <369AAF2C.29729AF7@hiwaay.net>
Source record: 74898

Does anyone have a Tektronix 7704A Oscilloscope that they
are parting out? If so, I would like to purchase the
horizontal output and Z-axis boards.

Thanks,

Gene Marcus W3PM
mmarcus@hiwaay.net

490. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <369AB5EC.A27B4096@buffnet.net>
Source record: 74899

"dennis W. Ostrowski" wrote:
>
> Kb9sikk wrote:
> >
> > 4-1000
>
> Grounded grid the 3-1000Z would run rings around the 4-1000 with 150
> watts max drive...
>
> But for future replacement of the tube, the 4-1000 will be cheaper
> and easier to find.
>
> Or if you want to run the 4-1000 as the true tetrode that it is and
> grid drive it, then the 4-1000 would also be the better choice..
>
> Dennis
>
> #12
One point you didn't take into account. The original poster mentioned
that he had a 4500 v power supply. That would make the 4-1000 the
choice. The amountof drive needed to put out 1400 watts with the 4-1000
tube would be in the order of 130 watts. That would also point to the
4-1000.

Max plate voltage recommended for the 3-1000 is 3000 volts. Whereas the
4-1000 can take 6kv . Been there, Done that.
--
73,

Jim N2go

491. Know any Electronic, Radio, or Test Equipment Surplus Stores in Toronto, Canada??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: jsoft@MCS.COM
Message-ID: <77eh3olgo1@Jupiter.mcs.net>
Source record: 74900
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Hi, I am visiting Toronto Canada starting this Jan 23rd through the 27th and wanted to stop into some surplus places. Any ideas or good haunts??

Thanks! Joe Jesson, KB9LZB

492. Re: Know any Electronic, Radio, or Test Equipment Surplus Stores in Toronto, Canada??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Don Gray <dgray@sympatico.ca>
Message-ID: <8Yzm2.1767$Aj4.1767@news20.bellglobal.com>
Source record: 74901
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Sure! http://www.torontosurplus.com/

Joseph Jesson wrote in message <77eh3olgo1@Jupiter.mcs.net>...
>
> Hi, I am visiting Toronto Canada starting this Jan 23rd through the 27th
and
>wanted to stop into some surplus places. Any ideas or good haunts??
>
>Thanks! Joe Jesson, KB9LZB
>
>

493. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369ACC1E.1C6E5AB9@lucent.com>
Source record: 74902

James Skalski wrote:

> One point you didn't take into account. The original poster mentioned
> that he had a 4500 v power supply. That would make the 4-1000 the
> choice. The amountof drive needed to put out 1400 watts with the 4-1000
> tube would be in the order of 130 watts. That would also point to the
> 4-1000.

The 3-1000Z is also rated at 6KV max plate. It works fine at 4500 volts with a 10V amplified zener in the cathode return circuit. 100 watts in will give you more than 2KW out and it will run a lot cleaner than the 4-1000....

> Max plate voltage recommended for the 3-1000 is 3000 volts.

Recommended, not RATED!

Max plate voltage for the 3-1000Z is 6KV just like the 4-1000.

The recommended voltage for a 2KW power input is 3KV. This is a HAM RADIO spec put in the catalog to get your attention...

> Whereas the
> 4-1000 can take 6kv .

Once again, they will both 'handle' 6KV.

> Been there, Done that.

So have I, and I still have 2 new 3-1000Z's in stock that I haven't needed yet!

But thank you for your input...

Dennis

#12

494. Re: Regulated Power Supply Experts out there?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <369AD5A3.D664CBC9@iag.net>
Source record: 74903

I ORDERED COMPLETE CIRCUIT BOARD FROM ASTRON FOR 20 BUCKS AFTER TRYING TO FIX MY 20A AND PULLING WHAT HAIR I HAVE LEFT OUT IT NOW WORKS FINE HOPE YOU GET IT FIXED 73 HARRY

Doug Snowden wrote:

> I have been intermittently working on an older Astron RS-20A power
> supply that folds back at about 1/2 current (about 10 amps). I started
> intelligently troubleshooting this p/s and have now resorted to
> wholesale
> parts replacement. It still folds back and the output voltage drops to
> around
> 11.5 volts at this time. I replaced the 2N3771 pass transistors with
> 2N3055
> xsistors (they have about 1/2 the current rating of the 2N3771). I
> figure
> they should still be able to handle 18 amps of current at full load
> (right?).
> Over a period of time I have replaced all of the active components and
> one
> 1N4002 diode. I don't know if a bit of RF might be getting into the p/s
> and
> causing problems, or if one or more of the resistors that determine the
> foldback
> current is out of range. That is a question I have - which resitors are
> involved
> in determining this? I have removed the SCR that is for overvoltage
> protection
> temporarily just to take it out of the picture. If I measure the
> voltages on
> the 723 regulator when the p/s is operating until less load, things seem
> normal
> according to the voltage chart on the schematic... Any ideas ?
>
> Doug Snowden

495. Re: TV card as VHF/UHF receiver!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-11 00:00:00 UTC
From: chris@pooh.cc.ucf.edu
Message-ID: <77d5k5ko1@newnews.cc.ucf.edu>
Source record: 74904

In article <7777nj$knt@zeppo.cs.ubc.ca>,
davem@zeppo.cs.ubc.ca (Dave Martindale) writes:
> mervins@aol.com (MervinS) writes:
>>You realize that there are many TV-band radios that receive TV audio without
>>the video.
>
> A TV transmitter actually has two separate transmitters with carriers
> 4.5 MHz apart - one big AM transmitter with lots of bandwidth for the
> video, and a lower-power FM transmitter for audio. The signals are
> independent, and you can receive them independently with two separate
> receivers, or receive the audio alone.
>
> But many tuners designed specifically for TV have a single local oscillator
> and a single IF that is used for both video and audio. The two signals
> are split later in the receiver. In some designs, the video signal needs
> to be present to extract the audio.

This was actually how it worked, back in the days of vacume tubes. The
output of the tuner was fed into a very broad band 45 mhz IF. This was
usually refered to as the vidio IF an was 6 mhz wide. The vidio was
demodulated with a simple diode detector and simultanrously sent to
the vidio amps and audio IF, which was at 4.5 mhz. Since the vidio
detector mixed the audio and vidio signals together producing the
diffenence signal of 4.5 mhz. The audio signal was then amplified
and detected with a quadriture detector and viola...sound.

Of course there where a number of traps and such to eliminate any
vidio component (buzz) from the sound and sound component (Sound bars)
from the vidio.

Of course these days everything is done on one chip.

Chris

--
==
Chris Maukonen "Change is not merely necessary
Sr. Systems Programmer to life - IT IS LIFE"
Univeristy of Central Florida Alvin Toffler
chris@.ucf.edu (407) 823 5460

496. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36dd6762.1022329716@news.atl.bellsouth.net>
Source record: 74767
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Sun, 10 Jan 1999 07:37:08 GMT, ignitron@my-dejanews.com wrote:
>For those not familiar with the equipment, the coil changed inductance by
>winding or unwinding turns off of a brass cylinder and onto a ceramic cylinder
>having helical grooves so the silver ribbon conductor formed a solenoid. The
>mechanism was motor driven of course, so inductance could be automatically
>varied. And although we are interested in homebrew, I would not dream of
>home-building THAT inductor. (chuckle)
>--Don

Hey, I bought one of these at a recent hamfest, motor driven, and looked like
new old stock. I haven't done anything with it yet. It was just too neat a mechanism
to pass up. When I get a chance, I'll do some measurements on it.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

497. 6 Meter Amplifier For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990112102837.27678.00011087@ng29.aol.com>
Source record: 74768

> For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
> Power input 25 to 75 watts
> Power output 250 to 650 watts
> AC Power 115 volts / 15 amps
> RF Deck 19"X10.5"X14" 60 lbs.
> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
> Internal Relay & Low Pass Filter
> RF Deck can be seen at (inetport.com/~arl)
> Under - items for sale - RF Amplifiers
> Price $600.00 + Shipping

498. Re: Know any Electronic, Radio, or Test Equipment Surplus Stores in Toronto, Canada??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <77furn$508$1@nnrp1.dejanews.com>
Source record: 74769
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

In article <77fiijpmu1@nnrp1.dejanews.com>,
ve3jtr@rac.ca wrote:

> Is Active Surplus still in business on Queen St? At least I think it was
> Queen St.

Yep. 347 Queen Street West - the south side of the street, a couple of
streetcar stops west of City-TV.

Have fun with the snowbanks. :-(

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

499. 8877 Amp Plans/What band/s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990112103736.27678.00011097@ng29.aol.com>
Source record: 74770

On the 8877 Amplifier Plans
On what band/Bands do you want the
Plans/layout.

500. Re: Electrical Interference in 1995 Saturn SW-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: tbone107@aol.com
Message-ID: <19990112104539.04439.00003968@ng51.aol.com>
Source record: 74771

This may be a very difficult problem to cure.
The Saturn body is a polymer (if I recall correctly). The RF characteristics are similar to those of Corvettes (made of fiberglass). While I don't own and never have owned a Saturn, I know how difficult some RF problems can be to cure in metal vehicles, I'm guessing you're in for a long search for a cure. Items under the hood, the alternator, the ignition rotor, etc (little spark-gap transmitters) can either send the noise through the electrical system, for which filters would most likely be the fix. These under the hood items also "broadcast" the noise such as the case in my 1990 GMC pick-up. I had all the right filters in place, had a new alternator and rotor/distributor cap, etc. Still had lots of noise but when I disconnected the antennas, the noise went away. It was obvious, the noise was being broadcast from under the hood. I grounded the hood...no more noise. My GMC is metal. I don't think Saturns are. I didn't mean to put a damper on your problem and I didn't mean to get so long-winded only to say, give a call the a Saturn service department. If they really are the way they make them seem in the Saturn commercials (very friendly and helpful) they might be able to help you better. you are most likely not the first ham to own a Saturn with a noise problem. Good luck, Wayne. 73 de Tom KB2FIK Tbone107@aol.com

501. TeraHertz Communication - IR Link

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: peterh2072@aol.com
Message-ID: <19990112113625.07345.00007640@ng124.aol.com>
Source record: 74772

I'm looking for either a commercial, low cost IR data link or some published literature on a DIY version. My need is for an outdoor, free space, 1 MBaud, one way data link that is good to 300 meters or so. I realize that there are commercial IR LAN transceivers available, but these are too sophisticated and very expensive. Most of the amateur designs I've seen are capable of voice and or music transmission using IR LEDs operated in FM mode, but aren't capable of the needed bandwidth. Does anyone reading this newsgroup know of any construction articles dealing with this type of device? IR, eyesafe lasers could also be considered.

Thanks,

Peter

502. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990112114406.01153.00012503@ng-ca1.aol.com>
Source record: 74773

I had lunch with some of the guys from/
with the FCC what do YOU want me to
tell them. JR KB5MER

503. Re: CONCLUSIVE EVIDENCE: Jesus *is* King of the Jews !!!! ! !! !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19990112114618.01066.00010128@ng-cd1.aol.com>
Source record: 74774

Hey John:
If your going to be critical, make sure you get it correct please--

N4MXF did not say>He's not even brave enough to have his name attached to his work.

N4MXF said:>What is in a name if the message has meaning?

And John, as to your point; >Sorry folks, but the newsgroup is homebrew NOT hebrew

I might agree with you, but then again, others may argue or point out the significance of the subject matter--Huh?

73 & God Bless; Bill (AF4LE)

504. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990112114727.01153.00012504@ng-ca1.aol.com>
Source record: 74775

<<>>

I had lunch on sunday with some of the
guys from/with the FCC, What do YOU
want me to tell them.
JR KB5MER

505. HP 8557A Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: puppin@netpar.com.br
Message-ID: <77g3se$4ol$1@nnrp2.dejanews.com>
Source record: 74776

I need the Freq Span/Div and Resolution BW switches (only the wafers) ,
or an idea to fix it. The plastic pin which hold the metalic spring blade
(moveable contact) has been broken.
I am in Curitiba, Parana, Brazil and there is no HP representative branch
here.
Thanks.
Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

506. Re: Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: JR <jr@ramseyelectronics.com>
Message-ID: <77g3on$3ui$1@newsreader.jvnc.net>
Source record: 74777

We used an old crock pot filled with common playground sand. We'd bake the crystals on "low" from when they were received until we would use in production (but, we made sure at least a month). The improvement we saw was pretty impressive in cutting down the usual high slope aging in a new crystal. We saw simple 4 MHz crystals hold their aging to as least as good as $100 Vectron units. Sorry I can't give more quantitative info, but this was about a decade ago.

507. 10M -> HF Band Transverter Designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Paul Knight <paul.knight@prairiecomm.com>
Message-ID: <77gd1q$348$1@eve.enteract.com>
Source record: 74778
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello! Do designs/plans/schematics exist for HF (i.e., 15m, 17m, 20m, 30m, or 40m) transverter(s) which use 10M as the IF? I'd like to build something which will work with my HR-2600 to give me a second band option (yes, I'm aware of the "Chipswitch" product which will allow the '2600 to be used on 12M, albeit poorly).

Thank you for any info you can provide,

Paul WD8DKY
paul.knight@prairiecomm.com

508. President Lincoln with Chipswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Colin Lowe <colinlowe@compuserve.com>
Message-ID: <#2W#4enP#GA.324@ntawwabp.compuserve.com>
Source record: 74779
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Over Xmas I have been playing with the 15mtr mod on my chipswitched President Lincoln, since I got the password to open the radio below 24.8MHz.

The radio now tunes down to 20.900 MHz on the display. However the radio transmits and receives on a different frequency to that of which is displayed on the LCD readout of the radio as soon as the radio is below 24.800 MHz.

For example:

24.8000 MHz to 29.9999 MHz works 100% both on TX and RX.

If I tune to 24.7999 MHz on the radio's LCD, the radio actually transmits and receives on 25.0775 MHz

If I tune to 24.7000 MHz on the radio's LCD, the radio actually transmits and receives on 24.9860 MHz

If I tune to 24.6000 MHz on the radio's LCD, the radio actually transmits and receives on 24.8860 MHz

If I tune to 24.5000 MHz on the radio's LCD, the radio actually transmits and receives on 24.7860 MHz

If I tune to 22.7000 MHz on the radio's LCD, the radio actually transmits and receives on 22.9860 MHz

If I tune to 22.6300 MHz on the radio's LCD, the radio actually transmits and receives on 22.9160 MHz

Have you come across this problem before? and if can you let me know of a fix. It's really strange as the radio works 100% down to 24.8000 MHz and if I drop just 0.0001MHz to 24.79999 MHz then the radio fails to TX on 24.79999 MHz. But TX's and RX's instead on 25.0775 MHz.

I look forward to your comments.

73 de Colin

509. Re: CRYSTALS FOR SALE & WANTED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.3.96.990112175422.3415C-100000@cluster2>
Source record: 74780
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.swap,rec.radio.amateur.homebrew

if you find some that will work in a motorolla ht-200, let me know.

On Tue, 12 Jan 1999, Bry wrote:

> Date: Tue, 12 Jan 1999 11:57:21 GMT
> From: Bry <bry@NOSPAM.mnsinc.com>
> Newsgroups: rec.radio.amateur.boatanchors, rec.antiques.radio+phono,
> rec.radio.swap, rec.radio.amateur.homebrew
> Subject: CRYSTALS FOR SALE & WANTED!
>
> Read the free ads!
>
> Buy and sell RADIO CRYSTALS at:
>
> http://pluto.beseen.com/boardroom/b/21532/
>
> The Crystal Swapping Page
>
> All Free - no gimmicks, just real amateur radio fun!
>
>
>

510. <Chicago xfmr information>

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: brandywine@writeme.com
Message-ID: <BA022E8291717CD8.93ADDE5A0A0A2F5C.AE5E37C58DA2D446@library-proxy.airnews.net>
Source record: 74781

I'm having difficulty finding primary connection info for a Chicago
Standard xfmr made for Collins Radio.

Part no. 672-1070-00
1150 va
pri V: 220, 230, 240
sec V: 4600V ct @ .325A
3500V ct @ .425A
<-->
This a big, heavy, unit--about 75+ lbs. The 1150 va rating must be
very conservative. A military or commercial unit?
Help!
Sam

511. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <77gp74$jq8$1@spock.tinet.ie>
Source record: 74782
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reg Edwards wrote in message <01be3ded$88d422e0$503e63c3@default>...
>Someone wrote - -
>
>> - - - - - I really don't know - - - -
>
>

It was Roy Lewallen, who as we all know, knows a great deal
about ferrite and powered iron.

73, Ed.

--

****

Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

www.nettaxi.com/citizens/ei9gq/

****

512. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <369BFAC2.25B6@lsid.hp.com>
Source record: 74783
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reg Edwards wrote:
>
> Saturation always comes just before smoke. It is the cause of smoke.
> Or the ferrite shatters with a loud crack in all directions in the
> same way as does a brittle glass when boiling water is poured over
> it.

So sorry, but I beg to differ. See, for example, the data
in the Amidon catalog on loss versus flux versus frequency.
At low frequencies, you can reach saturation safely; at high
frequencies you are typically limited by core loss well
before saturation. (It's a problem I'm currently dealing
with in the design of a 3MHz switching power supply...)

--
Cheers,
Tom
tom_bruhns@hp.com

513. FS: 3 acre DX QTH (Dallas area)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Patrick <zzzpat_bouldin@teleteam.com>
Message-ID: <369C090E.E8566B2D@teleteam.com>
Source record: 74784

In Lancaster, Texas - 15 miles South of Dallas. HF and Low Band
antennae. Hard line, amenities. Please see
http://www.bouldin.org/patrick

73,
Pat KM5L

reply to email but first remove the first three z's.

514. help with remote control in 6m band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: WebMonkey <usethelink@below.com>
Message-ID: <369C0E86.4D68@below.com>
Source record: 74785
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

i'd like to know if anyone out there is using the r/c allocation in the 6m band here in the states?

i want to convert my gas burning 4wd street car over from the 'cb band' the radio equip is in now and get some r/c gear made for the 6m ham band.

my xtra rural setting has several multi kilowatt cb'ers that just hammer my microwattage r/c. the car freaks out and pegs the accelerator and spins around and around till it runs out of gas or hits something. when it's goin' 40 to 50+ mph you can't just 'catch it' and turn it off.

anyone have any websites etc. i could check into?

--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

515. Re: NN1G info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Jim Porter <jkporter@compuserve.com>
Message-ID: <369C10D6.ABE17A66@compuserve.com>
Source record: 74786

Thanks for the help.

Jim K2NAX

Mr.D wrote:

> The BEST source !?!
> See NN1G kits on Web page: http://www.fix.net/~jparker/sml.html
>
> gl de Hugh VA3TO
>
> Jim Porter <jkporter@compuserve.com> wrote:
>
> >I would like to build a NN1G txer. Where is the best source if info
> >on these projects? Parts, etc?
>
> >Jim K2NAX

516. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Nethack <nethack99@yahoo.com>
Message-ID: <369c1eb2.0@news3.ibm.net>
Source record: 74787
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Ok, no problem.
>
>My suggestion is that if you (or someone else) find a 404-link in
>L.O.S.A e-mail the URL and the index number to me and I will double
>check and make the URL N/A if it doesn't work.

517. CQ DX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Ricco Lorenzi <n6xqt@qsl.net>
Message-ID: <369C32E8.16A75BF1@qsl.net>
Source record: 74788

My humble home page.

http://www.qsl.net/n6xqt/

73's

N6XQT

518. Re: 10M -> HF Band Transverter Designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <KDv8yCAWm2m2Eww3@g4zow.freeserve.co.uk>
Source record: 74789
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Paul,
>Hello! Do designs/plans/schematics exist for HF (i.e., 15m, 17m, 20m,
>30m, or 40m) transverter(s) which use 10M as the IF? I'd like to build
>something which will work with my HR-2600 to give me a second band
>option (yes, I'm aware of the "Chipswitch" product which will allow the
>'2600 to be used on 12M, albeit poorly).
I have surplus to requirements a CTE transverter which is similar in
size to your 2600. It has a 10/11m input for around 25-30w out on 40m.
All mode and 12v operation.

150 USD plus shipping if you're at all interested.

I'm located in the UK. Shipping would not be expensive at around 20
bucks.

(((73)))

Phil G4ZOW
Visit my favourite site: http://www.bigradios.com
and my LONG RANGE CORDLESS M.B. at: http://www.InsideTheWeb.com/mbs.cgi/mb285053

519. Software ICQ7+ICR2

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Ingra-Beton@t-online.de
Message-ID: <369A89F2.4E5A659C@t-online.de>
Source record: 74905

The Software for the IC-Q7 and IC-R2 had a time_check in the
beta to remind you to update to the Release version.

I've noticed I had vorget to remove it on my Skiing Holyday,
To bad I had no Internet access there :)))))))

And, who is working VERY much has a of vacation, so after
this delay everything is fixed and uploaded.

Have fun,

Goran Vlaski

520. Re: Measure? Loop loss resistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be3dbe$975a2320$fe864d0c@default>
Source record: 74906

Don W6JL <W6JL@ixpres.com> wrote in article
<916085878.391747@cs1.sdd.hp.com>...
> Mike OM,
>
> Why not measure the -3 dB bandwidth of the antenna? You can measure
> this by receiving a steady signal after having matched the loop at that
> frequency.

That's the problem, matching the loop at that freq. I need to know Rloss
to get perfect match.

> Then tune the receiver either side until you see 3 dB loss in
> signal. The operating
> Q of the loop is then F/BW (freq divided by -3dB bandwidth). The
> unloaded Q
> of the loop is twice this value, if perfectly matched.

If perfectly matched!

> You can then calculate the loss resistance if you want, knowing what
the
> theoretical radiation resistance is. (Radiation resistance is closely
> approximated by
> Rr = 197 * (circumfrence in wavelengths)^4. See either edition of
Kraus's
> book, "Antennas").
>
> Example: if F = 7000 KHz, and -3 dB bandwidth is 7 KHz, then the Q
> is 7000/7 = 1000. Q= Xl or Xc divided by (Rrad + Rloss), from which
Rloss
> can be calculated.
>
> 73 and GL,
> Don, W6JL

I have attempted to look at the 3db point with a scope probe (10x) isolated
with a
1 Meg resistor. The problem is the sig gen has to be driven hard to get
enough
signal to see. Then the loop picks up reflections in the room, the scope
picks up
signal direct from the sig gen. If I direct couple the sig gen to the loop
with
appropriate isolation then I have two items (scope and sig gen)to load the
loop
and lower the Q I'm trying to measure. (The problems are amplified by the

very high Q)
Since I posted the proposed method I have been told that by changing the load
resistor (reflected from 50 ohms) the Q is lower and when the Q is lower the
voltage developed by the loop is lower. So the method of treating the loop like
source with a series resistor won't work. (I'm still not sure some math would not
solve that also)
When I talk about a source with a series resistor, I'm thinking of a battery,
it acts like a perfect voltage source with a series resistance.
You can find the value of the series resistance by loading the battery with R,
and measure the voltage then load the battery with R/2 and measure the voltage.
Then R/(R/2)=dC

R series resistor = R x (1-dC) / (2dC-1)
And if that does not start you thinking you must have a life! :-)
Anyway I'm having fun learning how to do this.

Mike

521. Want Radio Shack Auto Alarm Module and diagram.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: skipp@catbert.ucdavis.edu
Message-ID: <77e6p4fdi1@mark.ucdavis.edu>
Source record: 74907
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair,rec.radio.cb

Hello there,

I'm looking to buy a Radio Shack car alarm module that's now discontinued.

I would really like to have the diagram for it that is/was printed in the back of the owners manual. It's not available through Tandy any longer.

The Module is the: Moblie Alert, Keyless Electronic Vehicle Alarm Module

The RS stock number is 49-751

If you have one, dead or alive, please contact me at the E-mail address below my name. I'll be happy to pay for a photocopy of the circuit diagram.

This module will replace one already installed that was damaged past repair.

thank you

skipp

skipp@pilot.ucdavis.edu

If your reply to the E-mail header, your reply will go into the spam filter (crapper), so please use the address just below my name.

chow...

522. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: wb0poz <wb0poz@cwix.com>
Message-ID: <UIxm2.2246$0F6.9563@news.cwix.com>
Source record: 74908
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

THis is STILL one of the best sig gens. SImple to use, and OUTSTANDING phase noise performance (it's not synthesized!). I'd love one, but can't afford it. Have to live with my Boonton 102e that cost me all of $10 at a hamfest. Could use a bottom cover for it though...

>
>Simon Cox wrote in message <01be3d85$d01a93e0$LocalHost@simoncox>...
>>Wanted, brief operating instructions for above rf sig gen.
>>I've looked at one with a view to purchase but no manuals can
>>be supplied although the set seems straight forward enough. I've
>>looked at the HP website but the set is not listed in their T&M
>>section of documents for download, a request to there help section
>>got no response, is it a military variant ?
>>
>>
>>simon.cox@breathe.co.uk
>
>

523. FS: Power Tubes & Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <77ek8n$1b7$1@nnrp1.dejanews.com>
Source record: 74909

********** TUBES **********

4-1000A used ok, Amperex $100
4-400A used tested good $40 ea
3-400Z weak pair $50
4CX250B used good $20
4CX250R used good $30
4CX250F used tested good $20 ea
4CX250FG used tested good $30 (one left)
4X150A pull (one left) $5
4X150D pulls $5 ea
4-125A used (pulls?) $5 ea.
WL 1B41 Westinghouse (whatever in the heck that is!) $10 ea

********** SOCKETS **********

Johnson 122-244 4 pin super jumbo tube sockets New $5 used $3 ea.

National giant 5 pin socket (for 3-400Z, 3-500Z, 4-400A) $8 ea
Other mfgrs. ceramic giant 5 pin sockets $5 ea

New chimneys for 3-400Z $10 ea

New Eimac SK 510 socket $55
Used SK 510 sockets $40 ea
Overused SK 510 socket $20

Amperex S3703 metal frame sockets modified for 4-1000A, $30 pair

Homebrew 4-1000A socket. Awfully nicely machined parts on a fiberglass base.
Someone put WAY MUCH more work into this than
buying a socket could possibly have ever cost. $10

Eimac SK 610 (cathode grounded) sockets used $30 pair
Eimac SK 606 Chimneys like new! :-) $10 ea.
Eimac SK 626 Chimney $10

Johnson 122-237 giant 7 pin socket (for 813) new $10 used $7

All of the above plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific
Time please) or via: Marv_E_Ads@Juno.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

524. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990112011257.16498.00010741@ng115.aol.com>
Source record: 74910
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

>IIRC the 8640A is a free-running device, the 8640B is a phase locked version
>using a tuning motor and varicap to drive the cavity tuned oscillator. The
>basic frequency coverage is 256-512MHz with some overlap at the ends. For
>frequencies down to 1 MHz the 256-512MHz output is divided by 2^n before the
>output amplifier. I think that there was a frequency doubler to increase the
>range to 1024MHz

The 8640M and 8640B can be phase locked, but only in fairly large steps.
There is no motor. You tune manually, then switch to lock. There is
a fine-tune knob as well as the main knob that covers an octave.
There are banks of filters to get the divided-down square wave cleaned
up and pretty low harmonic distortion. It covers to just below 455kHz,
to get the common low freq IF. They also have a pretty decent attenuator
for low-signal outputs...I assume the 8640A does as well.

The set was HP's first non-tube RF generator, or nearly the first, and they
were keen on upholding a reputation. There are a few HP synthesized
gens that have lower phase noise, but an 8640 A or B in good shape is
no slouch in the phase noise category. If you can find an 8662 at a
reasonable price and it's in good working shape, by all means get that
for exceptionally low phase noise (and very fine frequency control...
fully synthesized). There was a good article in the HP Journal on the
8640, and it may possibly be on their web site (though unlikely).

73,
Jay

525. Superior Instruments Tube Tester TV-II Currently $9.90

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Horizon <horizon@visi.net>
Message-ID: <ebCm2.962$zS5.4578193@firenze.visi.net>
Source record: 74911

Click here to see it
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=56052085

526. STEL 2110

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: Data <bja@pax.priv.no>
Message-ID: <77f1lc$hp6$1@elle.eunet.no>
Source record: 74912

I'm looking for data sheet and aplication notes for the PSK demodulator
STEL 2110

Hope someone can help.

Bjarne

527. CRYSTALS FOR SALE & WANTED!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <369b3849.2846307@news.mnsinc.com>
Source record: 74913
Cross-posted to: rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.swap,rec.radio.amateur.homebrew

Read the free ads!

Buy and sell RADIO CRYSTALS at:

http://pluto.beseen.com/boardroom/b/21532/

The Crystal Swapping Page

All Free - no gimmicks, just real amateur radio fun!

528. Re: Know any Electronic, Radio, or Test Equipment Surplus Stores in Toronto, Canada??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: ve3jtr@rac.ca
Message-ID: <77fiijpmu1@nnrp1.dejanews.com>
Source record: 74914
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

```
Is Active Surplus still in business on Queen St? At least I think it was
Queen St.

In article <8Yzm2.1767$Aj4.1767@news20.bellglobal.com>,
"Don Gray" <dgray@sympatico.ca> wrote:
> Sure! http://www.torontosurplus.com/
>
> Joseph Jesson wrote in message <77eh3o$lgo$1@Jupiter.mcs.net>...
> >
> > Hi, I am visiting Toronto Canada starting this Jan 23rd through the 27th
> and
> >wanted to stop into some surplus places. Any ideas or good haunts??
> >
> >Thanks! Joe Jesson, KB9LZB
> >
> >
>
>

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
```

529. FS: EIMAC 4CX350A "NEW"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-12 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19990112093347.00799.00011011@ng-fv1.aol.com>
Source record: 74915

I have 2ea. EIMAC 8321/4CX350A Tubes. These are "new" in original Eimac boxes.
See Ebay item#55903470.

530. FS 4-1000 socket

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <369D499E.327933C3@buffnet.net>
Source record: 74717

I have a metal socket for a 4-1000 or 3-1000 that is excess to my needs.
I don't know what brand it is but it fits the above tubes.
$22.
--
73,

Jim N2go

531. FS hv transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <369D4848.D87E1956@buffnet.net>
Source record: 74718

120 primary 1000V @.3A secondary
$20 each.
--

73,

Jim N2go

532. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369D54B4.287D1B16@lucent.com>
Source record: 74719

KB5MER wrote:
>
> I had lunch with some of the guys from/
> with the FCC what do YOU want me to
> tell them. JR KB5MER

Tell them to send me an e-mail address that I can send copies of your SPAM to!

I'd like them to see what you are trying to sell on the CB newsgroup.

Maybe they can set up a phoney 'buy' and you won't have a license any more!

Dennis

#12

533. Looking for CTC TX75 RF power transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <77jmui$et4$1@news.onr.com>
Source record: 74720

I'm repairing an HF power amp that uses TX75 RF power transistors.
RF Parts has a non-exact replacement....looking for an exact replacement
if anyone knows of one.

thanks in advance,

W5CDT

--
-->Remove the x's from my email address before using <--

534. Re: source for dielectric resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: dmlb@ragnet.demon.co.uk
Message-ID: <77j2pofhe2@computer.my.domain>
Source record: 74721
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <3zWm2.219$Gk4.393982@news4.mia>,
"Bert Douglas" <bertdNOSPAM@dibbs.net> writes:
> Hi Net Folks,
>
> I have been trying to buy a few for experimentation. But I am having
> difficulty finding a small quantity source. I am looking around 2.4GHZ.
>
> Thanks,
> Bert Douglas
>

Best bet is to phone up filter manufacters sales deptartments and try
and blagg a few samples for free. You may need to spin a yarn...

Duncan

--

Duncan Barclay | God smiles upon the little children,
dmlb@ragnet.demon.co.uk | the alcoholics, and the permanently stoned.

---

535. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Nigel Tolley <ntolley@hotmail.com>
Message-ID: <369f74cf.0@energise.enta.net>
Source record: 74722
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Sign your pages up to the website garage, or some other web page checking
service. They will give you a set of diagnostics, and check all your links,
etc.

Its free, too, and they email you once a month to update you.

Nigel aka Gadget Goth

Welcome to the world of SPAM, Spoofing and Ghost mailing
Welcome to the Wibbly Wobbly Web

Christer Johansson wrote in message <369a44ef.30111350@news.buller.se>...
>Hi,
>
>"Nethack" <nethack99@yahoo.com> wrote:
>
>>Chris, something I've noticed about the LOSA is that there are quite a few
>>links that are 404's. Thus, there's a brief description in the LOSA about
>>something that sounds interesting, but only a link to the website for more
>>details. Click on the link, and you get 404 not found. This is annoying.
>>Is there a way to ensure that the details for a specific application
>>mentioned in the list are also included in the list, so as not to have so
>>many not found's?
>
>I'm aware of the problem but I'm sorry to say that due to time
>limit I'm not able to test and verify the URL's more than once when
>it's submitted. Since some of the submissions is pretty old (going
>on the fourth year with L.O.S.A) people changes URL and e-mail
>addresses over the time.
>
>My suggestion is that if you (or someone else) find a 404-link in
>L.O.S.A e-mail the URL and the index number to me and I will double
>check and make the URL N/A if it doesn't work.
>
>Best regards,
>
>/Christer
>
>[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]
>
>-=-
> * High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
>-=-
> Send and receive serial data over the power lines... For more info

> about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
>-=-

536. FS: 6N2 Johnson

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: k6sde@my-dejanews.com
Message-ID: <77h97trps1@nnrp1.dejanews.com>
Source record: 74790

FOR SALE

Johnson 6N2 missing ONLY THE METER as best I can tell. (I have information on a meter that may be available in a parts unit if you are interested.)

The front panel and knobs are in pretty good shape...I suspect the panel would be a good 8 or 9 with some cleaning and polishing and the knobs look very good.

The case is without dents except for one corner that needs some reforming (upper left). Take a look at the picture.

The tubes are all there, including the 5894, but they are untested and the only things I know are missing is the hatch for the crystal socket, the screws for the case and the meter. There's even a crystal included with it.

This is a chance to have that unit that goes with the Ranger and later Johnson HF rigs or even the earlier Viking I or II. Restore this and you'll have the entire transmitter coverage from 160 meters through 2 meters! Just like the 1950s!

$40 plus you pay shipping and insurance if you want it. It's relatively light and I'll pack it well.

Pictures are at:

http://www.geocities.com/Heartland/Ridge/7463/6n2/all6n2.jpg

http://www.geocities.com/Heartland/Ridge/7463/6n2/front6n2.jpg

http://www.geocities.com/Heartland/Ridge/7463/6n2/top6n2.jpg

http://www.geocities.com/Heartland/Ridge/7463/6n2/bottom6n2.jpg

Ian, K6SDE

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

537. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: aci6@aol.com
Message-ID: <19990112233300.01781.00003033@ng-fw1.aol.com>
Source record: 74791

Inquire as to whether they are armed . . .

Bill

538. source for dielectric resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <3zWm2.219$Gk4.393982@news4.mia>
Source record: 74792
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi Net Folks,

I have been trying to buy a few for experimentation. But I am having
difficulty finding a small quantity source. I am looking around 2.4GHZ.

Thanks,
Bert Douglas

539. Re: Electrical Interference in 1995 Saturn SW-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990113013619.23737.00004216@ngol04.aol.com>
Source record: 74793

In article <19990112104539.04439.00003968@ng51.aol.com>, tbone107@aol.com (Tbone107) writes:

>Subject: Re: Electrical Interference in 1995 Saturn SW-1
>From: tbone107@aol.com (Tbone107)
>Date: 12 Jan 1999 15:45:39 GMT
>
>This may be a very difficult problem to cure.
>The Saturn body is a polymer (if I recall correctly).

Hello Tom,

Most of a Saturn is steel. Some body panels are polymer or polymer coated. There's a metal framework, as well. My magmount sticks to the roof - in the right spots.

>The RF characteristics
>are similar to those of Corvettes (made of fiberglass). While I don't own and
>never have owned a Saturn, I know how difficult some RF problems can be to
>cure
>in metal vehicles, I'm guessing you're in for a long search for a cure. Items
>under the hood, the alternator, the ignition rotor, etc (little spark-gap
>transmitters) can either send the noise through the electrical system, for
>which filters would most likely be the fix. These under the hood items also
>"broadcast" the noise such as the case in my 1990 GMC pick-up. I had all the
>right filters in place, had a new alternator and rotor/distributor cap, etc.
>Still had lots of noise but when I disconnected the antennas, the noise went
>away. It was obvious, the noise was being broadcast from under the hood. I
>grounded the hood...no more noise. My GMC is metal. I don't think Saturns
>are.

The hood and trunk lid of my 1994 are metal. Don't know about 1995 models, but a magnet will tell.

Saturns don't have distributors, either. Two coils, one for each pair of spark plugs.

>I didn't mean to put a damper on your problem and I didn't mean to get so
>long-winded only to say, give a call the a Saturn service department. If they
>really are the way they make them seem in the Saturn commercials (very
>friendly
>and helpful) they might be able to help you better. you are most likely not
>the
>first ham to own a Saturn with a noise problem.

Good advice. I've never had the least problem with service from them.

But I still miss my old car. No noise problems at all. It was a 1980 VW Rabbit with the diesel engine. No spark plugs, no distributor, no computer. Only possible source of noise was the alternator, and it was stone quiet.

73 de Jim, N2EY

540. Re: 10M -> HF Band Transverter Designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: roguer@my-dejanews.com
Message-ID: <77hlld$6qp$1@nnrp1.dejanews.com>
Source record: 74794
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The Lincoln will operate very well in 10, 11, AND 12 Meters
IF the person doing the modifications knows what he is doing.
After the Chipswitch IC is installed, the 12 Meter modifications
are done, then the radio must be adjusted to get equal operation
on all channels. The one person that does the very best at this
is Derrell Adams of Valley West Electronics. He also serves as
the Chipswitch service person. From the Chipswitch Service page,
http://www.chipswitch.com/Service.htm you will read:

"Only if you cannot contact your installer,
or you installed the Chipswitch yourself, call:
Derrell Adams, at (801) 269-0130 between
the hours of 7pm and 10pm Mountain Time Zone(USA)"

Please only call him during the hours listed if you'd like him to
modify your rig!

Others have tried to create a 12 Meter Kit/Modification, but
Derrell is the only person who has perfected it. Dan Valentine
programmed the Chipswitch IC with input from Derrell back in 1991.

In article <77gd1q$348$1@eve.enteract.com>,
"Paul Knight" <paul.knight@prairiecomm.com> wrote:
> Hello! Do designs/plans/schematics exist for HF (i.e., 15m, 17m, 20m,
> 30m, or 40m) transverter(s) which use 10M as the IF? I'd like to build
> something which will work with my HR-2600 to give me a second band
> option (yes, I'm aware of the "Chipswitch" product which will allow the
> '2600 to be used on 12M, albeit poorly).
>
> Thank you for any info you can provide,
>
> Paul WD8DKY
> paul.knight@prairiecomm.com
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

541. Ceramic ladder filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <369cc09b.39491843@news.erols.com>
Source record: 74795

I'm planning on doing some experiments with a 455 Khz IF ladder filter
using 2 pole ceramic resonators. Any suggestions (ballpark figures)
on the values for the capacitors?

TIA Bill N2CQR

542. Re: 10M -> HF Band Transverter Designs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <77i0ph$5jt$1@news5.svr.pol.co.uk>
Source record: 74796
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

roguer@my-dejanews.com wrote in message <77hlld$6qp$1@nnrp1.dejanews.com>...

>Dan Valentine programmed the Chipswitch IC with input from Derrell back in 1991.

Any idear what the number and maker of the chip used for Chipswitch is ?

I'd like to use the chip for another UHF application.

543. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be3f2d$2e9be740$LocalHost@default>
Source record: 74797
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Tom, just omit the "always" from my posting and we will be in full agreement.

Who's Amidon ?

Years ago, from my measurements around 2 MHz on HF ferrites, with Mu around 200, there was no sudden onset of saturation and other losses were quite small in comparison. Very high material resistivity means very small eddy current loss. At the time I was interested in push-pull class-B linear amplifier design, particularly power ratings.

(BTW - there is no such thing as a conjugate match in class-B linears.)

Oscillosope examination of the voltage across across an inductor when the current flowing through it is constrained to be sinusoidal, shows the effect. Non-linear waveform distortion is apparent before there is much increase in core temperature. Admittedly, the rate at which distortion increases with flux density also increases, but the effect is smooth. So even at relatively low core loss, loss is due to non-linearity.

If I remember correctly, with steel transformer laminations, loss increases as flux density raised to the power of 1.6 The point of 'maximum allowable' flux density for different steels is quite arbitrary. With ferrites it is probably nearer to a square law but 'saturation point' is just as arbitrary. No point exists !

I understand ferrite circuits at the inputs of high grade receivers should be avoided. Otherwise wide-band signal cross-modulation effects occur. Loop-sticks in pocket transistor receivers are acceptable it seems.

Regards, Reg.

544. Re: source for dielectric resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Frank Lynch <falynch@americasm01.nt.com>
Message-ID: <369C943D.B1B73F8C@americasm01.nt.com>
Source record: 74798
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:

> Hi Net Folks,
>
> I have been trying to buy a few for experimentation. But I am having
> difficulty finding a small quantity source. I am looking around 2.4GHZ.
>
> Thanks,
> Bert Douglas

> Find out who your local Murata Rep is. You can likely get samples for
> free.

Frank

545. Re: VLF receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <369c981e.12470119@news.mnsinc.com>
Source record: 74799

Recently, "MAC" <fbmac@ipr.nl> wrote:

>Are there still people experimenting with VLF/ELF receivers?
>I would like to come in contact. A specially people in the Netherlands.
>
>73's
>PE1CAF

YES!
See the VLF page at:

http://www.mnsinc.com/bry/73khz.htm

546. Re: Know any Electronic, Radio, or Test Equipment Surplus Stores in Toronto, Canada??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <369c9875.12556188@news.mnsinc.com>
Source record: 74800
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Recently, jsoft@MCS.COM (Joseph Jesson) wrote:

>
> Hi, I am visiting Toronto Canada starting this Jan 23rd through the 27th and
>wanted to stop into some surplus places. Any ideas or good haunts??
>
>Thanks! Joe Jesson, KB9LZB

Joe, you can find all that information at:

http://www.mnsinc.com/bry/mega/boatanch.htm

and

http://www.mnsinc.com/bry/mega/partsupp.htm

If you find any new places that need to be added, please e-mail them in
to those web sites too so that they can be added to the list for all travelling
amateurs and electronics enthusiasts worldwide!!

Bry

547. Re: source for dielectric resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <369C9FC6.72CCCBAA@home.com>
Source record: 74801
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
> I have been trying to buy a few for experimentation. But I am having
> difficulty finding a small quantity source. I am looking around 2.4GHZ.

I've gotten samples and ordered small quantities from Trans-Tech Inc. in
Maryland. They've even cut the samples to the frequency I wanted!

They can be probably be found thru a web search by name and some keywords
like dielectric, resonator, etc.

Don

548. zvei tone decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: khh@infocom.dk
Message-ID: <369ca619.25043137@news.tele.dk>
Source record: 74802

I'm looking for a single chip zvei tone decoder. Does any of you know a chip that does that, or a manufactor making semiconductors like that.

Best regards Karsten Hansen

549. Re: TV card as VHF/UHF receiver!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <369C603F.70CF@naples.infi.net>
Source record: 74803

Chris Maukonen wrote:
>
> In article <7777nj$knt@zeppo.cs.ubc.ca>,
> davem@zeppo.cs.ubc.ca (Dave Martindale) writes:
> > mervins@aol.com (MervinS) writes:
> >>You realize that there are many TV-band radios that receive TV audio without
> >>the video.
> >
> > A TV transmitter actually has two separate transmitters with carriers
> > 4.5 MHz apart - one big AM transmitter with lots of bandwidth for the
> > video, and a lower-power FM transmitter for audio. The signals are
> > independent, and you can receive them independently with two separate
> > receivers, or receive the audio alone.
> >
> > But many tuners designed specifically for TV have a single local oscillator
> > and a single IF that is used for both video and audio. The two signals
> > are split later in the receiver. In some designs, the video signal needs
> > to be present to extract the audio.
>
> This was actually how it worked, back in the days of vacume tubes. The
> output of the tuner was fed into a very broad band 45 mhz IF. This was
> usually refered to as the vidio IF an was 6 mhz wide. The vidio was
> demodulated with a simple diode detector and simultanrously sent to
> the vidio amps and audio IF, which was at 4.5 mhz. Since the vidio
> detector mixed the audio and vidio signals together producing the
> diffenence signal of 4.5 mhz. The audio signal was then amplified
> and detected with a quadriture detector and viola...sound.
>
> Of course there where a number of traps and such to eliminate any
> vidio component (buzz) from the sound and sound component (Sound bars)
> from the vidio.
>
> Of course these days everything is done on one chip.
>
> Chris
>
> --
> ==
> Chris Maukonen "Change is not merely necessary
> Sr. Systems Programmer to life - IT IS LIFE"
> Univeristy of Central Florida Alvin Toffler
> chris@.ucf.edu (407) 823 5460
>
>

Regards! It is done on one chip as you said. There are two systems in use in today's TV and VCR. The first one is the inter-carrier type which uses one SAW filter for both the visual and aural signals. The aural is attenuated about 20 DB in the SAW filter and the 4.5 Mhz aural FM signal is extracted from the quasi-synchronous video detector through a ceramic bandpass filter.
The second one is the split-carrier type which uses two SAW filters, one for the visual and one for the aural. This system has the advantage of being less sensitive to sound buzz from the video. It is my understanding that it is possible to get the audio information from this system if the video signal is missing as long as the quasi-synchronous detector is of the PLL type. The 4.5 Mhz aural signal is extracted from a "Q" synchronous detector which is fed from the VCO of the PLL. Philips has such a demodulator TDA 9800 or TDA9802. Yvon VE2AUC

550. Build a J-POLE Ant By K9QAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Ron Smith <k9qam@empnet.com>
Message-ID: <77iku6$rc2$1@news1-alterdial.uu.net>
Source record: 74804

J POLE ANTENNA PLANS

-

Roll up J antenna plans, part 1 of 2.

Just thought I would leave a bit of info about making your own twin lead roll up j antenna for 2 meters. I collect antenna designs, so if someone would leave thier favorite design in a bulletin, I would be in your debt. By the way, I have found this design to work quite well, and am using one mounted in my attic for all my 2 meter radio work. First off, you will need the following supplies:

Solder
Soldering iron
Heat gun (optional, but good to have. Available at hobby shack)
Coax Cable stripper (cheap but effective one available at radio shack, America's technology store)
Electrical shrink tubing
Electric tape
50 OHM Coaxial cable. I use RG 58/U. Center conductor is more easily manipulated if it is braided rather than solid.
I don't know if solid center conductors have any electrical advantages, but it took me a long time to learn how to deal with the connection to the twin lead. I like to buy it with BNC connectors on both ends, but that's just because I don't have the tools to buy bulk and attach my own connectors.
300 OHM TV Twin lead. I have found that the cheap Sav-on variety actually is better suited to the task, than the heavy, expensive stuff.
Razor blade or X-Acto knife (sharp. Dull ones are a real pain!)
Silicon sealant (also known as aquarium sealer, but less expensive)
Mini battery clips. These are available at radio shack, and while they are optional, they are very convienient.

Ok, down to brass tacks. First off, fire up the soldering iron, so it will be hot and ready when you are (somehow that didn't come out right hi, hi!)

Next measure out 55.5 inches of Twin lead and cut it.

1.5 inches up from the bottom end, make a mark on the twin lead. Half an inch above that make another mark. These marks will guide you in stripping the twin lead. you are going to need approximately that much room to solder in the coax sheild and core. I have found it most

easy to cut across the wire with the razor until I feel it touch metal
repeat that on the other side, then cut the center sheilding out.
Then it is a simple matter to remove the remaining insulation from our
target area. Oh, by the way, this will be your feedpoint, and it is
very important that you measure this accurately. The feedpoint is
critical.

Strip the coax so that you have the bare center conductor exposed, and
a little further up, exposed shielding. Cut down the side and twist
the shielding into a single strand.

Solder the sheild to one side of the twin lead, and the center conductor
to the other. One technique I use with solid core center conductors is
to bend it back in a fishook then solder to the twin lead.

Use electrical tape to fasten the coax to the twin lead. Only a couple
wraps is needed, as this is mostly just for strain relief in the
building stage. You may or may not want to do this before you do the
soldering.

End of part 1

Roll up J antenna plans part 2 of 2

-
16 inches from the bottom, cut the shield side. This is the "short".
Slightly above the original cut, Maybe an 8'th of an inch, cut it again,
then square out the plastic shielding slightly toward the center of
the twin lead and pull the little peice of plastic and conductor out.

Now is the time to find out if you have a solid connection. Get a radio
check. If you get a couple of poor reports, try resoldering the
connection.

Sqeeze some silicon sealer onto both the feedpoint and the "short".
We do this for four reasons. First, this effectively waterproofs the
whole job. Secondly, it provides structural strength. Third, it protects
the weak solder point from loosening with twists and turns and little
kids poking it with curious fingers. Last but not least, it provides
a permanent barrier between the two contacts so you don't blow the
finals in your HT!

Once the silicone has cured (the time required is usually overnight,
but I have managed to coax it along much faster) Measure a length of
heat shrink tubing to cover the "short" and another one for the
feedpoint. Don't be stingy, this is where we make this puppy look
really snazzy, and close everything up tight as a drum.

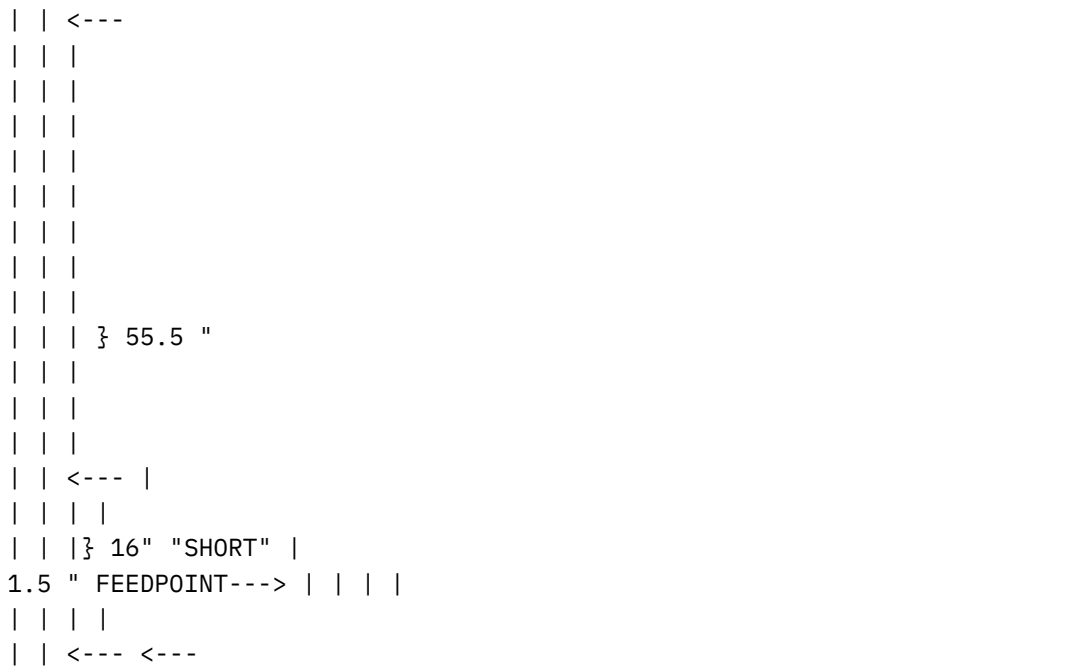
Now with heat gun in hand, heat the tubing evenly and slowly, allowing
it to shrink in it's own good time. Actually, it will shrink pretty
fast under a heat gun, and you know it is done when the ends curl up
just very *slightly*. I don't know how it behaves under a lighter, but
I have been told the effect is similar, taking slightly longer. I have

also been told that a good strong hair dryer can be used also.

Now make a hole in the end, and connect a mini battery clip with a shoelace or some other non conductive substance.

Be aware that this type of antenna has an annoying property. It tends to detune significantly in the prescence of metal, so avoid placing it near the stuff, if possible. I don't know this to be a fact, as I have never tested it myself, but I have been told that this design has about 3 Dbd gain.

Again, in summary:



If you want to have a little fun, you can stop by sav-on and buy a 75 OHM to 300 OHM matching transformer, (Used to connect cable TV to old TV's that don't have built in cable connectors) and solder that directly to the base of the antenna, rather than 1.5 inches up. That 1.5 inches is an impedance match, and with the 75 OHM matching transformer you don't
need it. Don't shorten the overall length or the "short" though! That will definetly throw a monkeywrench in the works! Oh and yes, I did say a 75 OHM matching transformer. That just happens to work out to, guess what? A 4:1 ratio. So in essence, you have a cheap but good 4:1 Balun for about two bucks. I stumbled on this quite by accident. To make this work you will need an adapter to go from the Cable tv size coax to Ham Coax, availble at your local swap meet quite cheap. This setup is nice because you can attach any length or type of coax that you want, and disconnect just as easily. disadvantage? It isn't a sealed system and I wouldn't place bets on how well it would work in wet weather without some kind of protection.

Well, hope I helped. 73's to you. And I am looking for any antenna plans I can get my hands on, so if you come across any, send them my way will you? Antennas have sort of become a sub-hobby for me.

73, Enjoy and good luck,

Ron Smith K9QAM <k9qam@empnet.com>

551. Re: Know any Electronic, Radio, or Test Equipment Surplus Stores in Toronto, Canada??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990113132915.16317A-100000@Ocean.CAM.ORG>
Source record: 74805
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I haven't been in Toronto for a decade, so perhaps the scene has changed,
but it used to be that there was a cluster of electronic stores near
Active Surplus. I remember once (the mid-80s) finding out about one on
one of the nearby sidestreets because they'd put up some posters on Queen
Street.

tor.general is the Toronto newsgroup, and maybe posting there will turn up
some more recent comments about the scene.

Someone visiting Toronto (or anywhere in Canada, for that matter) might
want to visit the Radio Amateurs of Canada site at
http://www.rac.ca
They keep track of upcoming hamfests, and I think there's a list of
affiliated clubs, and there's also a list of stores that carry their
publications, so it's a place to check for ham stores in Canada (though I
don't know if it's a complete list).

Michael VE2BVW

On Tue, 12 Jan 1999 marsgal42@hotmail.com wrote:

> In article <77fiijpmu1@nnrp1.dejanews.com>,
> ve3jtr@rac.ca wrote:
>
> > Is Active Surplus still in business on Queen St? At least I think it was
> > Queen St.
>
> Yep. 347 Queen Street West - the south side of the street, a couple of
> streetcar stops west of City-TV.
>
> Have fun with the snowbanks. :-(
>
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>
>

552. Sophisticated Breadboard System/Digital Electronics Course FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: lmarti49@linknet.net
Message-ID: <lmarti49-ya023580001301991252330001@news.idt.net>
Source record: 74806
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

I have the following mint condition, unused, high-quality equipment and
materials
to sell:

--1 HEATHKIT 3201A "DIGITAL TECHNIQUES COURSE"
(2 Volumes).

--1 HEATHKIT ET3700 "DIGITAL TRAINER,"
Includes a total of 4 insertion-type circuit breadboard cards
in a single, well laid-out package.
Also includes:
built-in +-5 and +-12v power supplies;
a variety of square wave TTL clock signal outputs at up to 100 khz;
a built-in DVM/frequency counter;
on/off led logic state indicators, buffered data switches; etc.

It's perfect for quick breadboarding of experimental circuits by means of
inserting component
leads and #10 wires in the little holes on the breadboard cards.

--1 KIT OF IC'S AND OTHER PARTS for doing the experiments in the course.

I bought these items in 1989 just before I became interested in computers
instead of electronics, so I never used them. I had previously taken
Heath's DC Electronics, AC Electronics, and Electronic Circuits"
courses, and found them unusually clear and easy to use, so I suspect this
course is also.

NOTE: This course teaches the fundamentals of digital circuit design
(e. g., AND, OR, and NAND gates; shift registers, clocking, Boolean
operations, etc).
These principles do not change, even if the hardware does.
The course does not teach computer programming, etc. so it should not be
out of date.
The accompanying ICs are TTL.
The course allows you to learn entirely on your own, by means of
"Programmed Learning".
The subject is broken down into manageable units, in each of which they
first tell you what
they are going to explain to you, they explain it, then present an
experiment demonstrating
it. There are periodic tests to help you synthesize what you've learned.

TOTAL COST NEW: $430
COST TO YOU $200, shipped.

--
Everything that rises must converge.
Flannery O'Connor

553. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <369CEF00.3C98@lsid.hp.com>
Source record: 74807
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reg Edwards wrote:
>
> Tom, just omit the "always" from my posting and we will be in full
> agreement.

:-) OK!

> Who's Amidon ?

www.amidoncorp.com. But also try http://www.ferronics.com/toroids.htm, and especially have a look at the "power inductors" section. You're right, saturation is somewhat subjective, but for "hard" ferrites, it sure seems pretty sudden. In any case, below or above some "saturation" limit, the energy dissipated per unit volume is given by the area in the hysterises loop around which you travel with your particular excitation. That happens each cycle, so if you increase the cycles per second and hold the excitation constant (follow the same hysterises loop), you increase the power dissipation in the core. Get to a high enough frequency, and you're in trouble well before you get to what most folk would call saturation. As I said, it's something that I'm keenly aware of right now because of my desire to use a very inexpensive stock inductor in an application where I care about core dissipation. I could design custom magnetics and get lower core loss, but the price would be ten times the expense for the inductor.

> (BTW - there is no such thing as a conjugate match in class-B
> linears.)

I'm not going to touch that one with a three-meter pole! :-)

>
> Oscillosope examination of the voltage across across an inductor when
> the current flowing through it is constrained to be sinusoidal, shows
> the effect. Non-linear waveform distortion is apparent before there
> is much increase in core temperature. Admittedly, the rate at which
> distortion increases with flux density also increases, but the effect
> is smooth. So even at relatively low core loss, loss is due to
> non-linearity.

Yep, quantitatively the area inside the hysterises curve the material is traversing.

> If I remember correctly, with steel transformer laminations, loss
> increases as flux density raised to the power of 1.6 The point of
> 'maximum allowable' flux density for different steels is quite
> arbitrary.

I had remembered a "rule of thumb" for small 60Hz power transformers
that copper loss was roughly equal to core loss for a well-designed
transformer. Someone in sci.electronics.design recently pointed out
to me that that's not true. I did some measurements and sure enough,
operating at rating typically the core loss was 10% and the copper loss
was 90%. The "saturation" flux density is obvious enough in that kind
of steel that you really don't want to be trying to run the transformer
into saturation, not because it increases core losses that dramatically,
but because the transformer winding inductance decreases and the current
goes up dramatically, and you end up with lots of distortion products
and I^2R heating.

But in the transformers used in (e.g. push-pull) switching power
supplies,
using hard ferrites at 100kHz and higher, it seems that the limit is
core loss, and that's well below the abrupt change in mu that would be
called saturation.

Interesting things to think about...nothing is completely black and
white and the gray areas in between are fun to explore.

Cheers,
Tom

554. eprom programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: graham knox <graham@knox.freeserve.co.uk>
Message-ID: <77irim$g25$1@news4.svr.pol.co.uk>
Source record: 74808

I'm looking for a circuit to build a simple eprom programmer.Any help would be appreciated. 73 , graham

555. Re: Build a J-POLE Ant By K9QAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990113154802.20560.00000137@ng17.aol.com>
Source record: 74809

My favorite antenna:
Get metal in the air & TUNE IT !!!

Right now, I have a 10M Jpole 1 1/2" copper 18' High. 1" copper pipe to 2' above grade. running up the side of my house. A Buncha wires running all funny directions w/ 4-3' groundrods (bedrock @ 4').
Well, here's the fun part...
Inductor:
take whatever you got for wire & wrap it around something wide (2"-6"), tap it & Tune it.(40' #8 Cu. bare wrapped around Winnebego table leg)
Capacitor:
BIG variable, motor driven.
Relays:
Many & Large
Tuning:
Buy a MFJ 259 or equivelant or waste all that time you could be on the air

Here's an Idea for people w/ covenants & Deeds:

Aluminum Peak Vent (goes on the peak of roof)
Just run it & split it in the middle, feed & TUNE.
Saw some Bird Proof Peak stuff on TV. It mounts the same as Peak Vent, but has a bunch of spikes to keep the Seagulls off the roof... Maybe the spikes will give resonance where it just wants to be?

Just Gimme a Restricted QTH, I'll get 'em on the air.

One thing to reitterate:
GET one of them Antenna Analyzing gadgets & Just mark the price to saving all that tuning time !!!!! THink about all the antennas you can find w/ one while Mobile or portable.

Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

556. Crosley radio needs repair in Cincy area

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: cubfnbdman@aol.comnospam
Message-ID: <19990113175103.25259.00000202@ng155.aol.com>
Source record: 74810

I have an old Crosley tabletop model that belonged to my father.
It has not been used in over 10 years. Is there anyone in the Cincinnati Ohio
area that I could contact to get it worked on?
Thanks
Doug

557. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: la8ak@online.no
Message-ID: <369d202b.18652669@news.online.no>
Source record: 74811
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 11 Jan 1999 21:33:42 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
wrote:

>Someone wrote - -
>
>> - - - - - I really don't know - - - -
>
>
could be an idea to try air core toroids for transmitter, could try to
vary the distance between the turns to vary inductance.......

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

558. Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <7ZC1UCAFhSn2Eweu@falstaf.demon.co.uk>
Source record: 74812
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Dear All,
I want to build a simple FM Transceiver. The RX is no problem but the TX is posing a few headaches, largely due to my lack of knowledge about FM.

I want to use a synthesiser or similar as a VFO. I was intending to use one of the commonly available ones intended for cellular phone type applications. They appear cheap and relatively easy to use. How do I FM modulate a constant frequency from a synthesiser.

Most of these require a VCO to be connected alongside them. Is there anything that I can do by modulating the VCO? or do I put some form of phase modulation in the output of the synthesiser/VCO combo?.

If anybody has any example circuits with a brief note on how they work then I would be extremely grateful.

Regards

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

559. Re: Measure? Loop loss resistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be3f4b$bbecada0$LocalHost@default>
Source record: 74813

Here's the story;

5 turn square loop 30" per side 1/4" soft copper tubing.
38uh, Xl = 445 ohms @ 1.85Mhz Calculated loss R = .43 ohms
Calculated Q = 1040
Wanted to design a transformer to drive a fifty ohm cable and
spectrum analyzer and later radio.
Transformer had to have a very low reflected resistance to preserve Q.
Even with a core A sub L of 20 a 2 to 40 turn transformer lowered the Q
to about 660. (Tried several transformers before moving on)
A pickup loop about 2 inches in diameter was added three inches away from
the main loop. The Q then went down to 540, I bent the pickup loop down to
be more perpendicular (less coupling) and the Q went up to over 700!
I continued tweaking (reducing coupling) until I peaked the Q at 902!
This is probably as high as it will go because of other losses. Including
the
PVC frame, the air capacitor, if the cap had a Q of 7000, that would bring
the Q down from 1040 to 902 (any comments about air cap Q?)

Don W6JL <W6JL@ixpres.com> wrote in article
<916085878.391747@cs1.sdd.hp.com>...
> Mike OM,
>
> Why not measure the -3 dB bandwidth of the antenna? You can measure
> this by receiving a steady signal after having matched the loop at that
> frequency. Then tune the receiver either side until you see 3 dB loss in
> signal. The operating
> Q of the loop is then F/BW (freq divided by -3dB bandwidth). The
> unloaded Q
> of the loop is twice this value, if perfectly matched.
> You can then calculate the loss resistance if you want, knowing what
the
> theoretical radiation resistance is. (Radiation resistance is closely
> approximated by
> Rr = 197 * (circumfrence in wavelengths)^4. See either edition of
Kraus's
> book, "Antennas").
>
> Example: if F = 7000 KHz, and -3 dB bandwidth is 7 KHz, then the Q
> is 7000/7 = 1000. Q= Xl or Xc divided by (Rrad + Rloss), from which
Rloss
> can be calculated.
>
> 73 and GL,
> Don, W6JL

>
>
>
>
>

560. ICOM 2400a need help with mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: Jon Johnson <jsj@netdirect.net>
Message-ID: <369D40C9.E4590B10@netdirect.net>
Source record: 74814

ICOM 2400a dual band mobile.
I got the mod to open the rx and tx on both bands but i need some clarification on a couple items before i do it myself.
The mod instructs me to clip 4 diodes total (2 for 2 meter and 2 for 440)
Then instructs me to install 2 chip diodes, this is where I need to know if theses two chip diodes are for the tx or rx ? If so then i need to know where I can purchase these chip diodes. The mod gives part #s.
Any help would be great.
Thanks
Jon N9XXR

561. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-13 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <369CF67B.5FB2@naples.infi.net>
Source record: 74815
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Robin Birch wrote:
>
> Dear All,
> I want to build a simple FM Transceiver. The RX is no problem but the
> TX is posing a few headaches, largely due to my lack of knowledge about
> FM.
>
> I want to use a synthesiser or similar as a VFO. I was intending to use
> one of the commonly available ones intended for cellular phone type
> applications. They appear cheap and relatively easy to use. How do I
> FM modulate a constant frequency from a synthesiser.
>
> Most of these require a VCO to be connected alongside them. Is there
> anything that I can do by modulating the VCO? or do I put some form of
> phase modulation in the output of the synthesiser/VCO combo?.
>
> If anybody has any example circuits with a brief note on how they work
> then I would be extremely grateful.
>
> Regards
>
> Robin
> ---
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

I remember reading an application note regarding this subject, but
pardon my memory for not remembering where. Try Philips Web site
under Applications notes. Regards! Yvon VE2 AUC

562. Re: zvei tone decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Carsten Groen <cgroen@image.dk>
Message-ID: <Mhan2.5441$25.5671@news010.image.dk>
Source record: 74723

Look at the company CML. They make zvei tone decoder/encoders.
I used one a long time ago, but don't remember the exact
type number, other than it started with FX.....
look at: http://www.cmlmicro.co.uk/Products/Datasheets/index.htm

Carsten Groen, OZ9AAR

Karsten Hansen wrote in message <369ca619.25043137@news.tele.dk>...
>I'm looking for a single chip zvei tone decoder. Does any of you know
>a chip that does that, or a manufactor making semiconductors like
>that.
>
>Best regards Karsten Hansen

563. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <77js4p$rms_001@slip-14.nlbbs.com>
Source record: 74724

In article <19990110191016.05848.00010689@ng-fr1.aol.com>,
ts950sdx@aol.com (TS950SDX) wrote:
>
> 4-1000 3-1000
>
> ANYONE KNOW MAX PLATE VOLTAGE ...DRIVE...OUTPUT..
>
> FOR THESE TWO TUBES HAVE BOTH AND TRING TO DECIDE
>
> WHICH ONE TO HOME BREW
>
> WHICH WOULD BE THE BEST AT 4500 VDC WITH 150 DRIVE ?
>
> INTO A DUMMYLOAD !!!
> JOE
The 3-1000Z is better tube, requires less drive and has less output capacitance, but with 150 watts drive, you can use the 4-1000A alright, for that matter they should interchange anyway, build an amp & try them both! I had 3-1000Z's on 80-10 and 4-1000A's on 160 & 6 in homebrew amps. My new amp uses 4-1000A's because there cheaper! GL de Dick NY1E

564. Re: QRP Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Bill <whagen@NOREPLY.inreach.com>
Message-ID: <369D5788.339C@NOREPLY.inreach.com>
Source record: 74725

Tony Breathnach wrote:
?
--
Please remove the word "NOREPLY" from the email adress. Sorry for the
inconvenience, but it helps keep down the spam.

565. Re: CONCLUSIVE EVIDENCE: Jesus *is* King of the Jews !!!! ! !! !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19990113231548.29510.00000386@ng19.aol.com>
Source record: 74726

Laurent Pichler, an intellectual proud graduate of public school
wrote>[bullshit snipped]>fuck off>
I'm impressed.

566. microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <Pzen2.703$Gk4.1001992@news4.mia>
Source record: 74727
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi Net Folks,

Thanks for all the good information recently. I am playing around with microstrip, and I am wondering if it is possible to make a parallel resonant "tank" circuit with microstrip. Every thing I try seems to be series resonant.

Thanks,
Bert Douglas

567. Superior Instruments Tube Tester TV-II LAST DAY Currently $12.50

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Horizon <horizon@visi.net>
Message-ID: <qefn2.1193$zS5.5796622@firenze.visi.net>
Source record: 74728

Click this link to see it
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=56052085

568. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Bill Bob <billbob@mns.com>
Message-ID: <77kark$ghb@journal.concentric.net>
Source record: 74729

When is it illegal to buy/sell ham radio equipement? I'm not agreeing with spamming and continuously posting for sale ads. (my newreader has anything with the words "for sale" and "fs:" filtered out)., but what can the FCC do about selling radio equipement to CB users?

It may be illegal for an un-licensed operator to transmit, but that's really not the seller's responsibility, especially the legal responsibility. I don't have a license yet, but that hasn't stopped me from buying equipement, even from ham radio dealers. In fact, no one has even hinted at asking for my callsign. (I hope I don't actually "look" like a ham :)).

I really don't see how selling to CBer's will make the voice bands any worse than they are now... If it weren't for the digital and experimental modes of amatuer radio, I wouldn't even be here now.

Bill

dennis W. Ostrowski <dwostrowski@lucent.com> wrote in message news:369D54B4.287D1B16@lucent.com...
>KB5MER wrote:
>>
>> I had lunch with some of the guys from/
>> with the FCC what do YOU want me to
>> tell them. JR KB5MER
>
> Tell them to send me an e-mail address that I can send copies of your
>SPAM to!
>
> I'd like them to see what you are trying to sell on the CB newsgroup.
>
> Maybe they can set up a phoney 'buy' and you won't have a license any
>more!
>
>Dennis
>
>#12

569. Re: Electrical Interference in 1995 Saturn SW-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Bill Bob <billbob@mns.com>
Message-ID: <77kc8g$hd9@journal.concentric.net>
Source record: 74730

Most Saturns have metal horizontal surfaces (top, hood, truck lid) for impact absorbtion. My stock 97' Saturn has alternator interference on the AM BC band.

I do remember seeing an article a while back in QST about someone mounting an HF rig on his Saturn.

Bill,

N2EY <n2ey@aol.com> wrote in message news:19990113013619.23737.00004216@ngol04.aol.com...
>
>In article <19990112104539.04439.00003968@ng51.aol.com>, tbone107@aol.com >(Tbone107) writes:
>
>>Subject: Re: Electrical Interference in 1995 Saturn SW-1
>>From: tbone107@aol.com (Tbone107)
>>Date: 12 Jan 1999 15:45:39 GMT
>>
>>This may be a very difficult problem to cure.
>>The Saturn body is a polymer (if I recall correctly).
>
>Hello Tom,
>
>Most of a Saturn is steel. Some body panels are polymer or polymer coated.
>There's a metal framework, as well. My magmount sticks to the roof - in the >right spots.
>
>>The RF characteristics
>>are similar to those of Corvettes (made of fiberglass). While I don't own and
>>never have owned a Saturn, I know how difficult some RF problems can be to >>cure
>>in metal vehicles, I'm guessing you're in for a long search for a cure. Items
>>under the hood, the alternator, the ignition rotor, etc (little spark-gap >>transmitters) can either send the noise through the electrical system, for >>which filters would most likely be the fix. These under the hood items also
>>"broadcast" the noise such as the case in my 1990 GMC pick-up. I had all the
>>right filters in place, had a new alternator and rotor/distributor cap, etc.
>>Still had lots of noise but when I disconnected the antennas, the noise went

>>away. It was obvious, the noise was being broadcast from under the hood. I
>>grounded the hood...no more noise. My GMC is metal. I don't think Saturns
>>are.
>
>The hood and trunk lid of my 1994 are metal. Don't know about 1995 models,
but
>a magnet will tell.
>
>Saturns don't have distributors, either. Two coils, one for each pair of
spark
>plugs.
>
>>I didn't mean to put a damper on your problem and I didn't mean to get so
>>long-winded only to say, give a call the a Saturn service department. If
they
>>really are the way they make them seem in the Saturn commercials (very
>>friendly
>>and helpful) they might be able to help you better. you are most likely
not
>>the
>>first ham to own a Saturn with a noise problem.
>
>Good advice. I've never had the least problem with service from them.
>
>But I still miss my old car. No noise problems at all. It was a 1980 VW
Rabbit
>with the diesel engine. No spark plugs, no distributor, no computer. Only
>possible source of noise was the alternator, and it was stone quiet.
>
>73 de Jim, N2EY
>

570. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <369E0403.510999AA@home.com>
Source record: 74731
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
>
> Hi Net Folks,
>
> Thanks for all the good information recently. I am playing around with
> microstrip, and I am wondering if it is possible to make a parallel resonant
> "tank" circuit with microstrip. Every thing I try seems to be series
> resonant.

Layout a length of low impedance line 1/4 wavelength long.
Short one end to the groundplane either with a plated-thru-hole or a
wrap-around ground.

It is now a parallel resonance with 0 impedance at the shorted end and
infinite impedance at the open end. Slide a tap up from the shorted end
to match to the impedance you want.

Don

571. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369e09a8.0@news.netwalk.com>
Source record: 74732

dennis W. Ostrowski wrote in message <369AA5F9.AD83577E@lucent.com>...
>
> Using a square wave, wouldn't you only get the ODD harmonics?
>
>Dennis
>
>#12

That is true, you will get only odd harmonics with a _square_ wave, but if you make the pulse width smaller you no longer have a square wave and you will (at zero pulse width) get all of the harmonics.

Jim

572. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369e0cd0.0@news.netwalk.com>
Source record: 74733

PSK wrote in message <36963D2B.21E278FE@exit109.com>...

There is another method that I think may give better results, and is a much simpler circuit.

Start out with a NN MHz oscillator (NN being a number).

Have a variable frequency oscillator covering the range that you are interested in. This oscillator can be controlled by a mechanically variable capacitor or by a voltage controlled capacitor. In addition you will need another voltage controlled capacitor that has a limited tuning range, perhaps tens of KHz.

Take the output of the variable frequency oscillator and feed it into a D flip flop (sorry, but can't remember which input---my books on this are at home). Feed the NN MHz into the other input of the D flip flop.

Take the Q output of the D flip flop and feed it into a phase detector (as in a phase lock loop). The reference signal for the phase detector will be NN/NN, in other words 1 MHz.

As you tune the main tuning capacitor in the variable oscillator it will go in and out of lock every 1 MHz.

As someone else in this thread pointed out, the Wadley loop was/is used as a 'block converter' or 'band select'. You can either convert a block of frequencies and have a tunable IF, or mix the output of the Wadley loop with a VFO and have a fixed tuned IF. The circuit I just described can be used the same way.

Jim

573. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Dave Heil <K8MN@cats-net.com>
Message-ID: <369E80B1.79D9@cats-net.com>
Source record: 74734

TS950SDX wrote:
>
> 4-1000 3-1000
>
> ANYONE KNOW MAX PLATE VOLTAGE ...DRIVE...OUTPUT..
>
> FOR THESE TWO TUBES HAVE BOTH AND TRING TO DECIDE
>
> WHICH ONE TO HOME BREW
>
> WHICH WOULD BE THE BEST AT 4500 VDC WITH 150 DRIVE ?
>
> INTO A DUMMYLOAD !!!
> JOE

If you want to build an amp which will cover 160-10m and plan to use switched inductance, pick the 3-1000. The 4-1000 has too much interelectrode capacitance to allow hitting 10m with all of the lead length associated with the tank coils. If you plan to use a roller inductor, it makes little difference.

Dave K8MN

574. Re: Crosley radio needs repair in Cincy area

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Dave Heil <K8MN@cats-net.com>
Message-ID: <369E81CC.3E2B@cats-net.com>
Source record: 74735

CubFnBdMan wrote:
>
> I have an old Crosley tabletop model that belonged to my father.
> It has not been used in over 10 years. Is there anyone in the Cincinnati Ohio
> area that I could contact to get it worked on?
> Thanks
> Doug

Try Pete Palm on Madison Road in Madisonville. He used to run a shop called Musicality which dealt and repaired vintage radios. He should be reasonable.

Dave Heil K8MN

575. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Dave Heil <K8MN@cats-net.com>
Message-ID: <369E8132.6DB0@cats-net.com>
Source record: 74736

KB5MER wrote:
>
> <<>>
>
> I had lunch on sunday with some of the
> guys from/with the FCC, What do YOU
> want me to tell them.
> JR KB5MER

Tell 'em how much you're asking for the homebrew six meter amp. That should be good for a hoot.

Dave K8MN

576. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <36a108c9.4702381@netnews.worldnet.att.net>
Source record: 74737
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Thu, 14 Jan 1999 04:41:19 GMT, "Bert Douglas"
<bertdNOSPAM@dibbs.net> wrote:

>Thanks for all the good information recently. I am playing around with
>microstrip, and I am wondering if it is possible to make a parallel resonant
>"tank" circuit with microstrip. Every thing I try seems to be series
>resonant.

A quarter-wave stub *ought* to be the equivalent of a parallel
resonant tank.

Perhaps your difficulty is in the method you're using to
connect or couple into the "tank".

What have you tried so far and why do you think you always
come up series instead of parallel?

Jim

577. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <369E1635.D43F8827@teleport.com>
Source record: 74738
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Don wrote:
>
> Bert Douglas wrote:
> >
> > Hi Net Folks,
> >
> > Thanks for all the good information recently. I am playing around with
> > microstrip, and I am wondering if it is possible to make a parallel resonant
> > "tank" circuit with microstrip. Every thing I try seems to be series
> > resonant.
>
> Layout a length of low impedance line 1/4 wavelength long.
> Short one end to the groundplane either with a plated-thru-hole or a
> wrap-around ground.
>
> It is now a parallel resonance with 0 impedance at the shorted end and
> infinite impedance at the open end. Slide a tap up from the shorted end
> to match to the impedance you want.
>
> Don

Alternatively, make the line about 1/2 wavelength long and leave the far end open. The line will end up a little shorter than 1/2 wavelength due to fringing at the open end. Of course, you can't tap up on this one like you can the 1/4 wavelength line.

By the way, in both these schemes, you have to take into account the velocity factor of the line. This depends on the material, board thickness, and frequency. Very roughly, it's about 50% for epoxy glass board and 70% for Teflon. So on expoxy glass, a wavelength is about half the distance it is in air.

One other thing to remember is that unlike an LC resonant circuit, these are also resonant at about 3, 5, 7, etc. times their fundamental resonance. This can cause trouble if you're not prepared for it.

Roy Lewallen, W7EL

578. For Sale 6 Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990114131317.00907.00000048@ng32.aol.com>
Source record: 74739

> For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
> Power input 25 to 75 watts
> Power output 250 to 650 watts
> AC Power 115 volts / 15 amps
> RF Deck 19"X10.5"X14" 60 lbs.
> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
> Internal Relay & Low Pass Filter
> RF Deck can be seen at (inetport.com/~arl)
> Under - items for sale - RF Amplifiers
> Price $600.00 + Shipping

579. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Andy Lake <andy.lake@bt.com>
Message-ID: <369E3885.3307@bt.com>
Source record: 74740
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Robin Birch wrote:
>
> Dear All,
> I want to build a simple FM Transceiver. The RX is no problem but the
> TX is posing a few headaches, largely due to my lack of knowledge
> about FM.
>
> I want to use a synthesiser or similar as a VFO. I was intending to
> use one of the commonly available ones intended for cellular phone
> type applications. They appear cheap and relatively easy to use. How
> do I FM modulate a constant frequency from a synthesiser.
>
> Most of these require a VCO to be connected alongside them.

Well, at risk of being pulled apart by those with more knowledge than me, here goes....

The VCO is an integral part of the synthesizer. By varying a DC voltage on it's control line, the VCO frequency is moved to lock the loop of the synth. To produce FM (but really, AIUI, it's phase modulation), you can apply an audio voltage to the frequency-determining element of the VCO, which is usually a variable-capacitance diode ('varicap').

A simple view of this is shown on my page about converting a ex-PMR Dymar 2000, which was originally an AM transmitter, for 2 metre FM operation. See "http://www.qsl.net/g8yoa/dymar.htm"
In image1.gif the screened lead carries conditioned audio from the microphone pre-amp, and applies this across the varicap. D202. The control voltage from the synth. is applied across the varicap via R225. This results in the final frequency being phase modulated, easy! If you are multiplying the output of the synth to final-frequency, remember you will not need a great amount of modulation, as this will multiply also.

> Is there anything that I can do by modulating the VCO? or do I put
> some form of phase modulation in the output of the synthesiser/VCO
> combo?

See above! But also, if you are MIXING the output of your synth with another frequency for transmit, then you could modulate (in the same way) the fixed frequency oscillator, to again end up with a final-frequency FM signal. If your fixed frequency oscillator is crystal controlled, try paralleling the trimmer capacitor with a varicap, and treat it the same as above.

> If anybody has any example circuits with a brief note on how they work
> then I would be extremely grateful.

Hope that helps. Let us know how you get on? Is this for 6m FM? If so,
have you considered the RSGB challenge of building / designing a 6m FM
transceiver? Just a thought...

> M1ASU/2E0ARJ Old computers and radios always welcome

73
Andy
G8YOA / 2E0APR New computers and radios welcomed with open arms!

> Regards
> Robin
> ____
> Robin Birch robin@falstaf.demon.co.uk

580. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990114135853.6004A-100000@Ocean.CAM.ORG>
Source record: 74741

On Thu, 14 Jan 1999, Jim wrote:

>
> PSK wrote in message <36963D2B.21E278FE@exit109.com>...
>
>
> There is another method that I think may give better results, and is a much
> simpler circuit.
>
> Start out with a NN MHz oscillator (NN being a number).
>
> Have a variable frequency oscillator covering the range that you are
> interested in. This oscillator can be controlled by a mechanically variable
> capacitor or by a voltage controlled capacitor. In addition you will need
> another voltage controlled capacitor that has a limited tuning range,
> perhaps tens of KHz.
>
> Take the output of the variable frequency oscillator and feed it into a D
> flip flop (sorry, but can't remember which input---my books on this are at
> home). Feed the NN MHz into the other input of the D flip flop.
>
> Take the Q output of the D flip flop and feed it into a phase detector (as
> in a phase lock loop). The reference signal for the phase detector will be
> NN/NN, in other words 1 MHz.
>
> As you tune the main tuning capacitor in the variable oscillator it will go
> in and out of lock every 1 MHz.
>[stuff deleted]

You'd see the idea of using a type D flip flop as a mixer years ago, but
for some reason you don't see much mention of it in recent years. I can
picture articles that used them, but I'd have to do some searching to dig
them out and so I can't provide info on which pin is fed from what source.

But I think you've complicated something unnecessarily. There was a time
when you'd see PLL's for generating signals every 500kHz or 1Mhz for the
first oscillator in a receiver. I even mentioned one in this thread, when
I mentioned that such a scheme was used in the HRO-500. And you'd see
articles for building such a PLL in the ham magazines.

But they locked to a harmonic of the reference oscillator, without the
need for a mixer between the VCO and the phase detector. You'd tune the
oscillator manually till it was close to lock (often indicated by a beat
note in an audio amplfier fed from the output of the phase comparator),
and then the phase detector would take over. The oscillator would feed

the phase comparator, and the reference oscillator (with plenty of harmonics) would feed the other input. Remember, the simplest phase detectors are harmonic sensitive.

Some of the construction articles mentioned that it was harder to lock the loop the higher the harmonic you were locking to, and also that the lower the reference point the more trouble.

There is nothing particularly different between this and having the VCO go through a programmable divider. One uses harmonics, the other uses division. Functionally, I think there are trade-offs to either scheme.

If you lock to a harmonic, you'll need a dial for the oscillator tuning, and you will be going in and out of lock as you tune through the harmonic points. But since you are manually tuning the oscillator, the voltage variable capacitor does not need to tune very much.

If you use a divider, the VCO should always be in lock, and the number of the division will always tell you the correct frequency. But you'll have to have a VCO that tunes the whole range (though you could use pre-steering off the programmable divider input).

I think the locking to a harmonic of the reference was primarily used because programmable dividers weren't available or were still hard to get. The scheme was used in the HRO-500 and the Galaxy R-530 receiver, perhaps others. One construction article that comes to mind was in QST for January 1972 (with an excerpt in the ARRL Handbook for a nubmer of years). The author had an updated design in Ham Radio about 1978 or so.

Michael VE2BVW

581. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <77lgkj$133$1@plug.news.pipex.net>
Source record: 74742
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Andy Lake wrote in message <369E3885.3307@bt.com>...
>The VCO is an integral part of the synthesizer. By varying a DC voltage
>on it's control line, the VCO frequency is moved to lock the loop of the
>synth. To produce FM (but really, AIUI, it's phase modulation), you can
>apply an audio voltage to the frequency-determining element of the VCO,
>which is usually a variable-capacitance diode ('varicap').

Ok to get from PM to FM all that is required is a 6dB per octave filter.
A simple CR circuit will do the job. Put it in the Audio circuit ;-)

The other way is to use a varicap modulated VCO and a mixer to add the
synthesised frequency.

Gary7SLL

582. 572Bs tubes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: "Aristides Kaponides-(5B4JE)" <arisk@spidernet.com.cy>
Message-ID: <369E4434.7C8BA2DE@spidernet.com.cy>
Source record: 74743
Body handling: Binary attachment payload not displayed: arisk.vcf

I am a radio ham in Cyprus and I need a pair if 572B's tubes for my linear.Please send info prices,and postage.If donated i am willing to pay carriage costs.They dont have to be new.Only working resonably.

[One or more binary attachments are retained only in the source text.]

583. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369e45de.0@news.netwalk.com>
Source record: 74744

Forgot to mention....

The variable oscillator will have to tune from NN MHz upward, and will then lock at every 1 MHz frequency starting at NN MHz.

Jim

584. Re: Measure? Loop loss resistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369e478d.0@news.netwalk.com>
Source record: 74745

AMDX wrote in message <01be3f4b$bbecada0$LocalHost@default>...
>Here's the story;
>
> 5 turn square loop 30" per side 1/4" soft copper tubing.
>38uh, Xl = 445 ohms @ 1.85Mhz Calculated loss R = .43 ohms
>Calculated Q = 1040
>Wanted to design a transformer to drive a fifty ohm cable and
>spectrum analyzer and later radio.

Could you use a differential to single ended amplifier, such as a FET op amp? This could be designed to have a very hi impedance input and a low impedance output.

With lots of gain you could use a resistive network on the output to match to the 50 ohm cable.

I am assuming here that it will be used for receiving only.

Jim
N8EE

585. Re: Ceramic ladder filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990113141316.11780B-100000@Stratus.CAM.ORG>
Source record: 74746

On Wed, 13 Jan 1999, Bill Meara wrote:

> I'm planning on doing some experiments with a 455 Khz IF ladder filter
> using 2 pole ceramic resonators. Any suggestions (ballpark figures)
> on the values for the capacitors?
>
When I saw the subject header, I thought you were asking about cascading ceramic filters. The idea's been on my mind, I'm sure I mentioned the idea here once. This does give a chance to mention an article about this that I came across. In an old article in 73 (December 1977) about the Yaesu FRG-7, reference is made to an "by Ron Risher VK3OM in the March 1977 issue of "Amateur Radio". He describes... an alternate filter, consisting of four cascaded SFD-455-B solid state filters linked by small coupling capacitors". It might be interesting to someone who can get ahold of the magazine, which I assume is Australian.

As for ceramic resonators as filters, I've not seen much about them. When they were a new item, you'd see them used in the emitters of IF amps, across the biasing resistor. The idea being that they'd replace the bypass capacitor, and provide high gain close to the resonators frequency and dropping off away from there. You'd see the same idea using crystals.

But I've nto seen anything about using ceramic resonators in ladder filters. That doesn't mean it hasn't been done, doesn't mean it can't be done, just that I've never seen anything in the ham magazines about it.

I've yet to build a ladder filter, but the articles that detail creating your own all mention the need to evaluate the crystals used and taylor the coupling capacitors to the crystals. So if I was going to try to use the resonators, I'd try the same techniques to evaluate them. In itself it might be interesting, to see what results you get. The articles warn about low-Q crystals, and perhaps you'll find that the resonators aren't suitable. But until you gather the data from evaluating the resonators, you may not be able to figure out the rest.

As mentioned before, there are three articles about ladder filters at the back of W1FB's Design Notebook. They came out of QST, and there have been other articles ont he subject since then, in QST and Commuications Quarterly and Ham Radio.

Hayward says that narrow band filters are easier to do than wider (ie voice) and that wide band are easier as you go up in frequency. I don't know what that says about ceramic resonators at 455KHz. All the home made ladder filters I've seen described are in the HF range.

Michael VE2BVW

586. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369e49e2.0@news.netwalk.com>
Source record: 74747
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Andy Lake wrote in message <369E3885.3307@bt.com>...
>The VCO is an integral part of the synthesizer. By varying a DC voltage
>on it's control line, the VCO frequency is moved to lock the loop of the
>synth. To produce FM (but really, AIUI, it's phase modulation), you can
>apply an audio voltage to the frequency-determining element of the VCO,
>which is usually a variable-capacitance diode ('varicap').

The problem with this is that the VCO frequency is not linear with voltage.
This will result in the deviation being different at different frequencies
in the band. Depending on how much of the voltage controlled capacitor
range is actually used this may or may not be a problem.

A better way would be to have a second voltage variable capacitor _very_
lightly couple to the main one, say with a small fixed capacitor in series.
Then this second voltage variable capacitor can have a fixed bias and the
modulation applied.

Another approach, as the previous post says, is to modulate another fixed
oscillator and mix together.

To get true FM you will have to use a preemphasis circuit on the modulating
audio. There are standard circuits for this in the various books on the
subject.

Jim
N8EE

587. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <z$KXdAAkpkn2Ew9m@falstaf.demon.co.uk>
Source record: 74748
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <77lgkj$133$1@plug.news.pipex.net>, Gary Peach
<xcg34@dial.pipex.com> writes
>
>Andy Lake wrote in message <369E3885.3307@bt.com>...
>>The VCO is an integral part of the synthesizer. By varying a DC voltage
>>on it's control line, the VCO frequency is moved to lock the loop of the
>>synth. To produce FM (but really, AIUI, it's phase modulation), you can
>>apply an audio voltage to the frequency-determining element of the VCO,
>>which is usually a variable-capacitance diode ('varicap').
>
>
>Ok to get from PM to FM all that is required is a 6dB per octave filter.
>A simple CR circuit will do the job. Put it in the Audio circuit ;-)
>
Hate to appear thick but how will this do it?.

Robin
>The other way is to use a varicap modulated VCO and a mixer to add the
>synthesised frequency.
>
>Gary7SLL
>
>

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

588. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369e4b56.0@news.netwalk.com>
Source record: 74749
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I have had trouble with coupling strip lines together, like in a multi section filter. The stop band always seems to fall apart unless I put a grounded shield in between the sections. The sheild is shorter than the strip line so there is a small amount of coupling between the sections.

Why do they act like this, Roy? I have not seen this in very many of the texts on the subject.

Incedently, if you make the shorted line smaller than a quarter wave it can be tuned to frequency with a small variable capacitor.

Jim
N8EE

589. Atlas 350XL problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990114160344.01080.00000635@ng-ca1.aol.com>
Source record: 74750

A good friend for whom I helped with problems with his Atlas 350, now has a problem which has me stumped. I would like to talk with anyone who has been into this rig with hopes I can find a solution. Reply to my E-mail address and I will outline the problem. Thanks, George W3ASE
G345CDE

590. Re: For Sale 6 Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: jls <jls1@inreach.com>
Message-ID: <XRtn2.1460$9X4.614581@news.inreach.com>
Source record: 74751

Well here he is, nothing else to do in life, spamming the ng with his junk amplifier AGAIN.
KB5MER wrote in message <19990114131317.00907.00000048@ng32.aol.com>...
>
>> For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
>> Power input 25 to 75 watts
>> Power output 250 to 650 watts
>> AC Power 115 volts / 15 amps
>> RF Deck 19"X10.5"X14" 60 lbs.
>> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
>> Internal Relay & Low Pass Filter
>> RF Deck can be seen at (inetport.com/~arl)
>> Under - items for sale - RF Amplifiers
>> Price $600.00 + Shipping
>

591. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <99s09BA8nmn2EwdN@falstaf.demon.co.uk>
Source record: 74752
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <369e49e2.0@news.netwalk.com>, Jim <jbolinger@lintek.com>
writes
>To get true FM you will have to use a preemphasis circuit on the modulating
>audio. There are standard circuits for this in the various books on the
>subject.
>
>Jim
>N8EE
>
>
Jim,
1) Thanks for this useful addition. Most of the books that I have only
do CW and SSB. What are good ones for FM type circuits and supporting
discussion of them?.

2) What is the form of the pre-emphasis?.

Rgds

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

592. Re: Measure? Loop loss resistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be400b$fec824e0$b4864d0c@default>
Source record: 74753

>
> Could you use a differential to single ended amplifier, such as a FET op
> amp? This could be designed to have a very hi impedance input and a low
> impedance output.
>
> With lots of gain you could use a resistive network on the output to
match
> to the 50 ohm cable.
>
> I am assuming here that it will be used for receiving only.

Yes there has been some thought about a high input impedance amp.
I might even have to spoil the Q to get decent audio!

593. Re: Ceramic ladder filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: nobody@xxx.com
Message-ID: <369E7505.6EA2CFB1@xxx.com>
Source record: 74754

A 2 resonator ladder filter is definitely possible , even with low Q
resonators,
and maybe a 3 resonator filter , if U accept a 10-12dB filter loss for a 3
resonator
filter. (Low Q means greater Loss and Low order of cascading)

A IF amplifier using one BJT like 2n2222a stuck between two 3 resonator
filters
should be usable with about a few db gain and 10 db NF.

Starting values for a 3 resonator filter could be Zi=Zo= 1 to 2 K and Shunt
capacitors for ladder from 330 pF to 500 Pf.

This should be pretty easy to lash up and test .

If I get time time I will try to test it.
73

Michael Black wrote:

> On Wed, 13 Jan 1999, Bill Meara wrote:
>
> > I'm planning on doing some experiments with a 455 Khz IF ladder filter
> > using 2 pole ceramic resonators. Any suggestions (ballpark figures)
> > on the values for the capacitors?
> >
> When I saw the subject header, I thought you were asking about cascading
> ceramic filters. The idea's been on my mind, I'm sure I mentioned the idea
> here once. This does give a chance to mention an article about this that
> I came across. In an old article in 73 (December 1977) about the Yaesu
> FRG-7, reference is made to an "by Ron Risher VK3OM in the March 1977
> issue of "Amateur Radio". He describes... an alternate filter, consisting
> of four cascaded SFD-455-B solid state filters linked by small coupling
> capacitors". It might be interesting to someone who can get ahold of the
> magazine, which I assume is Australian.
>
> As for ceramic resonators as filters, I've not seen much about them. When
> they were a new item, you'd see them used in the emitters of IF amps,
> across the biasing resistor. The idea being that they'd replace the
> bypass capacitor, and provide high gain close to the resonators frequency
> and dropping off away from there. You'd see the same idea using crystals.
>
> But I've nto seen anything about using ceramic resonators in ladder
> filters. That doesn't mean it hasn't been done, doesn't mean it can't be
> done, just that I've never seen anything in the ham magazines about it.
>

> I've yet to build a ladder filter, but the articles that detail creating
> your own all mention the need to evaluate the crystals used and taylor the
> coupling capacitors to the crystals. So if I was going to try to use the
> resonators, I'd try the same techniques to evaluate them. In itself it
> might be interesting, to see what results you get. The articles warn
> about low-Q crystals, and perhaps you'll find that the resonators aren't
> suitable. But until you gather the data from evaluating the resonators,
> you may not be able to figure out the rest.
>
> As mentioned before, there are three articles about ladder filters at the
> back of W1FB's Design Notebook. They came out of QST, and there have been
> other articles ont he subject since then, in QST and Commuications
> Quarterly and Ham Radio.
>
> Hayward says that narrow band filters are easier to do than wider (ie
> voice) and that wide band are easier as you go up in frequency. I don't
> know what that says about ceramic resonators at 455KHz. All the home made
> ladder filters I've seen described are in the HF range.
>
> Michael VE2BVW

594. 6 meter amp wanted (Homebrew)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: "Dr. Dee Dawgy Dawgerton" <*****@ix.netcom.com>
Message-ID: <77m421$7it@dfw-ixnews6.ix.netcom.com>
Source record: 74755
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I'm looking for a home built 6 meter amp. I am willing to pay $600 for the right one. Does anyone know where I can find one?

Dr.. Dee

595. Re: For Sale 6 Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <369e79fa.4101507@news.online.no>
Source record: 74756

all the unneccessary comments are just as much SPAM, why not just delete
it UNREAD, or do you really enjoy complaining?

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

596. Re: For Sale 6 Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: "Rexford T. Hound" <*****@ix.netcom.com>
Message-ID: <77m0m2$59g@dfw-ixnews6.ix.netcom.com>
Source record: 74757

Well, as much as I hate to see the same add over and over again, we need to give him a little latitude since he has cut back in the amount of postings and seems to be following reasonable posting practices. Let's pat him on the ass and give him a hearty, "That a boy, you did good".

With that being said, I like the next guy feel that he has as much chance selling the damn thing as a Chinaman has intentions of not including monosodium glutamate in the food they sell us. He knows he's just pissing in the wind, It's simply not going to happen. He will carry the damn thing into the after life and probably try to sell it to Gandhi or Lucifer. Hey what the hell, it sounds about as reasonable as him selling it.

He has a dream (That sounds familiar) that he needs to pursue. He will wake up one day and see that it was nothing more than a waste of his time and ours. At least he will know that we were right.

My current bid stands at $0.32 a pound. I'm being generous since this is far above fair scrap value.

--
From the paws of,
Rexford T. Hound

..
jls wrote in message ...
>Well here he is, nothing else to do in life, spamming the ng with his junk
>amplifier AGAIN.

597. Re: This place needs a joke / No Shoes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: "Rexford T. Hound" <*****@ix.netcom.com>
Message-ID: <77m22a$647@dfw-ixnews6.ix.netcom.com>
Source record: 74758

Seems that he's a bar-room philosopher too. It wasn't enough that he's playing (or playing with) the Court Gesture and thinking we're all fools, he really believes that he's doing us a favor by trying to sell us this amp.

My son, it's time for you to purge your ass and drink a pint of magnesium citrate and blow a load and you'll feel better in the morning. The first indications of constipation is when you start believing the shit you spout out your mouth.

--
From the paws of,
Rexford T. Hound

..
KB5MER wrote in message <19990114191242.04058.00000849@ng-fu1.aol.com>...
>
>A young blonde was on vacation in the depths of Louisiana. She wanted
>a pair of genuine alligator shoes in the worst way, but was very
>reluctant to pay the high prices the local vendors were asking.
>

598. Re: For Sale 6 Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <369E941E.54B2@megsinet.net>
Source record: 74759

J.-M. Noeding wrote:
> all the unneccessary comments are just as much SPAM, why not just delete
> it UNREAD, or do you really enjoy complaining?

It's true that newsgroup discussion of it is useless. But "just hit delete"
is exactly what spammers want you to do, so they can continue to spam
unmolested.

For those interested, the address to complain to is abuse@aol.NET if you're
not on AOL, or tosspam@aol.com if you are using an AOL account.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

599. FS\Heath SB-102

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: "P.Ness" <sex@horney.com>
Message-ID: <77m6p1$r1j$1@news1.alltel.net>
Source record: 74760

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=56890075

600. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: munsch@ibm.net
Message-ID: <369ec55c.0@news1.ibm.net>
Source record: 74761
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I've forgotten. What is the frequency readout method on the 8640A? I guess
I've always used the B.
Crazy George

Simon Cox wrote in message <01be3dab$07c1dcc0$36eeb094@simoncox>...
>I didn't want to mention that as he'd taken the trouble to reply
>but now that you mention it no it isn't.
>
>Simon, G1DRY
>
>"Anthony R. Gold" <tgold@microvest.demon.co.uk> wrote in article
><19990111.2115.9900193snz@microvest.demon.co.uk>...
>> On Monday, in article <369A5EBA.369C@boi.hp.com>
>> cj@boi.hp.com "cj" wrote:
>>
>> > Built in freq counter,
>>
>> That's not in the 8640A.
>>
>> Regards,
>> --
>> Tony - G3SKR / W2TG email: tgold@panix.com
>>

601. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <77mebp$hv6$1@news.onr.com>
Source record: 74762
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hell yes you can make a microstrip parallel tank equivalent !...just
short a quarter-wave microstrip section on one end and drive the other.

In contrast...a series resonant equivalent is the just the opposite..
open on one end and drive the other end of the 1/4 wave line and
it will look like a SHORT at the driven end. This trick is used for
amplifier bypassing since caps can have a series resonant below
the frequency of interest. Frequency-sensitive bypassing of course.

As you might have guessed...the 1/4 wave section acts an impedance
reciprocator....1/2 way around on your Smith chart give the inverse
impedance.

--
-->Remove the x's from my email address before using <--
Bert Douglas wrote in message ...
>Hi Net Folks,
>
>Thanks for all the good information recently. I am playing around with
>microstrip, and I am wondering if it is possible to make a parallel
resonant
>"tank" circuit with microstrip. Every thing I try seems to be series
>resonant.
>
>Thanks,
>Bert Douglas
>
>

602. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <369EC714.99BE6DAA@teleport.com>
Source record: 74763
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I don't know, unless the lines are too close together. I've got
several pages of notes on the topic from a Les Besser course I took,
but haven't yet actually made a coupled-line filter. I'm sure there
are folks reading this who have experience with these and could answer
your question.

Roy Lewallen, W7EL

Jim wrote:
>
> I have had trouble with coupling strip lines together, like in a multi
> section filter. The stop band always seems to fall apart unless I put a
> grounded shield in between the sections. The sheild is shorter than the
> strip line so there is a small amount of coupling between the sections.
>
> Why do they act like this, Roy? I have not seen this in very many of the
> texts on the subject.
>
> Incedently, if you make the shorted line smaller than a quarter wave it can
> be tuned to frequency with a small variable capacitor.
>
> Jim
> N8EE

603. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-14 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <6rqiELCqPln2EwsL@jmwa.demon.co.uk>
Source record: 74764
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<36a108c9.4702381@netnews.worldnet.att.net>, James Meyer
<notjimbob@worldnet.att.net> wrote:
>What have you tried so far and why do you think you always
>come up series instead of parallel?

An isolated tuned circuit cannot be unabiguously described as either
series or parallel. It depends on how you couple to it.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

604. From KB5MER/If you tag - I post

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990114193516.04068.00000908@ng-fu1.aol.com>
Source record: 74667

If you tag my posting, I will post two (2)
times to give you something to do.
HAVE A BALL - I AM

A young blonde was on vacation in the depths of Louisiana. She wanted a pair of genuine alligator shoes in the worst way, but was very reluctant to pay the high prices the local vendors were asking.

After becoming very frustrated with the "no haggle" attitude of one of the shopkeepers, the blonde shouted, "Maybe I'll just go out and catch my own alligator so I can get a pair of shoes at a reasonable price!"

The shopkeeper said, "By all means, be my guest. Maybe you'll luck out and catch yourself a big one!"

Determined, the blonde turned and headed for the swamps, set on catching herself an alligator.

Later in the day, the shopkeeper is driving home, when he spots the young woman standing waist deep in the water, shotgun in hand. Just then, he sees a huge 9 foot alligator swimming quickly toward her. She takes aim, kills the creature and with a great deal of effort hauls it on to the swamp bank. Laying nearby were several more of the dead creatures.

The shopkeeper watches in amazement. Just then the blonde flips the alligator on it's back, and frustrated, shouts, "Damn, this one isn't wearing any shoes either!"

605. For Sale 6 Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990114193718.04068.00000910@ng-fu1.aol.com>
Source record: 74668

> For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
> Power input 25 to 75 watts
> Power output 250 to 650 watts
> AC Power 115 volts / 15 amps
> RF Deck 19"X10.5"X14" 60 lbs.
> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
> Internal Relay & Low Pass Filter
> RF Deck can be seen at (inetport.com/~arl)
> Under - items for sale - RF Amplifiers
> Price $600.00 + Shipping

606. No Shoes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990114193924.04068.00000914@ng-fu1.aol.com>
Source record: 74669

> For Sale: 6 Meter G.G. 4-400 650 watt Amplifier
> Power input 25 to 75 watts
> Power output 250 to 650 watts
> AC Power 115 volts / 15 amps
> RF Deck 19"X10.5"X14" 60 lbs.
> Cabinet- Bud 22"X12.25"X14.75" 25 lbs.
> Internal Relay & Low Pass Filter
> RF Deck can be seen at (inetport.com/~arl)
> Under - items for sale - RF Amplifiers
> Price $600.00 + Shipping

607. Anyone built Operating Impedance Bridge in ARRL Handbook/QST?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: nx7u@primenet.com
Message-ID: <369ec4ed.854633@news.primenet.com>
Source record: 74670
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

```
------------
Scott Townley
nx7u@primenet.com
------------
Collector of:
Stoddard Aircraft EMI/RFI receivers and accessories
Big Parts for that Big Linear Amp
70's era RF test equipment HP/GR/Tek
Radio-related technical reference material 1940+
...anything else that will keep me off the streets at night
```

608. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <77mdgm$j3n$2@news4.svr.pol.co.uk>
Source record: 74671
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Try the RSGB book list Robin. or your back issues of radcom, or the CRAC
library which I believe is still held at Burt Hammets qth in Laddock

=== Mike W mike@corn2.freeserve.co.uk ===
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Robin Birch wrote in message <99s09BA8nmn2EwdN@falstaf.demon.co.uk>...
>In article <369e49e2.0@news.netwalk.com>, Jim <jbolinger@lintek.com>
>writes
>>To get true FM you will have to use a preemphasis circuit on the
modulating
>>audio. There are standard circuits for this in the various books on the
>>subject.
>>
>>Jim
>>N8EE
>>
>>
>Jim,
>1) Thanks for this useful addition. Most of the books that I have only
>do CW and SSB. What are good ones for FM type circuits and supporting
>discussion of them?.
>
>2) What is the form of the pre-emphasis?.
>
>Rgds
>
>Robin
>____
>Robin Birch robin@falstaf.demon.co.uk
>
>M1ASU/2E0ARJ Old computers and radios always welcome
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

609. radiosonde conversion power supply? HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: EC Therapy <docshok@sunlink.net>
Message-ID: <369ED69A.2755F054@sunlink.net>
Source record: 74672

I have the transmitter for the radiosonde that was used by the US GOVT in the 70's. The number is T-435A for this part. I do not have the battery, but would like to use the transmitter for other things... Does anyone know the voltage for the wires? There is a red, black, White, grey, and orange wire... the voltages in the manual are 110v, 6 v, and 1.5 volts. If anyone could give me a clue as to which ones are which, I would appreciate it!

Paul

610. Re: Ceramic ladder filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Doug Dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <Hgy6eDAzixn2EwL1@ddwyer.demon.co.uk>
Source record: 74673

In article <369E7505.6EA2CFB1@xxx.com>, nobody@xxx.com writes
>A 2 resonator ladder filter is definitely possible , even with low Q
>resonators,
>and maybe a 3 resonator filter , if U accept a 10-12dB filter loss for a 3
>resonator
>filter. (Low Q means greater Loss and Low order of cascading)
>
>A IF amplifier using one BJT like 2n2222a stuck between two 3 resonator
>filters
>should be usable with about a few db gain and 10 db NF.
>
>Starting values for a 3 resonator filter could be Zi=Zo= 1 to 2 K and Shunt
>capacitors for ladder from 330 pF to 500 Pf.
>
>This should be pretty easy to lash up and test .
>
>If I get time time I will try to test it.
>73
>
>Michael Black wrote:
>
>> On Wed, 13 Jan 1999, Bill Meara wrote:
>>
>> > I'm planning on doing some experiments with a 455 Khz IF ladder filter
>> > using 2 pole ceramic resonators. Any suggestions (ballpark figures)
>> > on the values for the capacitors?
>> >
>> When I saw the subject header, I thought you were asking about cascading
>> ceramic filters. The idea's been on my mind, I'm sure I mentioned the idea
>> here once. This does give a chance to mention an article about this that
>> I came across. In an old article in 73 (December 1977) about the Yaesu
>> FRG-7, reference is made to an "by Ron Risher VK3OM in the March 1977
>> issue of "Amateur Radio". He describes... an alternate filter, consisting
>> of four cascaded SFD-455-B solid state filters linked by small coupling
>> capacitors". It might be interesting to someone who can get ahold of the
>> magazine, which I assume is Australian.
>>
>> As for ceramic resonators as filters, I've not seen much about them. When
>> they were a new item, you'd see them used in the emitters of IF amps,
>> across the biasing resistor. The idea being that they'd replace the
>> bypass capacitor, and provide high gain close to the resonators frequency
>> and dropping off away from there. You'd see the same idea using crystals.
>>
>> But I've nto seen anything about using ceramic resonators in ladder

>> filters. That doesn't mean it hasn't been done, doesn't mean it can't be
>> done, just that I've never seen anything in the ham magazines about it.
>>
>> I've yet to build a ladder filter, but the articles that detail creating
>> your own all mention the need to evaluate the crystals used and taylor the
>> coupling capacitors to the crystals. So if I was going to try to use the
>> resonators, I'd try the same techniques to evaluate them. In itself it
>> might be interesting, to see what results you get. The articles warn
>> about low-Q crystals, and perhaps you'll find that the resonators aren't
>> suitable. But until you gather the data from evaluating the resonators,
>> you may not be able to figure out the rest.
>>
>> As mentioned before, there are three articles about ladder filters at the
>> back of W1FB's Design Notebook. They came out of QST, and there have been
>> other articles ont he subject since then, in QST and Commuications
>> Quarterly and Ham Radio.
>>
>> Hayward says that narrow band filters are easier to do than wider (ie
>> voice) and that wide band are easier as you go up in frequency. I don't
>> know what that says about ceramic resonators at 455KHz. All the home made
>> ladder filters I've seen described are in the HF range.
>>
>> Michael VE2BVW
>
>
>
Depends on the bandwidth you want.
Two terminal Ceramic resonators have significant shunt capacitance so 3
terminal are better, if stages are separated by isolating BJT then
gaussian type response is achieved with good transient response. 3
Terminal crystals (monolithic duals) are available cheaply that will do
the same at 10.7MHZ and above.
--
Doug Dwyer

611. Inside R/S DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: xhduff@ica.net
Message-ID: <369f10ec.0@lightning.ica.net>
Source record: 74674

Anyone ever had a look inside the Radio Shack
DSP unit ?
I'm wondering what processor it uses and whether
is has the code embedded into the processor or
it has an external ROM ?
I was thinking of picking up a used one to
experiment with.
Anyone?

Please DO NOT AUTOreply
Remove the 'x' in my address to reply.

Thanks, Hugh VA3TO

612. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <77nbvp$d4c$1@plug.news.pipex.net>
Source record: 74675
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Robin Birch wrote in message ...
>Gary Peach writes:
>>Andy Lake wrote:
>>>The VCO is an integral part of the synthesizer. By varying a DC voltage
>>>on it's control line, the VCO frequency is moved to lock the loop of the
>>>synth. To produce FM (but really, AIUI, it's phase modulation), you can
>>>apply an audio voltage to the frequency-determining element of the VCO,
>>>which is usually a variable-capacitance diode ('varicap').
>>
>>Ok to get from PM to FM all that is required is a 6dB per octave filter.
>>A simple CR circuit will do the job. Put it in the Audio circuit ;-)
>>
>Hate to appear thick but how will this do it?.

The instantaneous frequency of FM and PM is given by:

FM f(s) = Cos (wc t + k Integral (f(t)) dt)

PM f(s) = Cos (wc t + k f(t))

respectively.

If you examine the equations you will see that they are very similar.

fc is the frequency of the carrier
wc is the angular frequency 2 PI fc
wc
wc t is the carrier amplitude at an instant in time t
k is the modulation Index
f(t) is the amplitude of the modulating waveform at an instant in time.

The mean frequency over a time period for a PM signal is the carrier
frequency.
i.e. the mean frequency deviation is zero. (thus Doppler can still be
sensibly extracted from a PM signal.)
The angular deviation is less than 2 Pi (360 degrees).
The ideal deviation for best S/N is one Radian. see Weber tests

For an FM signal the mean frequency over a time period is a function of the
applied modulation amplitude and waveform and the carrier frequency.

Upon inspection it can be seen that the difference between the two functions
is the integral of the instantaneous values of the modulating audio
waveform.

A simple integrator can be formed from a resistor and capacitor.
integral (f(t) dt)

This integrator is also described as a 6 dB per octave filter.

By applying this Filter to the modulating waveform before it is impressed upon the Phase Modulating point of the modulator converts the resultant output carrier to a FM signal.

QED

I hope that explains the underlying theory to your satisfaction.

There is life after the RAE ;-)

Gary7SLL

613. Re: 6 meter amp wanted (Homebrew)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: "Rexford T. Hound" <*****@ix.netcom.com>
Message-ID: <77ng3f$r6l@dfw-ixnews11.ix.netcom.com>
Source record: 74676
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Your right, I wanted to see if KB5MER is as simple as he appears to be. You shouldn't have let the cat out of the bag....

--
From the paws of,
Rexford T. Hound

..
Nick wrote in message <36a12db7.3200733@news.dial.pipex.com>...
>On Thu, 14 Jan 1999 20:00:30 -0500, "Dr. Dee Dawgy Dawgerton"
><*****@ix.netcom.com> wrote:
>
>>Does anyone know where I can find one?
>>
>>
>> Dr.. Dee
>>
>
>Your headers give you away Rexford.
>
>Nick

614. For Sale: test gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: mark beutler <mbeutler@tds.net>
Message-ID: <369F5DBA.8544B9D8@tds.net>
Source record: 74677

For Sale:

Fluke 8020A 4 1/2 digit DVM. (still the most accurate handheld they make) Measures AC & DC volts, amps (2 amps max); ohms, frequency (to about 200Khz, I believe), and db.
VG condition, case, leads, no manual. $200 OBO.

Valhalla Scientific 2010 digital power analyzer. Measures volts, amps, power from DC to 40Khz. Always shows true rms watts + either volts or amps. Will handle 300V and 20A max to 6000watts max from DC to 10KHz. (2 amps max from 10Khz-20Khz for 600watts max) Calibration verified Sept 97 by lab. Primarily intended for measuring true rms power usage on AC equipment. Great for finding out what the various things plugged into the wall Really use in the way of power. Have manual and homebrew AC test jig. $600 OBO.

--
-
Regards,
mark beutler
-

615. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Dan Newby <newbyd@ipix.com>
Message-ID: <369F7522.16A070CE@ipix.com>
Source record: 74678

I have built several amps over the years, the amp I use now is one I built in 1987. It uses a 4-1000. The 3-1000 is not really a good substitute. It will work when just plugged in, but with reduced efficiency and higher input SWR, if you have built your amp with tuned input and adjusted the tank circuit for the best efficiency. This is the same going the other direction also, from the 3-1000 to the 4-1000. The intrerelectrode capacitances are not the same.
A 4-1000 CAN easily work on 10m with or without a roller inductor. You need to follow good engineering practices, keep all connections that are in tuned circuits to the minimum length possible. The efficiency of my amp ranges from 52% on 10m, to a high of 72% on 40m. Now, the efficiency is less on 10m, because of all the extra stuff in the tank to allow it to work on the other bands, but this is the case with all multiband amps, regardless of the tube used. With less interelectrode capacitance, the 3-1000 may end up with slightly higher efficiency on 10m. But the quality of construction, parts used(especially size), layout, etc., will far outweigh the difference in the two tubes.
Dan
WD4LUR

Dave Heil wrote:

> TS950SDX wrote:
> >
> > 4-1000 3-1000
> >
> > ANYONE KNOW MAX PLATE VOLTAGE ...DRIVE...OUTPUT..
> >
> > FOR THESE TWO TUBES HAVE BOTH AND TRING TO DECIDE
> >
> > WHICH ONE TO HOME BREW
> >
> > WHICH WOULD BE THE BEST AT 4500 VDC WITH 150 DRIVE ?
> >
> > INTO A DUMMYLOAD !!!
> > JOE
>
> If you want to build an amp which will cover 160-10m and plan to use
> switched inductance, pick the 3-1000. The 4-1000 has too much
> interelectrode capacitance to allow hitting 10m with all of the lead
> length associated with the tank coils. If you plan to use a roller
> inductor, it makes little difference.
>
> Dave K8MN

616. Atlas 350XL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990115120435.14776.00000330@ng147.aol.com>
Source record: 74679

Does anyone know if the people who manufactured the Atlas years ago are still in business.....I think I recall a company in CA (Oceanside?) that was building another Atlas product. Any information will be appreciated. Respond to my E-mail address. Thanks, W3ASE. George
G345CDE

617. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <77o3jj$o6b$1@nnrp1.dejanews.com>
Source record: 74680

In article <77kark$ghb@journal.concentric.net>,
"Bill Bob" <billbob@mns.com> wrote:
> When is it illegal to buy/sell ham radio equipement?

Well, there is the matter of manufacturing for sale more than one each of a type of HF-capable amplifier per year. I believe but am not positive that the particular rule for hams applies to everything below 2 meters. And while the amps J.R. makes look different, whether they ARE different electrically is subject to interpretation by the FCC.

So his buying and selling may be subject to regulation by the same gang he took to lunch last Sunday. Frankly, it's not my problem. The more amps he builds, the more toys there are in the world.

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

618. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369f85be.0@news.netwalk.com>
Source record: 74681
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Robin Birch wrote in message <99s09BA8nmn2EwdN@falstaf.demon.co.uk>...
>Jim,
>1) Thanks for this useful addition. Most of the books that I have only
>do CW and SSB. What are good ones for FM type circuits and supporting
>discussion of them?.
>

Don't mean to repeat myself, but I will anyway ;-) Try the ARRL literature. In the UK the equivalent would be the RSGB. If you want to get deeper into the subject go to a good bookstore and look in their technical book section.

>2) What is the form of the pre-emphasis?.
>

Read the posts by David Peach. He describes it better than I can without looking it up. It is essentially a 6 dB per octave RC filter.

Jim

619. Re: Measure? Loop loss resistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <369f86a9.0@news.netwalk.com>
Source record: 74682

AMDX wrote in message <01be400b$fec824e0$b4864d0c@default>...
>
>
>>
>> Could you use a differential to single ended amplifier, such as a FET op
>> amp? This could be designed to have a very hi impedance input and a low
>> impedance output.
>>
>> With lots of gain you could use a resistive network on the output to
>match
>> to the 50 ohm cable.
>>
>> I am assuming here that it will be used for receiving only.
>
> Yes there has been some thought about a high input impedance amp.
>I might even have to spoil the Q to get decent audio!

I was also wondering, with a transformer, if the loss in the transformer
would be a major problem since it may be bigger than the radiation
resistance of the loop. An amplifier would overcome this.

I have been considering experimenting with an amplified loop myself, but
have not obtained enough roundtuits.

Jim
N8EE

620. Re: 3-1000Z VS 4-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: "William P. Osborne" <wosborne@utdallas.edu>
Message-ID: <369F88F1.6A7E220B@utdallas.edu>
Source record: 74683

Can one still buy a 3-1000Z?

Dan Newby wrote:
>
> I have built several amps over the years, the amp I use now is one I
> built in 1987. It uses a 4-1000. The 3-1000 is not really a good
> substitute. It will work when just plugged in, but with reduced
> efficiency and higher input SWR, if you have built your amp with tuned
> input and adjusted the tank circuit for the best efficiency. This is
> the same going the other direction also, from the 3-1000 to the 4-1000.
> The intrerelectrode capacitances are not the same.
> A 4-1000 CAN easily work on 10m with or without a roller inductor. You
> need to follow good engineering practices, keep all connections that are
> in tuned circuits to the minimum length possible. The efficiency of my
> amp ranges from 52% on 10m, to a high of 72% on 40m. Now, the
> efficiency is less on 10m, because of all the extra stuff in the tank to
> allow it to work on the other bands, but this is the case with all
> multiband amps, regardless of the tube used. With less interelectrode
> capacitance, the 3-1000 may end up with slightly higher efficiency on
> 10m. But the quality of construction, parts used(especially size),
> layout, etc., will far outweigh the difference in the two tubes.
> Dan
> WD4LUR
>
> Dave Heil wrote:
>
> > TS950SDX wrote:
> > >
> > > 4-1000 3-1000
> > >
> > > ANYONE KNOW MAX PLATE VOLTAGE ...DRIVE...OUTPUT..
> > >
> > > FOR THESE TWO TUBES HAVE BOTH AND TRING TO DECIDE
> > >
> > > WHICH ONE TO HOME BREW
> > >
> > > WHICH WOULD BE THE BEST AT 4500 VDC WITH 150 DRIVE ?
> > >
> > > INTO A DUMMYLOAD !!!
> > > JOE
> >
> > If you want to build an amp which will cover 160-10m and plan to use
> > switched inductance, pick the 3-1000. The 4-1000 has too much
> > interelectrode capacitance to allow hitting 10m with all of the lead

> > length associated with the tank coils. If you plan to use a roller
> > inductor, it makes little difference.
> >
> > Dave K8MN

--
William P Osborne, PhD & PE
Dean Erik Jonnson School
University of Texas-Dallas
PO BOX 830688
Richardson, TX 75083-0688
Voice 972-883-2974
Fax 972-883-2813
email wosborne@utdallas.edu

621. FS: TUBES mostly tx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Dee Almquist <w4pnt@rica.net>
Message-ID: <3UMn2.208$aa1.337@newsfeed.slurp.net>
Source record: 74684
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Hello Fellow Boatanchorites
Have few tubes surplus to my needs. Dee says "we dont need them, sell or trade them off". So here goes...

1- 814 RCA, looks NOS, chks new, $15.
1- 843 RCA, NOS, chks new......$20.
4- 872A GE, w/ orig paperwork, NOS.....$15.ea
4- 4-125A 3RCAs, 1Amperex, NOS.....$40.ea
7- 8008 RCA pulls from TV tx in orig boxes...$35 for all
"many" 6080s US tung. & others, NOS......$3.ea
3- 4CX300 Jan/ Eimac, NOS, orig boxes.....$50.ea
"many" 6BG6, G, GC all US made, NOS......$4.ea
1- 4CX250B Svetlana, NIB w/ fact warr, ...$80.
6- 6GJ5 RCA, Sylv, GE, NOS, Dee uses these in his T4XC with no modif, just plug & play w/ full output+, lots less money, $10.pr
1- 4-65/8165 US made, lo hrs pull, chk good.....$20.
2- 6528 Chatham/ Jan, NOS, same as 6336A but higher gm, carbon plts.....$60.pr
1- 8643/A02 Amperex, NOS, VHF dual tet. like 5894, 60w, 7.25v fil.....$10.

All the above + shipping/ packing. We take Visa / MC in fact we prefer this to method of pmt.

73
Patty
Patty Almquist, 534 W. Main St. Waynesboro, Va. 22980
(540)249-3161

622. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <369FA375.BBD7FF41@teleport.com>
Source record: 74685
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote:
>
> An isolated tuned circuit cannot be unabiguously described as either
> series or parallel. It depends on how you couple to it.

That's an interesting thought, and not one I've encountered before. A parallel LC will of course have a very high Z at one frequency and lower Z at others (when measured directly across the parallel combination), and a series LC circuit a very low Z at one frequency and high Z at others (when measured directly across the series combination). So how would I couple to a parallel LC to give the characteristics of a series LC, i.e., low Z at resonance and higher Z at other frequencies, or to a series LC to get a high Z at resonance?

Roy Lewallen, W7EL

623. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <77obhjdnd1@plug.news.pipex.net>
Source record: 74686
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Jim wrote
>
>Read the posts by David Peach. He describes it better than I can without
>looking it up. It is essentially a 6 dB per octave RC filter.

Handle here is Gary OM, or should I be pleased to learn that I have a
relative in this NG ;-)

Gary7SLL

624. WTD: IF-10B Info/Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <369FB26D.D9077AB1@starc.org>
Source record: 74687
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi,

I've gotten a bunch of info on the IF-10B, and am near the point of building one. The interface also requires an eprom (MBM2732A-30). If you have an IF-10B, I'd like to make arrangements to copy the code from your existing eprom so I can create new ones. Please send e-mail if you can help.

Thanks,

--Tom
KB1CGA

625. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: xhduff@ica.net
Message-ID: <369fb877.0@lightning.ica.net>
Source record: 74688
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

You would modulate a varactor that is lightly coupled
in parallel to the tuned circuit of a VCO.
Add some RF amplification...voila' ...FM TX !
The modulator/amplifier should have some limiting along the
way to prevent overdeviation.
Hugh Duff VA3TO Toronto

Robin Birch <robin@falstaf.demon.co.uk> wrote:
>Dear All,
>I want to build a simple FM Transceiver. The RX is no problem but the
>TX is posing a few headaches, largely due to my lack of knowledge about
>FM.
>I want to use a synthesiser or similar as a VFO. I was intending to use
>one of the commonly available ones intended for cellular phone type
>applications. They appear cheap and relatively easy to use. How do I
>FM modulate a constant frequency from a synthesiser.

>Most of these require a VCO to be connected alongside them. Is there
>anything that I can do by modulating the VCO? or do I put some form of
>phase modulation in the output of the synthesiser/VCO combo?.

626. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <369f905c.5426032@news.online.no>
Source record: 74689
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Fri, 15 Jan 1999 13:09:16 -0500, "Jim" <jbolinger@lintek.com> wrote:

>
>Robin Birch wrote in message <99s09BA8nmn2EwdN@falstaf.demon.co.uk>...
>>Jim,
>>1) Thanks for this useful addition. Most of the books that I have only
>>do CW and SSB. What are good ones for FM type circuits and supporting
>>discussion of them?.
>>
>
>Don't mean to repeat myself, but I will anyway ;-) Try the ARRL literature.
>In the UK the equivalent would be the RSGB. If you want to get deeper into
>the subject go to a good bookstore and look in their technical book
>section.
>

Jim

Indeed a very good idea to buy one of those readily available books
instead of relaying what's written word for word

Jan-Martin

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

627. Re: 6 meter amp wanted (Homebrew)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Robert Kubichek <bobn9lvu@lakefield.net>
Message-ID: <369FC3F1.85496575@lakefield.net>
Source record: 74690
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

You also can get a Dentron Clipperton V 2 meter amp that tunes to
6 meters for less used. I have one that I picked up for $400.
This amp uses a 4cx250b and is well built!

"Dr. Dee Dawgy Dawgerton" wrote:
>
> I'm looking for a home built 6 meter amp. I am willing to pay $600 for the
> right one. Does anyone know where I can find one?
>
> Dr.. Dee

628. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <369FCD0A.B3F09010@home.com>
Source record: 74691
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

It could be that the coupling is wrong or maybe your topology is such that
resonator #1 couples directly to resonator #3, etc. For instance, arranging
1/4 wave resonators in an interdigital pattern gives a more symmetrical
stopband performance compared to a combline pattern (all grounds at
one end). If you're using 1/2 wave resonators you spread them out in a line.

Zverev gives filter design information in terms of the coupling between
resonators. You can empirically generate curves of the coupling vs.
spacing using 2 of your resonators with a few iterations.

Don

Roy Lewallen wrote:
>
> I don't know, unless the lines are too close together. I've got
> several pages of notes on the topic from a Les Besser course I took,
> but haven't yet actually made a coupled-line filter. I'm sure there
> are folks reading this who have experience with these and could answer
> your question.
>
> Roy Lewallen, W7EL
>
> Jim wrote:
> >
> > I have had trouble with coupling strip lines together, like in a multi
> > section filter. The stop band always seems to fall apart unless I put a
> > grounded shield in between the sections. The sheild is shorter than the
> > strip line so there is a small amount of coupling between the sections.
> >
> > Why do they act like this, Roy? I have not seen this in very many of the
> > texts on the subject.
> >
> > Incedently, if you make the shorted line smaller than a quarter wave it can
> > be tuned to frequency with a small variable capacitor.
> >
> > Jim
> > N8EE

629. Need a Pair of MRF248's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01be40e2$741e9360$9b8492d0@Bit-Net.bit-net.com>
Source record: 74692
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

Anyone have a matched pair of MRF248's?
Or, recommendations of a source, please?
Need to repair a RF Concepts 217 VHF amp.
Thanks! & 73,
~~~
���
\ ~ / .... DavidC K1YP@qsl.net
~~~

630. Re: Q:Homebrew Wadley Loop HF RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: "dennis W. Ostrowski" <dwostrowski@lucent.com>
Message-ID: <369FE816.C454A5B2@lucent.com>
Source record: 74693

Jim wrote:
>
> dennis W. Ostrowski wrote in message <369AA5F9.AD83577E@lucent.com>...
> >
> > Using a square wave, wouldn't you only get the ODD harmonics?
> >
> >Dennis
> >
> >#12
>
> That is true, you will get only odd harmonics with a _square_ wave, but if
> you make the pulse width smaller you no longer have a square wave and you
> will (at zero pulse width) get all of the harmonics.
>
> Jim

Sounds cool!

I had already done something similar to run very low power FM radio commercials on a lot of different channels simultaneously, like house for sale, open house, etc...where someone driving by would hear it and maybe stop in, but I couldn't cover every frequency, just every other one!

Thanks again,

Dennis

#12

631. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <369FFD6C.89C7F770@teleport.com>
Source record: 74694
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Graeme Zimmer wrote:
>
> >> An isolated tuned circuit cannot be unabiguously described
> >> as either series or parallel. It depends on how you couple to it.
>
> >That's an interesting thought, and not one I've encountered before. A
> >parallel LC will of course have a very high Z at one frequency and
> >lower Z at others (when measured directly across the parallel
> >combination), and a series LC circuit a very low Z at one frequency
> >and high Z at others (when measured directly across the series
> >combination). So how would I couple to a parallel LC to give the
> >characteristics of a series LC, i.e., low Z at resonance and higher Z
> >at other frequencies, or to a series LC to get a high Z at resonance?
>
> Roy, I think the point was that a Series tuned circuit and a Parallel
> tuned circuit are exactly the same thing, just redrawn.
>
> The trick is how you couple into the circuit.
>
> If you break the "series" circuit, you have a low impedance point,
> while if you go "across" the L (or the C, same thing) you get high
> impedance.
>
> If you "tap" the L or the C you can get any intermediate impedance.
>
> Or to put it another way, at resonance, a Tuned Circuit has
> large circulating currents (which implies low impedance)
> and at the same time, high voltages (which implies high impedance).
>
> It depends where you measure it.
>
> A strip line is no different, just harder to visualise.
> It still has current and voltage nodes.
>
> Make any sense ? ..... Zim

No, but I'm kind of slow that way. I'm sure it made more sense to the other readers. I'm afraid I'll just plod along with my "in the box" thinking. Thanks for the explanation.

Roy Lewallen, W7EL

632. Re: Need a Pair of MRF248's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Sam <sdsnyder@prodigy.net>
Message-ID: <36A00CFF.7EAD@prodigy.net>
Source record: 74695
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.swap

DavidC wrote:
>
> Anyone have a matched pair of MRF248's?
> Or, recommendations of a source, please?
> Need to repair a RF Concepts 217 VHF amp.
> Thanks! & 73,
> ~~~
> ï¿½ï¿½ï¿½
> \ ~ / .... DavidC K1YP@qsl.net

http://www.rfparts.com/

633. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <zMGv+LCWt8n2Ew+g@jmwa.demon.co.uk>
Source record: 74696
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<369FA375.BBD7FF41@teleport.com>, Roy Lewallen <w7el@teleport.com>
wrote:
>John Woodgate wrote:
>>
>> An isolated tuned circuit cannot be unabiguously described as either
>> series or parallel. It depends on how you couple to it.
>
>That's an interesting thought, and not one I've encountered before. A
>parallel LC will of course have a very high Z at one frequency and
>lower Z at others (when measured directly across the parallel
>combination), and a series LC circuit a very low Z at one frequency
>and high Z at others (when measured directly across the series
>combination). So how would I couple to a parallel LC to give the
>characteristics of a series LC, i.e., low Z at resonance and higher Z
>at other frequencies, or to a series LC to get a high Z at resonance?
>
>Roy Lewallen, W7EL

If you draw an L and C connected together as a circuit, you can see that
they are in series and in parallel simultaneously. What appears to
happen at resonance (neglecting the uncertainty about what the
'resonance' frequency is if the Q is low) depends entirely on how you
couple the energy in, and how you couple it out. For example, at
resonance, the voltage across either reactive component is a maximum -
so that's a parallel resonance, isn't it? But the current through either
component is *also* a maximum - so that's series resonance, isn't it?

In impedance terms, it's high at resonance if you look *across* the
circuit, but *low* at resonance if you break it open and look in series
with it. But you must look across with a high impedance 'looker' and
look in series with a low-impedance 'looker', otherwise you ruin the Q.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

634. This place needs a joke / No Shoes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990114191242.04058.00000849@ng-fu1.aol.com>
Source record: 74765

A young blonde was on vacation in the depths of Louisiana. She wanted a pair of genuine alligator shoes in the worst way, but was very reluctant to pay the high prices the local vendors were asking.

After becoming very frustrated with the "no haggle" attitude of one of the shopkeepers, the blonde shouted, "Maybe I'll just go out and catch my own alligator so I can get a pair of shoes at a reasonable price!"

The shopkeeper said, "By all means, be my guest. Maybe you'll luck out and catch yourself a big one!"

Determined, the blonde turned and headed for the swamps, set on catching herself an alligator.

Later in the day, the shopkeeper is driving home, when he spots the young woman standing waist deep in the water, shotgun in hand. Just then, he sees a huge 9 foot alligator swimming quickly toward her. She takes aim, kills the creature and with a great deal of effort hauls it on to the swamp bank. Laying nearby were several more of the dead creatures.

The shopkeeper watches in amazement. Just then the blonde flips the alligator on it's back, and frustrated, shouts, "Damn, this one isn't wearing any shoes either!"

635. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-15 00:00:00 UTC
From: Martin Ackroyd <martin.ackroyd@virgin.net>
Message-ID: <369E8882.983C91DD@virgin.net>
Source record: 74766
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Robin Birch wrote:
>
> Dear All,
> I want to build a simple FM Transceiver. The RX is no problem but the
> TX is posing a few headaches, largely due to my lack of knowledge about
> FM.
>

Robin,

Look at the following URL:

http://www.legend.co.uk/~veronica/a-access.htm

This firm makes FM transmitters, including STEREO units.

I bought their 50mW stereo unit to serve as a sig gen for
measuring the frequency response of hi-fi stereo tuners.

I bought a ready made unit - it only cost about ten quid more than the
kit. You'll prabably find they ill sell you what you need
cheaper than you could make it.

Cheers,
Martin

636. F.S.1936 Shure mic{ model 70}

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: wa4uso@aol.com
Message-ID: <19990116175331.07790.00001842@ng115.aol.com>
Source record: 74617

F.S. 1936 Shure {model 70} mic. and stand in
fair condition, working with cord, but no plug.
asking $35.00 Please email WA4USO

637. WTB B&W switch contacts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36A1230A.99C44C1C@buffnet.net>
Source record: 74618

-I need replacement switch contacts.
I think the model number of the contacts is 850C
They are found on the 850 and 852 B&W Band-switching P-Network
circuits.-

I guess you can melt 'em :-)

73,

Jim N2go

638. FS: TS-520 et al...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: "Earl H. Duda" <earld@tricon.net>
Message-ID: <36A15025.C5A45A89@tricon.net>
Source record: 74619

Kenwood TS-520 with cw filter, mobile microphone (has never been used mobile), SP-520 speaker, external VFO-520, 2 spare 6146Bs, and manuals. Want to sell as a package. Original owner, has been a backup rig for years. $425, you ship.

Please contact via email. Earl, WA1MPB, Kingsport, TN

639. FS High Voltage Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36A12C66.44456D1F@buffnet.net>
Source record: 74620

I have two high voltage transformers for sale /trade
They were both used in 4-1000 amps.

One is a HAMMOND Transformer
14" long x 8" wide and 9 1/2" high
This one has taps at 1000,2000,3000 volts
This is one heavy SOB and must be picked up.

The second transformer is a STANCOR
12" long x 11" wide and 10" high
taps at 2000 and 2500 volts
Another heavy SOB , Pick up only

The Stancor is mounted in a very nice Hammond cabinet that is gray and
is 20" wide x 13" high and 16 1/2" deep, handles on end.

Also included with it is three 5kv oil caps and a voltage doubler diode
stack. You have to supply the front relay rack panel and metering.
Power cord and millen high voltage jacks on the back.

I would trade the stancor power supply for a 1500pf 1-3kv vacuum
variable or some 4-1000 good pulls.

If you are weak; don't come alone :-) These are some of the heaviest
transformers that I have seen in a while. They must have been in some
kind of broadcast transmitter.
--
73,

Jim N2go (Near Buffalo, NY)

640. Re: HELP! Paralleling 2 switching supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Piet Ibelings <nntp@ibelings.com>
Message-ID: <77rb5t$i26$1@samsara0.mindspring.com>
Source record: 74621

John,

Thanks for the tips. I need to fit both power supplies in a metal box with feedthru's. I'm concerned with the high levels of RF present in the amplifier. I need to get a pair of high current, low drop diodes and give it a try.

Pieter

John Mackesy wrote in message <77rac8$5f6$1@possum.melbpc.org.au>...
>
>Piet Ibelings wrote in message <77qgt7$1q8$1@camel18.mindspring.com>...
>>Hi,
>>
>>I have 2 Lambda LFS-48-48 power supplies. These are 22.5Amps at 50Volts
>>each. I need 45 amps to power a homebrew amplifier. What would be the best
>>way to combine these puppies
>
>What we're talking about here is paralleling 2 power supplies - the type
>doesn't matter. I have a couple of Condor 27.5V 10A linear supplies
>paralleled, with a power diode in the DC output of each one. The voltage
>sense connection is made before the diode. Seems to work OK.
>
>The system doesn't have a crowbar, uses an (aircraft-type) over-voltage
trip
>relay in the combined output.
>
>John Mackesy VK3XAO
>
>

641. Re: Alliance Model 73 rotor motor voltage?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <77rjif$9h7$1@camel19.mindspring.com>
Source record: 74622
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Best think some more.... Most rotor motors are a/c powered and in the low voltage class +/- 24-28 vac. The cap is for phase reversal to rotate the motor in both directions. Sparks W4EAS

Tim Hynde wrote in message <77r0agcka1@smithers.eaglequest.com>...
>I'm rebuilding one that is in great shape but needs an overhaul, grease
>dried up etc. I have no controller for it but intend to build one since the
>original was just a powersupply and an a meter for direction feedback.
>
>Anyone know the voltages required for the motor, I think it's 90VDC but not
>sure.
>
>Tim ka8ddz
>
>

642. Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36A1560E.4744@megsinet.net>
Source record: 74623

Let's compare notes. What kind of transistors do you keep on hand, and why? Since I'm just starting to experiment a bit (after many years of ignoring it), I'm tending to build up a few general-purpose things like 2N2222, 2N3904, 2N3906, a few MPF102 and J-310, and the odd power TO-220. What's your favorite, indispensable, wouldn't-do-without-it type? What do you have dozens of, never used and wish you'd never spent the money? What other types of discrete semiconductors do you keep around? (For me, a few 1N4001, 1N4007 and 1N4148 is just about it.)

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

643. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36A17436.6D7CC0C9@teleport.com>
Source record: 74624

You've selected my favorites already. I'd add to that list the VN-10 VMOS FET (TO-92). Those dang things really come in handy. (I'm a little out of date -- there might be better ones more readily available today.) There's also a complimentary VP-10, but I don't find nearly as much use for 'em. A TO-220 (both NPN and PNP) with low saturation voltage comes in handy, too, on a number of occasions, but I don't have a particular favorite.

Roy Lewallen, W7EL

Clifton T. Sharp Jr. wrote:
>
> Let's compare notes. What kind of transistors do you keep on hand, and
> why? Since I'm just starting to experiment a bit (after many years of
> ignoring it), I'm tending to build up a few general-purpose things like
> 2N2222, 2N3904, 2N3906, a few MPF102 and J-310, and the odd power TO-220.
> What's your favorite, indispensable, wouldn't-do-without-it type? What do
> you have dozens of, never used and wish you'd never spent the money?
> What other types of discrete semiconductors do you keep around? (For me,
> a few 1N4001, 1N4007 and 1N4148 is just about it.)
>
> --
> | Cliff Sharp | All relevant people are pertinent. |
> | WA9PDM | All rude people are impertinent. |
> | | Therefore, no rude people are relevant. |
> | | --Solomon W. Golomb |

644. FS: NOS Clarostat wirewnd. pwr. resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36A142CB.7898@pop.valley.net>
Source record: 74625

Hello--

I'm offering the following NOS Clarostat wirewound power
resistors for sale at $3.00 each plus postage. All are rated at
50 watts maximum (but see note below re: adjustables).

You can use these as power-supply bleeders, voltage dividers, tapped
plate loads, etc. All are manufactured by Clarostat and are
individually boxed; mounting hardware is not included.

73,
Brad AA1IP

****

Clarostat p/n Qty. Avail. Resistance Type
------------ ---------- ---------- ----

VP50K 2 30K Fixed
VP50KA 9 35K Adjustable
VP50KA 6 40K Adjustable
VP50KA 1 50K Adjustable
VP50KA 4 60K Adjustable
VP50K 6 75K Fixed
VP50KA 3 80K Adjustable

****

NOTE: power rating for adjustable resistors applies to entire resistance
element. If you use 25 per cent of the resistor, power dissipation
in that portion derates to 25 per cent of 50 watts, or 12.5 watts.

U.S. Postage: $4.75 for one to ten pieces; $5.75 for 11 or more pieces;
foreign purchasers; inquire for postage.

I accept payment via personal or cashier's check or money order drawn in
U.S. dollars and made payable to "Brad Thompson".

Warranty policy:

If you purchase these components and find them unsatisfactory upon your
inspection, you can return them within seven days in as-received
condition for a full refund or replacement (if available).

This material is subject to prior sale and is supplied as-is, as
new-old-stock (NOS) merchandise, with all responsibility for safe and
successful application residing solely with the purchaser.

**********Available from:**********
Brad Thompson, AA1IP
P.O. Box 307, 202 Whitaker Rd.
Meriden, NH 03770-0307
Voice:(603) 469-3351
Fax: (603) 469-3917
E-mail: brad.thompson@valley.net

645. Free Amateur Radio Buy / Sell / Trade page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Netminder <webmaster@lakeisabella.net>
Message-ID: <exMn2.10516$bf6.2326@news1.giganews.com>
Source record: 74697
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.swap

```
...
Free Buy / Sell / Trade page for amateur
radio and computer related items.

http://www.lakeisabella.net/amateur
```

646. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Graeme Zimmer <gzimmer@vic.bigpond.net.au>
Message-ID: <77oolppch1@m2.c2.telstra-mm.net.au>
Source record: 74698
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>> An isolated tuned circuit cannot be unabiguously described
>> as either series or parallel. It depends on how you couple to it.

>That's an interesting thought, and not one I've encountered before. A
>parallel LC will of course have a very high Z at one frequency and
>lower Z at others (when measured directly across the parallel
>combination), and a series LC circuit a very low Z at one frequency
>and high Z at others (when measured directly across the series
>combination). So how would I couple to a parallel LC to give the
>characteristics of a series LC, i.e., low Z at resonance and higher Z
>at other frequencies, or to a series LC to get a high Z at resonance?

Roy, I think the point was that a Series tuned circuit and a Parallel
tuned circuit are exactly the same thing, just redrawn.

The trick is how you couple into the circuit.

If you break the "series" circuit, you have a low impedance point,
while if you go "across" the L (or the C, same thing) you get high
impedance.

If you "tap" the L or the C you can get any intermediate impedance.

Or to put it another way, at resonance, a Tuned Circuit has
large circulating currents (which implies low impedance)
and at the same time, high voltages (which implies high impedance).

It depends where you measure it.

A strip line is no different, just harder to visualise.
It still has current and voltage nodes.

Make any sense ? ..... Zim

647. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Graeme Zimmer <gzimmer@vic.bigpond.net.au>
Message-ID: <77pa3n$39c$1@m2.c2.telstra-mm.net.au>
Source record: 74699
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>No, but I'm kind of slow that way. I'm sure it made more sense to the
>other readers. I'm afraid I'll just plod along with my "in the box"
>thinking. Thanks for the explanation.

Well try this......

Connect three resistors in series with each other so they form a ring.

No question about it, they are in series.

Now connect two resistors in series the same way.

It still forms a ring, alhough smaller.

But is it in parallel or in series ?

In is of course, both a parallel and a series circuit.

At the same time.......

It depends how you look at it.

Cheers .... Zim VK3GJZ

648. Re: VLF receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Unclaimed Mysteries <cls@ro.com>
Message-ID: <369FF603.798F57B6@ro.com>
Source record: 74700

MAC wrote:
>
> Are there still people experimenting with VLF/ELF receivers?
> I would like to come in contact.

Some of us in Huntsville, AL USA are working with VLF/ELF for cave communications. We have a set of send/receive units suitable for beacons, operating at 873 Hz. (Is that LF enough? :) Obviously, modulating them with data of any speed is a problem.

> A specially people in the Netherlands.

Hey, I'm Dutch on my mother's side. That's the best I can do there...

>
> BTW: I found already most of the site on the web.

http://www.sat.dundee.ac.uk/~arb/creg/ just in case.

Good luck. It's a different world in the lonnnnng wavelengths.
--
It Came from Unclaimed Mysteries
C. L. Smith, Maximum Director
K4DOH
http://www.nasw.org/users/clsmith/

649. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <77po4j$ep8$1@plug.news.pipex.net>
Source record: 74701
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

J.-M. Noeding wrote
>"Jim" wrote:
>>Robin Birch wrote
>>>1) Thanks for this useful addition. Most of the books that I have only
>>>do CW and SSB. What are good ones for FM type circuits and supporting
>>>discussion of them?.
>>
>>Don't mean to repeat myself, but I will anyway ;-) Try the ARRL
literature.
>>In the UK the equivalent would be the RSGB. If you want to get deeper
into
>>the subject go to a good bookstore and look in their technical book
>>section.
>
>Indeed a very good idea to buy one of those readily available books
>instead of relaying what's written word for word

Whilst on the subject of books:
Some years ago I read an excellent mathematical treatise on the phasing
method of producing SSB.

I think the authors name was Smith, but I don't remember the title.

As I had more pressing concerns at the time I did not spend as much time
with the book as I would have liked.

Please can anyone either supply or tell me the name of this most excellent
book so that I can get a copy of my own?

Gary7SLL

650. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a0704e.62764357@news.online.no>
Source record: 74702
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 16 Jan 1999 08:44:29 -0000, "Gary Peach" <xcg34@dial.pipex.com>
wrote:

Gary
>
>
>Whilst on the subject of books:
>Some years ago I read an excellent mathematical treatise on the phasing
>method of producing SSB.
>
>I think the authors name was Smith, but I don't remember the title.
>
I am not familiar with those books, only heard about Smtih and Jones,..

>As I had more pressing concerns at the time I did not spend as much time
>with the book as I would have liked.
>
>Please can anyone either supply or tell me the name of this most excellent
>book so that I can get a copy of my own?
>
Did not see the original post, so I didn't know how serious the question
was.
It is some very good reasons for discussing FM methods, because some
different systems exists all over the world, one may experience some
problems communicating with different sets.

While it is normal to have 6dB pre-amphasis, some commercial rigs have
not, and some have 6dB pre-emphasis ahead of speech-clipper but very
hard de-emphasis after it .
Some have no audio pre-emphasis, but have DE-EMPHASIS after the
compressor and use phase-modulator (Shinwa). Removing the modulator
de-emphasis (and decrease audio gain) make this set compatible with
normal sets - at least for packet radio. On RX side Shinwa has another
de-emphasis, this is rather strange practice!

etc

Some of us remember those TS-700 where adding pre-emphasis to TX made
substantial quality improvement (adding a 50-100nF capacitor in series
with mike element)

73
Jan-Martin

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

651. HELP - tone to turn on speaker

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: apolllo13@aol.com
Message-ID: <19990116082739.14483.00001703@ng-fx1.aol.com>
Source record: 74703

I am only an amateur circuit designer. My wife and I are using CB's around town and invariably we end up turning the squelch up and can't call each other and the feds won't allow upping the power.

sooo... we are thinking of using a tone generator and decoder and using the output to turn the speaker off and on. that way we could leave the radios on all the time at low squelch until the radio receives the tone and then the speaker would turn on, like a phone ringing.

Am I forging new ground here or do such things exist?

Any circuit diagrams for my son and I to build?

652. Re: HP 8640A sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19990116.1432.9900336snz@microvest.demon.co.uk>
Source record: 74704
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Thursday, in article <369ec55c.0@news1.ibm.net>
munsch@ibm.net "<munsch@ibm.net>" wrote:

> I've forgotten. What is the frequency readout method on the 8640A? I guess
> I've always used the B.

It's something like the 8620C sweeper. The band switch controls a
revolving drum which brings different range scales into the visible
window on the front panel and the tuning knob moves a pointer by
string, like an old radio set, horizonally across the scale markings.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

653. HELP! Paralleling 2 switching supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Piet Ibelings <nntp@ibelings.com>
Message-ID: <77qgt7$1q8$1@camel18.mindspring.com>
Source record: 74705

Hi,

I have 2 Lambda LFS-48-48 power supplies. These are 22.5Amps at 50Volts each. I need 45 amps to power a homebrew amplifier. What would be the best way to combine these puppies? Do I need a little of resistance or would a diode on each B+ do the trick. If the voltages are within .2V would I get the full current of 22.5x2amps?

This is what i'm powering:

http://www.ibelings.com/n4ip/mrf157.html

Pieter

654. Debris wanted...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <36A08C8D.5367@atl.org>
Source record: 74706
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.swap,alt.drugs.mushrooms,alt.drugs.usenet,rec.radio.amateur.homebrew

Been about 3 months so time for a wanted list again.....

1) Altec Bookshelf speaker. I post a lot looking for this
http://www.atl.org/images/altec.jpg
Not having much luck in a years looking so will be pretty
generous for one in good shape.

2) Funky looking home built microphones for less than $1 plus postage.
I'm probably the only guy in the world who would spend good $
for something that looks like the one sitting on the Vibroplex box
http://www.atl.org/images/bestHBmic.jpg
The Wollensak on the hand turned base is nifty but that pure junkbox
with the button glommed from a (pay?)phone takes the cake for
scratch built with character (so far)

3) Older National RX like FB-7 or other small pre-war RX with plug
in coils. Prefer something that is challenging and cheap. Perhaps
someone in their misguided youth disassembled and still has the box
of parts???? Your secret will be safe with me!

4) Homebrew tube type receivers that never worked or weren't completed
or have been abandoned for new and better things.

I'm told I have weird taste in radio debris so prior to tossing anything
out, send me some mail describing it. Who knows, I might swap something
you'd really like for something you were gonna toss. That Vibroplex
under the funky microphone above is sn 174276 and a Champion in it's
matching box. Box has been opened but is in pretty good shape. Key has
had minimal use. Might swap it for something...maybe a more unusual key
in poorer condition or ???

Thanks for reading.

-bob

655. PYE SSB 210

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: pnarozny@c2i.NET
Message-ID: <36A0D363.B3AA3AD5@c2i.net>
Source record: 74707

Do any of you know any thing about an HF rig from PYE with the name SSB210?
It is X-tal controlled, with 4 channels. The same x-tal both for TX and RX.

please replay to:
E-Mail: la5hja@repairman.com

656. new radio medium

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: shrode@hotmail.com
Message-ID: <xF4o2.816$IJ3.7783508@WReNphoon2>
Source record: 74708

hey guys, check out talknetradio.com. anyone can broadcast live through
this sight free.
can you imagin the possibilities? oh yeah, they're also givin away a free
computer.
just thought you guys would like to lknow
msh

*** Posted from RemarQ - http://www.remarq.com - Discussions Start Here (tm) ***

657. Elmer-mixer-Q?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Don <dsalo@nmu.edu>
Message-ID: <77qlds$shb1@medusa.bresnan.net>
Source record: 74709

Would one of you very kind, technical people please explain to me a mixer for AM. I read that the mixer has to be non-linear to be effective. What does this mean? They say that a diode is nonlinear and can be used, however a transistor (properly biased) is also nonlinear and has the added feature of gain. What would a linear mixer produce? Is there a different list where I can get answers to technical questions such as this? Or have I found the right place?

Thanks, Don Salo

658. voice keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Stu Olson <solson@usa.net>
Message-ID: <77qjhhcju1@ash.prod.itd.earthlink.net>
Source record: 74710

With the upcoming VHF contest closing in on us, don't forget to check out VoiceKeyExpress, the latest digital voice keyer for contesting, meteor scatter contacts, and good 'ol ragchewing. VKE turns your sound card equipped PC into a first class voice keyer.

You can find it at :

http://home.earthlink.net/~n7qjp

or

http://www.qsl.net/~n7qjp

Satisfied users from Switzerland, Germany, Malta, France, Madagascar, Canadan, and ;even the US can't be all wrong!

73.....Stu

--
Stu Olson N7QJP DM33
http://home.earthlink.net/~n7qjp

--
Stu Olson N7QJP
http://home.earthlink.net/~n7qjp

659. Re: Elmer-mixer-Q?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: j.m.franke@larc.nasa.gov
Message-ID: <j.m.franke-1601991339480001@franke.larc.nasa.gov>
Source record: 74711

In article <77qlds$shb1@medusa.bresnan.net>, "Don" <dsalo@nmu.edu> wrote:

> Would one of you very kind, technical people please explain to me a mixer
> for AM. I read that the mixer has to be non-linear to be effective. What
> does this mean? They say that a diode is nonlinear and can be used, however
> a transistor (properly biased) is also nonlinear and has the added feature
> of gain. What would a linear mixer produce? Is there a different list
> where I can get answers to technical questions such as this? Or have I
> found the right place?
>
> Thanks, Don Salo

If the mixer is linear, then the output is an exact replica of the input. Put in two signals, the received signal plus the local oscillator, and you get out two signals, the received signal and the local oscillator. There was no interaction. The output may be smaller or greater than the input, but no crossproducts are generated. An audio combiner is unfortunately called a mixer. It is a linear mixer.

If the mixer is non-linear, the two signals interact. One signal affects how the circuit responds to the other. The gain for one signal is determined by the instananeous level of the other signal. The result is a multiplication of one signal by the other. Because of the multiplication process, a non-linear mixer is often called a product detector. The output, math omitted (there might be children reading this), consists of the original frequencies, the sum of the frequencies and the difference between the frequencies. Filters are used following the mixer to select the desired frequencies and/or reject the undesired ones.

Does this help?

John

660. Re: Debris wanted... RATS RATS RATS I'm in Atlanta!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <36A0A010.6463@atl.org>
Source record: 74712
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.swap,alt.drugs.mushrooms,alt.drugs.usenet,rec.radio.amateur.homebrew

I rag on folks for not stating their location and here I am,
JUST AS GUILTY

in

ATLANTA, GA USA

-bob

661. Re: new radio medium

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <36A104A2.4787@ruraltel.net>
Source record: 74713

Ecuse Me,

A new "radio" medium?
Not quite.
Sorry

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net

662. Re: Elmer-mixer-Q?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36A0FF02.7B4DD952@teleport.com>
Source record: 74714

John Franke made an excellent simple explantion of mixers. To answer
your question about where you can get answers to questions like this,
you might also consider books. I highly recommend _The ARRL Handbook_.

Roy Lewallen, W7EL

Don wrote:
>
> Would one of you very kind, technical people please explain to me a mixer
> for AM. I read that the mixer has to be non-linear to be effective. What
> does this mean? They say that a diode is nonlinear and can be used, however
> a transistor (properly biased) is also nonlinear and has the added feature
> of gain. What would a linear mixer produce? Is there a different list
> where I can get answers to technical questions such as this? Or have I
> found the right place?
>
> Thanks, Don Salo

663. Alliance Model 73 rotor motor voltage?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: Tim Hynde <ka8ddz@eaglequest.com>
Message-ID: <77r0agcka1@smithers.eaglequest.com>
Source record: 74715
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

I'm rebuilding one that is in great shape but needs an overhaul, grease dried up etc. I have no controller for it but intend to build one since the original was just a powersupply and an a meter for direction feedback.

Anyone know the voltages required for the motor, I think it's 90VDC but not sure.

Tim ka8ddz

664. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-16 00:00:00 UTC
From: cei@nwark.COM
Message-ID: <3.0.3.32.19990116160358.007ac730@nwark.com>
Source record: 74716

```
add ham-homebrew
```

665. Oil Filled Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: w4jf@gnes.net
Message-ID: <77rd4odpe1@nnrp1.dejanews.com>
Source record: 74626

Nice oil-filled capacitors. Mfg by GE, 32 uF at 4500 VDC. No PCBs! Perfect for HV power supply decks. Units weigh 7 lbs each. Size is 3.5" x 4.5" x 12". Price: $55 for one, $45 each for orders of two or more. UPS shipping is extra. If you would like to see a picture of the caps, drop me an email and I will be happy to send you one. Thanks and 73 de Joe, W4JF (South Carolina). Phone: 803-328-2936

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

666. Re: HELP! Paralleling 2 switching supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: John Mackesy <mack@melbpc.org.au>
Message-ID: <77rac8$5f6$1@possum.melbpc.org.au>
Source record: 74627

Piet Ibelings wrote in message <77qgt7$1q8$1@camel18.mindspring.com>...
>Hi,
>
>I have 2 Lambda LFS-48-48 power supplies. These are 22.5Amps at 50Volts
>each. I need 45 amps to power a homebrew amplifier. What would be the best
>way to combine these puppies

What we're talking about here is paralleling 2 power supplies - the type doesn't matter. I have a couple of Condor 27.5V 10A linear supplies paralleled, with a power diode in the DC output of each one. The voltage sense connection is made before the diode. Seems to work OK.

The system doesn't have a crowbar, uses an (aircraft-type) over-voltage trip relay in the combined output.

John Mackesy VK3XAO

667. Re: new radio medium

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Jonesy <jones@rmi.net>
Message-ID: <77rheg$ag9$1@news1.rmi.net>
Source record: 74628

Doug Younker <dougy@ruraltel.net> wrote:
: Ecuse Me,

: A new "radio" medium?
: Not quite.
: Sorry

And:
:> anyone can broadcast live through
:> this sight free.

"sight free" ???!!! It's the blind leading the blind....

Jonesy

668. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <yoeo2.3569$y85.1498201@news3.mia>
Source record: 74629

There are some new chips from National, with software design aids.

yvon wrote in message <368FE5F8.8CC@naples.infi.net>...
>Stuart Baynes wrote:
>>
>> Looking to make a simple FM tranceiver for the 6m band, frequency steps
of
>> either 2.5, 10 or 12.5.
>> Has any body seen any chips that can do this, that are self contained and
>> that don't need an on board computer to program it? Look forward to any
>> replies.
>> Stuart ZS6OUN @ ZS0DLD

669. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Jason Cheng <jasoncmc@net.polyu.edu.hk>
Message-ID: <36A1A4E3.2DFB@net.polyu.edu.hk>
Source record: 74630

Well, my stock composes of big heaps of Japanese transistors (2SA/B/C/D). In those days those old devices are pretty popular in Hong Kong, we are a big exporter you know. And I love those different packages, e.g. 2SC373, 2SC458, 2SA215, 2SA643... The Japanese manufacturers offered so many unique packages. By the way, I wish I hadn't kept those germanium types, they all have excessive leakage currents after more than 20 yrs' storage.

Jason

> Let's compare notes. What kind of transistors do you keep on hand, and
> why? Since I'm just starting to experiment a bit (after many years of
> ignoring it), I'm tending to build up a few general-purpose things like
> 2N2222, 2N3904, 2N3906, a few MPF102 and J-310, and the odd power TO-220.
> What's your favorite, indispensable, wouldn't-do-without-it type? What do
> you have dozens of, never used and wish you'd never spent the money?
> What other types of discrete semiconductors do you keep around? (For me,
> a few 1N4001, 1N4007 and 1N4148 is just about it.)
>
> --
> | Cliff Sharp | All relevant people are pertinent. |
> | WA9PDM | All rude people are impertinent. |
> | | Therefore, no rude people are relevant. |
> | | --Solomon W. Golomb |

670. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36A1C522.6B367CBC@teleport.com>
Source record: 74631

Jason Cheng wrote:
>
> Well, my stock composes of big heaps of Japanese transistors
> (2SA/B/C/D). In those days those old devices are pretty popular in Hong
> Kong, we are a big exporter you know. And I love those different
> packages, e.g. 2SC373, 2SC458, 2SA215, 2SA643... The Japanese
> manufacturers offered so many unique packages. By the way, I wish I
> hadn't kept those germanium types, they all have excessive leakage
> currents after more than 20 yrs' storage.
>
> Jason

Germanium transistors had a lot more leakage than silicon transistors even when they were brand new. You mean they keep getting worse and worse?

Roy Lewallen, W7EL

671. Re: Oil Filled Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Michael Sawyer <kc4slk@csrlink.net>
Message-ID: <36A1E4A5.E929ABE2@csrlink.net>
Source record: 74632

You can get them from Fair Radio for $30.00 a piece plus shipping, no matter how many you buy!
Mike
W3SLK

w4jf@gnes.net wrote:

> Nice oil-filled capacitors. Mfg by GE, 32 uF at 4500 VDC. No PCBs! Perfect
> for HV power supply decks. Units weigh 7 lbs each. Size is 3.5" x 4.5" x
> 12". Price: $55 for one, $45 each for orders of two or more. UPS shipping
> is extra. If you would like to see a picture of the caps, drop me an email
> and I will be happy to send you one. Thanks and 73 de Joe, W4JF (South
> Carolina). Phone: 803-328-2936
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

672. Transport to Germany.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be421b$3a7eeee0$LocalHost@simoncox>
Source record: 74633
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

Wanted, anyone who commutes / travels between UK and Germany
on something like a regular basis by car, van or lorry that can help with
transport / delivery of a couple of items of radio gear. I'm trying to save
the
buyer some money on shipping costs and risk of damage, there will of course
be a modest cash incentive. I don't have the address in Germany yet, were
still negotiating on the items. I'm in Somerset but could meet and pass on
the items and I'm sure the guy in Germany would travel to meet whoever
wherever.

Anybody GENUINELY interested in helping ?

simon.cox@breathe.co.uk

673. Re: CONCLUSIVE EVIDENCE: Jesus *is* King of the Jews !!!! ! !! !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <36a1f40a.12141603@news.mnsinc.com>
Source record: 74634

Recently, n4mxf@aol.com (N4MXF) wrote:

>Laurent Pichler, an intellectual proud graduate of public school
>wrote>[bullshit snipped]>fuck off>
>I'm impressed.

Yeah! What a handsome hero he must be!

REALLY contributing to the hichly intellectual nature of the
discussions here!

674. Re: L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: cjX@hth.com
Message-ID: <36a1f632.101492563@news.buller.se>
Source record: 74635
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Hi Nigel,

"Nigel Tolley" <ntolley@hotmail.com> wrote:

>Sign your pages up to the website garage, or some other web page checking
>service. They will give you a set of diagnostics, and check all your links,
>etc.
>
>Its free, too, and they email you once a month to update you.

Thanks for the tip but L.O.S.A is a plain ASCII file so I guess it
won't work.

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

675. FS Heath AMP Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36A20DEE.12469D3C@buffnet.net>
Source record: 74636
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

I have some heath junk that was from a heathkit amplifier.

A set of three large knob and one smaller knobs. The larger knobs are about 2 1/4" diameter and the smaller one is 1 1/8" diameter. These are the dark green jobs that have a brushed aluminum rim and aluminum center inserts. The have a small triangular pionter on the outer rim. These are in exceptional shape and would make nice replacements for someone with crappy knobs.

The second griefkit item is the tuned input from the amp. It consists of a ceramic rotary switch silver mica caps and slug tuned coils for the five bands all mounted on a L-shaped aluminum bracket. Also in excellent shape.

The third item is a pair of meters. They each have the following labeling. (the same on both meters)

Final Plate MA, Grid MA and OUTPUT.
The scales are 0-500, 0-10 and 0-10
--

If these items are of use to you. Make an offer.
I would prefer to sell the bunch instead of three or four packages to the post office.

73,

Jim N2go

676. FS Roller inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36A21199.A4CA9F8A@buffnet.net>
Source record: 74637
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

I have two roller inductors that can be used in amplifiers or tuners.

I picked up Johnson Matchbox and wont be building a tuner so I have the

following if anyone is interested.

They are almost identical except for the length. The endplates and

materials are the same.

One is marked Cardwell 229-203 around 37 turns total length 7 1/4"

The second one around 27 turns and total length 6 1/4"

Most probably 28 and 18 uH according to an old RadioKit catalog--

I have duodial turns counters if you need them.

Make an offer on one or all. If you give me your zipcode I can guess the
shipping charge.

I need high voltage filter caps and a vac variable if you have them to
trade.

73,

Jim N2go

677. Re: Simple Frequency Synth HOW?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <noli4QAR5jo2Ew2j@falstaf.demon.co.uk>
Source record: 74638

In article <yoeo2.3569$y85.1498201@news3.mia>, Bert Douglas
<bertdNOSPAM@dibbs.net> writes
>There are some new chips from National, with software design aids.
>
>yvon wrote in message <368FE5F8.8CC@naples.infi.net>...
>>Stuart Baynes wrote:
>>>
>>> Looking to make a simple FM tranceiver for the 6m band, frequency steps
>of
>>> either 2.5, 10 or 12.5.
>>> Has any body seen any chips that can do this, that are self contained and
>>> that don't need an on board computer to program it? Look forward to any
>>> replies.
>>> Stuart ZS6OUN @ ZS0DLD
I'm looking at doing the same thing. I guess that competition announced
at XMAS has sparked a few thoughts off. A useful source is the Philips
Radio Products databook. Farnells sell them for 13.50 or if you can
scrounge on all the better. There is a section on Synth chips that will
do exactly what you want. They only need coupling up to a VCO and ref
osc and off you go.

Unfortunately these all need some form of programming as they all work
by a serial line but using something cheap and cheerful to do this, like
a small pic, shouldn't be too difficult. you could jury rig something
with TTL and a set of shift registers if you wanted to get up and going
ASAP though.

Cheers

Robin

PS: Good luck with building it. Its going to take me a few months to
get myself sorted out before putting a prototype together.

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

678. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <14lmsLAktjo2Ew0w@falstaf.demon.co.uk>
Source record: 74639
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

>
>I hope that explains the underlying theory to your satisfaction.
>
>There is life after the RAE ;-)
>
>Gary7SLL
>
>
Thanks Gary,
I understood all of that - thank which ever god you want to.

Cheers

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

679. Rotor computer control

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Rick Mintz <Rmintz@Frontiernet.net>
Message-ID: <77tm99$m7s$7@node17.cwnet.frontiernet.net>
Source record: 74640

Hi.

Been preparing to upgrade the station with some computer control. Part of this is to control my Yaesu G-800-SDX rotor via my contest software. Yaesu wants $300 for the interface! That's almost as much as the rotor was when I purchased it.

So... anyone in hamland come up with or can guide me to a homebrew interface to control the Yaesu rotors? Sounds like a good project for the electronically able, unlike me.

Please respond directly (also to the group, if you want).

73 de Rick, W1TY
Rmintz@frontiernet.net

680. Re: FS Heath AMP Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: "D.E. Thomas" <dethomas@airnet.net>
Message-ID: <36A264BA.43197644@airnet.net>
Source record: 74641
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

James,

How about $35 and I pay shipping ??

Thanks,
Dave Thomas N4CLR

James Skalski wrote:

> I have some heath junk that was from a heathkit amplifier.
>
> A set of three large knob and one smaller knobs. The larger knobs are
> about 2 1/4" diameter and the smaller one is 1 1/8" diameter.
> These are the dark green jobs that have a brushed aluminum rim and
> aluminum center inserts. The have a small triangular pionter on the
> outer rim. These are in exceptional shape and would make nice
> replacements for someone with crappy knobs.
>
> The second griefkit item is the tuned input from the amp. It consists of
> a ceramic rotary switch silver mica caps and slug tuned coils for the
> five bands all mounted on a L-shaped aluminum bracket. Also in excellent
> shape.
>
> The third item is a pair of meters. They each have the following
> labeling. (the same on both meters)
>
> Final Plate MA, Grid MA and OUTPUT.
> The scales are 0-500, 0-10 and 0-10
> --
>
> If these items are of use to you. Make an offer.
> I would prefer to sell the bunch instead of three or four packages to
> the post office.
>
> 73,
>
> Jim N2go

681. Re: Oil Filled Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <77ttb4cmv1@nnrp1.dejanews.com>
Source record: 74642

In article <36A1E4A5.E929ABE2@csrlink.net>,
Michael Sawyer <kc4slk@csrlink.net> wrote:
> You can get them from Fair Radio for $30.00 a piece plus shipping, no matter how
> many you buy!
> Mike
> W3SLK

Thanks for this info, I was about ready to place an order for four.
You saved me enough to complete the project (3cx3000a7)
WA1WLA

>
> w4jf@gnes.net wrote:
>
> > Nice oil-filled capacitors. Mfg by GE, 32 uF at 4500 VDC. No PCBs! Perfect
> > for HV power supply decks. Units weigh 7 lbs each. Size is 3.5" x 4.5" x
> > 12". Price: $55 for one, $45 each for orders of two or more. UPS shipping
> > is extra. If you would like to see a picture of the caps, drop me an email
> > and I will be happy to send you one. Thanks and 73 de Joe, W4JF (South
> > Carolina). Phone: 803-328-2936
> >
> > ----------== Posted via Deja News, The Discussion Network ==----------
> > http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

682. Improving Collins 51-S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a26173.88831452@news.online.no>
Source record: 74643
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Hi

have now scanned to gif file AGC modifications showing to improve the rather poor ssb quality on this receiver to be the best receiver I have ever listened to. It is only 8kb as gif file, so if you wish to see it, pse send me an email
Note: I cannot exactly tell how I did it, but believe the drawing is showing how it was done as far as I can remember it

Also available gif files for FT-902 CW keying modification and block diagram for low-signal units with some improvements and signal levels

73
Jan-Martin
LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

683. Re: Electrical Interference in 1995 Saturn SW-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19990117174400.27030.00000924@ng55.aol.com>
Source record: 74644

The roof of my Saturn station wagon is plastic. I had earlier checked the sedans and their roofs were metal, so when I tried my mag-mount and it would not stick, I was surprised. The only piece of metal big enough for a mag mount is the hood, so I put it there. Even though Im only using 0.5 / 5 watts, Im still unconfortable about the antennea lobes being in the plane of my eye. (Yeah, I use a speaker mike with my handheld to keep the antennea a little further away.)

73
Jim Cooper NE6O

684. outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: "M.L. McCauley" <mtech@airmail.net>
Message-ID: <64344774C36996D7.D9CE3F5CC7199126.0242FE22BE41349B@library-proxy.airnews.net>
Source record: 74645
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I am interested in adding SSB to an AM only tube receiver with a 455KHz last IF stage. Any suggestions on good ICs to check out?

Thanks!

Mike, WB5MYY

685. pro 2006 400 channel FS/FT--also 4x150's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: km5rt@ticnet.com
Message-ID: <F38754DB0A4687BA.75A2D8D5E62BC205.37F08F693BDD2893@library-proxy.airnews.net>
Source record: 74646
Cross-posted to: rec.radio.swap,rec.radio.scanner,rec.radio.amateur.equipment,alt.radio.scanner,rec.radio.amateur.homebrew

I have a pro 2006 realistic 400 channel scanner for sale.
It currently has no mods done <but can if needed>
There is a few scuffs on top that would make it a 8.5 of 10.
This radio works perfectly.
I want $250 + shipping
will trade for kam + with version 8.x hardware or
or I will do a partial trade for:
6 meter allmode yaesu or the like
would consider ts660, triband radio as long as
allmode for partial trade
kevin
km5rt@ticnet.com

I also have several 4x150 tubes for sale/trade

********remove nospam to reply*********
see ya on the bands

686. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-17 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <782rbg$2nh@news.netcologne.de>
Source record: 74647
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>I don't know, unless the lines are too close together. I've got
>several pages of notes on the topic from a Les Besser course I took,
>but haven't yet actually made a coupled-line filter. I'm sure there
>are folks reading this who have experience with these and could answer
>your question.

Roy / Jim,

there is a nice DOS/WIN shareware program named Faisyn which calculates (beside "standard" filters with lumped elements) distributed stepped impedance resonator filters and distributed parallel coupled line filters.

I'm still looking for formulas to calculate magnetically coupled bandpass filters using microstrip lines instead of lumped inductors. I didn't find a way to simulate this type of filters with Puff and so I have to use the trial and error method which is a bit time consuming. Any ideas?

Peter

687. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: davidcopperhead@usa.net
Message-ID: <36a673a3.11255771@netnews.worldnet.att.net>
Source record: 74517
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi Marshall,
a bit off topic but...
I remember 10 years ago you wrote a postscript smith chart file that
was widely distributed of the net. Have you done anything more in this
line of work?
Thanks,
DC

688. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: c.c.tqbssz@handXcrank.killspam.us.com
Message-ID: <77vsig$sq9$1@samba.rahul.net>
Source record: 74518

Gary Coffman (ke4zv@bellsouth.net) wrote:

: There are alternators which use permanent magnets. These can operate
: without battery excitation. Some of these are fairly small, so you might be

Most (BMW is the exception I know of) motorcycle alternators are permanent
rotor and might be suitable. The rectifiers/regulator are in a
separate assembly, and the regulator is often a shunt type ensuring
maximum continuous dissipation in the alternator and relatively short
life. If you did use an m/c alternator it would probably be best to build
your own rectifier/regulator.

Stephen

689. Re: Question re TDA7000 and/or other FM receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: tcrpe <tcrpe@yahoo.com>
Message-ID: <H_Ko2.14659$MW1.2952@news2.giganews.com>
Source record: 74519

Here's DC Electronics site -- http://www.dckits.com/index.htm

They post that they have the tda7000 in stock.

I see that the data sheet is also available over the Internet, or I can
email it to you as an Adobe file.

Good Luck

TR

Moocows hate spam. wrote in message ...
>Been doing quite a bit of searching on the Internet to find info, have had
>rather a fruitless time at it, so now I'm asking:
>
>1) Does anyone know of a source where I can possibly get a TDA7000 IC for
> less than fifteen dollars US? :) (I have found all of *two* suppliers
> in the United States, and neither of them will sell in lots of less
> than twenty. I only want two or three, not *twenty*. :)
>
> I would *strongly* prefer a United States-based seller; buying from
> overseas is not exactly an option, thanks to costs to convert currency
> and buy an International Money Order in Irish pounds, pounds Sterling,
> or Euros [not to mention shipping, not to mention the real possibility
> THEY don't sell in lots of less than twenty, either].
>
>2) If nobody knows of a source in the US, are there any other FM IC's of
> that rough type (i.e. essentially FM radios on a chip) that are a)
> fairly cheap and b) one CAN get them without buying in lots of 25 or
> more through usual electronics suppliers (Mouser, etc.)?
>
> Just FWIW, it would be a major plus if it could either go below the
> broadcast FM band or above (or both).
>
>3) This last one is a *major* shot in the dark, but does anyone know if
> equivalents exist for the old TDA1071 chip?
>
>Thanks in advance...
>
>-moo

690. Re: Question re TDA7000 and/or other FM receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: tcrpe <tcrpe@yahoo.com>
Message-ID: <i7Lo2.13244$bf6.3349@news1.giganews.com>
Source record: 74520

Oh, and here's a link to an application note:

http://www-us2.semiconductors.philips.com/acrobat/applicationnotes/AN193.pdf

TR

tcrpe wrote in message ...
>Here's DC Electronics site -- http://www.dckits.com/index.htm
>
>They post that they have the tda7000 in stock.
>
>I see that the data sheet is also available over the Internet, or I can
>email it to you as an Adobe file.
>
>Good Luck
>
>TR
>
>
>
>Moocows hate spam. wrote in message ...
>>Been doing quite a bit of searching on the Internet to find info, have had
>>rather a fruitless time at it, so now I'm asking:
>>
>>1) Does anyone know of a source where I can possibly get a TDA7000 IC for
>> less than fifteen dollars US? :) (I have found all of *two* suppliers
>> in the United States, and neither of them will sell in lots of less
>> than twenty. I only want two or three, not *twenty*. :)
>>
>> I would *strongly* prefer a United States-based seller; buying from
>> overseas is not exactly an option, thanks to costs to convert currency
>> and buy an International Money Order in Irish pounds, pounds Sterling,
>> or Euros [not to mention shipping, not to mention the real possibility
>> THEY don't sell in lots of less than twenty, either].
>>
>>2) If nobody knows of a source in the US, are there any other FM IC's of
>> that rough type (i.e. essentially FM radios on a chip) that are a)
>> fairly cheap and b) one CAN get them without buying in lots of 25 or
>> more through usual electronics suppliers (Mouser, etc.)?
>>
>> Just FWIW, it would be a major plus if it could either go below the
>> broadcast FM band or above (or both).
>>
>>3) This last one is a *major* shot in the dark, but does anyone know if
>> equivalents exist for the old TDA1071 chip?

>>
>>Thanks in advance...
>>
>>-moo
>
>
>

691. Postscript Smith Chart (was Re: microstrip question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Marshall Jose <Marshall.Jose@jhuapl.edu>
Message-ID: <36A38472.2717@jhuapl.edu>
Source record: 74521
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

David Copperhead wrote:
> a bit off topic but...
> I remember 10 years ago you wrote a postscript smith chart file that
> was widely distributed of the net. Have you done anything more in this
> line of work?

Regrettably, I ran out of steam after that. I had hoped to create an expanded (with negative resistances for oscillator design) and compressed version, but it got too weird and asymmetrical.

At any rate, Spehro Pefhany used Adobe's Distiller to create a PDF file of the Smith chart, which you can find on

http://www.qis.net/~josemj1

There's a spiffed-up version of my PS Smith chart stuff there, too, courtesy of Rob Castle.

Interestingly, I recently ran across a version of mine in which the text was translated by Lasse Langwadt Christensen to Danish. I was really pleased to realize that it could be modified so easily to accomodate a different language. You can find it with a search at http://www.dejanews.com .

--
Marshall Jose, WA3VPZ
Johns Hopkins Univ. Applied Physics Laboratory
Marshall.Jose@jhuapl.edu

692. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36A385EC.87E96BC6@certco.com>
Source record: 74522

A lot of people speak highly of the 2N5179 and 2N5109 parts. Any good, preferably cheap RF transistors that people here have had good experience with?

693. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: "M.L. McCauley" <mtech@airmail.net>
Message-ID: <945897DDE9F0E690.D845594AB2F57A03.DF361B64F51E7B1B@library-proxy.airnews.net>
Source record: 74523
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

nobody@xxx.com wrote in message <36A339D0.CC0C6D8A@xxx.com>...
>
>
>I have been thinking of building a
>LOW IF amplifier with a IF about 10-15 KHZ
>which would be run from the AM 455 IF you have mentioned.
>
>This would provide the narrow band width SSB and CW
>characteristics + should be a ideal platform for connecting a
>DSP kit like the SHARC ADSP21061 or Motorola DSP56307.
>
>
>The conversion from 455 Khz to 15 Khz could be done with
>a 1 or TWO (I- Q) NE602 chips .
>
>The 15 KHz IF filter and demodulator can be realised with either
>OPAMPS (GYRATORS for filters, Opamp All Pass Hilbert transformers etc)
>
>Alternately, a powerful DSP like DSP 56307 can implement all of the
>15 Khz processing in Software.
>
>No Hi Inductance coils should be necessary as , the Gyrator
>circuit is said to be suitable for use in HiQ filters.

This sounds like a very slick approach. I'm sure DSP would yield great results, but I don't have any DSP programming background, and something tells me this would not be a trivial project.

I was thinking of some sort of quick and dirty 1-2 IC approach, operating at the IF freq, using filters of some sort.

If you elect to press on with this, please post to the list how it comes out. A few folks have replied to me RE a simpler approach, and I'll do the same on my end.

73,

Mike, WB5MYY

694. workbench design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36A39C6F.2EF9B7DB@certco.com>
Source record: 74524
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components

I've got a couple of home built wooden workbenches that I'm using for electronics assembly and light duty mechanical tasks.

The work surface is 1/2 inch plywood with a top layer of medium density fiberboard. I've been planning on applying a few coats of polyurethane to seal the fiberboard, when it occurred to me that there might be a static dissipative finish I could apply.

I've seen static dissipative floor polishes, but I was thinking of a permanent coating.

Does anyone know of any finish that is static dissipative, which I could apply to MDF or plywood?

Is there a way of treating polyurethane so that it becomes slightly conductive? I.e. mix in a certain amount of graphite, or some other conductive material? What about dusting the top layer with graphite while the polyurethane is still wet?

thanks in advance, and 73

ncc KB1DEJ

695. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <7807gk$e9q$1@flood.weeg.uiowa.edu>
Source record: 74525

What about one of those bike generators? The one I have is an alternator and not a generator. It has permanent magnets for the field. This should produce enough power for an HT. They light a 10 or 15 watt bulb on a bike. The units are small also. Some sort of regulation would be necessary.

john
WA0VYZ

John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

696. V/F: Your ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <36A39864.2A4B@alliedsignal.com>
Source record: 74526

A certain process generates a square wave frequency in the range of 1 Mhz to 1.8 Mhz. I would like to be able to convert that frequency to an analog voltage of a given span, let's say 0-10 volts.

Any ideas for a chip/circuit/website to accomplish this?

Thanks

Pete

697. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Marty Jones <see.the.text@see.the.text>
Message-ID: <36A3A6B8.66452D43@see.the.text>
Source record: 74527

Gary Coffman wrote:

> On Mon, 18 Jan 1999 05:48:00 GMT, Jim Pierpoint <pierpo@bellsouth.net> wrote:
> >Just wondering if I could easily make a hand cranked generator to power
> >my HT... just for survival reasons. Is there any reason I could not use
> >an old 12vdc auto generator... put a hand crank on it... and generate
> >enough power for my HT???
>
> I doubt you're up to hand cranking an auto generator at the required
> speed. Unlike alternators, you have to spin up a generator pretty good
> to get any reasonable amount of power from it. You'd do better with an
> alternator. They produce good power at speeds as low as 600 RPM.
> But you'd need a battery to excite the field of most auto alternators.
>

While there are autos that can usefully charge their batteries at 600 RPM,
this is engine speed, not alternator speed. The alternator is running 2 or
3 times faster, more like 1500 RPM, because of the pulley ratios.

For battery charging from a hand- or leg-powered contraption, I'd use a
permanent-magnet DC motor. There are low-rpm "servo motors" available
that are pretty efficient when used as generators. The large number of
poles on the commutator ensures pretty clean DC (less filtering needed),
and the low speed means less loss in step-up gearing.

best regards,

Marty Jones
mjones at ti dot com

698. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a3a9b4.0@news.netwalk.com>
Source record: 74528
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Gary Peach wrote in message <77obhjdnd1@plug.news.pipex.net>...
>
>Jim wrote
>>
>>Read the posts by David Peach. He describes it better than I can without
>>looking it up. It is essentially a 6 dB per octave RC filter.
>
>
>Handle here is Gary OM, or should I be pleased to learn that I have a
>relative in this NG ;-)
>
>Gary7SLL
>
>

Sorry, Gary...guess I shouldn't trust my short term..uh, er, oh yes...memory

Jim

699. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: nobody@xxx.com
Message-ID: <36A3ABAD.98F3F342@xxx.com>
Source record: 74529
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

You dont have to USE DSP, if you dont want to.

Simple OPAMP gyrator filters should provide enough selectivity at 15 KHZ
and you can get away with 1 or 2 Ne602 + 1-2 quad opamps
or
you might want to build a low cost R2 like I-Q (to get opposite sideband
rejection)receiver and get all the selectivity at audio with L-C or opamp
lowpass filters. (This might be preferable)

The TenTec Rx320 use a low IF of around 12 Khz and opamp filters
+ DSP filters. Its DSP filters really are great0 and beat my Collins R390a
mechanical filters.(Less ringing and sharper skirts)

Best of luck with your filters + 455 Khz approach, It would work and would be
somewhat simpler, but hardly something very exciting.

I would definitly try to do something like the R2 Receiver using Ne602 at 455
Khz
instead, as, all the filtering can be done at audio, and DSP interface is easy.

Anyway, I definitely want to learn DSP processing, so will ultimately
use this approach, but in simple easy to build and debug steps.

The current stage is that I just got my R-2 (regular R2 receiver using SRA-1)
up in the 20M band, but am having trouble with excessive oscilator radiation.
Opposite sideband rejection is good and is atleast 40 db or so. Did build
a 1 transistor + 2 diode AGC circuit for R2 to save my ears though.

regards

M.L. McCauley wrote:

> nobody@xxx.com wrote in message <36A339D0.CC0C6D8A@xxx.com>...
> >
> >
> >I have been thinking of building a
> >LOW IF amplifier with a IF about 10-15 KHZ
> >which would be run from the AM 455 IF you have mentioned.
> >
> >This would provide the narrow band width SSB and CW
> >characteristics + should be a ideal platform for connecting a
> >DSP kit like the SHARC ADSP21061 or Motorola DSP56307.
> >
> >
> >The conversion from 455 Khz to 15 Khz could be done with
> >a 1 or TWO (I- Q) NE602 chips .

> >
> >The 15 KHz IF filter and demodulator can be realised with either
> >OPAMPS (GYRATORS for filters, Opamp All Pass Hilbert transformers etc)
> >
> >Alternately, a powerful DSP like DSP 56307 can implement all of the
> >15 Khz processing in Software.
> >
> >No Hi Inductance coils should be necessary as , the Gyrator
> >circuit is said to be suitable for use in HiQ filters.
>
> This sounds like a very slick approach. I'm sure DSP would yield great
> results, but I don't have any DSP programming background, and something
> tells me this would not be a trivial project.
>
> I was thinking of some sort of quick and dirty 1-2 IC approach, operating at
> the IF freq, using filters of some sort.
>
> If you elect to press on with this, please post to the list how it comes
> out. A few folks have replied to me RE a simpler approach, and I'll do the
> same on my end.
>
> 73,
>
> Mike, WB5MYY

700. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a3ae1f.0@news.netwalk.com>
Source record: 74530
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Gary Peach wrote in message <77po4j$ep8$1@plug.news.pipex.net>...
>
>Whilst on the subject of books:
>Some years ago I read an excellent mathematical treatise on the phasing
>method of producing SSB.
>
>I think the authors name was Smith, but I don't remember the title.
>
>As I had more pressing concerns at the time I did not spend as much time
>with the book as I would have liked.
>
>Please can anyone either supply or tell me the name of this most excellent
>book so that I can get a copy of my own?

I'm not sure what books you are refering to, _Gary_ ;-) , but the original idea was developed by a guy named Weaver. If you have access to a good college level technical library you could look them up. If you can have access to a good on line reference you could look up the articles and any _decent_ library would be able to get you a copy for a modest fee, no matter where they are located. I have done this at our local library (city population 60,000) with about 60% success rate.

I have done some modest research into this idea my self.

The basic idea is to have two circuit paths. One using 'inphase' oscillators and the other 'quadrature' oscillators. Inphase and quadrature are also known as sine and cosine or 0 and 90 degrees phase shift.

Each path consists of: mixer---filter---mixer---filter
* *
* *
osc1 osc2
* *
90 90
deg shift deg shift
* *
mixer---filter---mixer---filter

There is a splitter at the input to feed the two paths and a adder at the output to combine the two.

Sometimes the first mixer (on transmit) or second (on receive) are replaced with audio phase shifters, but mixers allow better control of the balance.

Balance between the two paths are critical to performance, as well is the exact 90 degree shift. By doing various 'tricks' related to the oscillator frequencies and filter frequencies different effects can be obtained, like variable bandwidth filtering, passband tuning, etc. It is also possible to demodulate FM.

I hope this wasn't too confusing. By the way, there were article in QST a year of two ago on building practical versions of this.

Jim
N8EE

701. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a3b0bf.0@news.netwalk.com>
Source record: 74531
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote in message ...

[...clipped...]
>resonance, the voltage across either reactive component is a maximum -
>so that's a parallel resonance, isn't it? But the current through either
>component is *also* a maximum - so that's series resonance, isn't it?

Not necessarily. In a 'conventional' parallel arrangement, in which the signal source is in parallel with the L and C, the L is a short circuit at DC and the capacitor is a short circuit at infinitely high frequencies. At these frequencies the current will be maximum.

In a conventional series resonant arrangement the source is in parallel with a series connected L and C. At resonance the current will then be maximum thru both.

I challenge all on this newsgroup to show me the difference between series and parallel tuned with out hooking up a signal generator in one of these arrangements!!!

Jim
N8EE

702. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a3b117.0@news.netwalk.com>
Source record: 74532
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Graeme Zimmer wrote in message <77pa3n$39c$1@m2.c2.telstra-mm.net.au>...
>It still forms a ring, alhough smaller.
>
>But is it in parallel or in series ?
>
>In is of course, both a parallel and a series circuit.
>

It is _neither_ until you couple a signal into it.

Jim
N8EE

703. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <z6FPDPCIs6o2EwFL@jmwa.demon.co.uk>
Source record: 74533
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<36A36F67.547@jhuapl.edu>, Marshall Jose <Marshall.Jose@jhuapl.edu>
wrote:
>I don't think this argument helps illuminate what is essentially a
>distributed-reactance (i.e., transmission-line) problem. It's not
>possible to analyze the microstrip from that point of view. Roy's
>dealing with waves and fields, not with lumped elements.

But the point about stubs is that you *can* treat them as if they were
LC circuits. A 1/4-wave stub shorted at one end looks like a parallel-
tuned circuit at the open end. An open-ended 1/4-wave stub looks like a
series-tuned circuit at the other end.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

704. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36A3E913.E898B491@teleport.com>
Source record: 74534
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jim wrote:
>
> John Woodgate wrote in message ...
>
> [...clipped...]
> >resonance, the voltage across either reactive component is a maximum -
> >so that's a parallel resonance, isn't it? But the current through either
> >component is *also* a maximum - so that's series resonance, isn't it?
>
> Not necessarily. In a 'conventional' parallel arrangement, in which the
> signal source is in parallel with the L and C, the L is a short circuit at
> DC and the capacitor is a short circuit at infinitely high frequencies. At
> these frequencies the current will be maximum.
>
> In a conventional series resonant arrangement the source is in parallel with
> a series connected L and C. At resonance the current will then be maximum
> thru both.
>
> I challenge all on this newsgroup to show me the difference between series
> and parallel tuned with out hooking up a signal generator in one of these
> arrangements!!!
>
> Jim
> N8EE

I think I've finally seen your way at looking at this. I define series and parallel cicuits just the way you have here. Both are two-terminal devices. There is no difference between an open-circuited parallel circuit and a short-circuited series circuit, where you're talking about opening or shorting those two terminals, and I assume that's what you mean when you say the two circuits are the same. But I can easily tell the difference between an open-circuited series LC and an open-circuited parallel LC without a direct connection, simply by coupling to the inductor with a small coil and observing the way the impedance of the coil changes with frequency. The same can be done to distinguish a short-circuited parallel circuit from a short-circuited series circuit.

But I'm sure we all know this anyway, and the discussion is solely one of semantics. This is taking on the characteristics of one of those high-Q threads (which rings for a long, long time after being struck) that don't leave the participants any more knowledgeable at the end than at the start. So with this I respectfully bow out.

Roy Lewallen, W7EL

705. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990118185233.8847C-100000@oso.slonet.org>
Source record: 74535

These bike generators are simply amazing! Some of the units made in
Europe with permanent magnets will put out five or so watts without any
effort whatever---certainly enough to light a small bulb. They appear to
be current limited, so I would think easy to attach to a battery. K7RR

On 19 Jan 1999, Hamm4fun wrote:

> >
> >What about one of those bike generators? The one I have is an alternator and
> >not a generator. It has permanent magnets for the field. This should
> >produce enough power for an HT. They light a 10 or 15 watt bulb on a bike.
> >The units are small also. Some sort of regulation would be necessary.
> >
> >
> >john
> >WA0VYZ
> >
> >
> >
> >
> > John Stroppel | Internet: jstroppe@uhl.uiowa.edu
> > The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
> > Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
> > Iowa City, IA 52242 | Fax: (319) 335-4555
> >
> >
> >
> >
> >
> >
>
> How about just putting a bike with generator on an exercise stand. Cranking
> with your legs would beat the heck out of doing it with your arms and all the
> gearing is already taken care of.
>
>

706. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <780suu$1bj@apple.telalink.net>
Source record: 74536

Monty Northrup wrote in message <36a3e082.3029132@news.io.com>...
>Assuming QRP power levels, would it make an effective transmitting
>antenna? Would RF effectively stop at the feed transformer, or couple
>easily across it to the higher-voltage power lines (for a VERRRRRY
>long -wire antenna). Would this make it effective at low HF
>frequencies, like 160 meters, or even VLF?

For some time, this was widely used for campus broadcasting stations, in the AM broadcast band. Usually, a few watts (as much as 40 for large buildings) would be coupled into the line on the 120V side of the feed transformer, by feeding all three phases against ground through a capacitor & impedance transformer. It does NOT get across the feed transformer (at least not much), but on the near side it is fairly effective at LF.

I don't know anyone who's tried it for receiving, but suspect it would be too noise-ridden to be usable.

73 Doug

707. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <780utv$r9n$1@camel15.mindspring.com>
Source record: 74537

Carrier Current Broadcast Stations couple to the power lines for transmission all the time. During WW-11 when "on the air" ham radio was banned many used "Carrier current" transmissions. The stopping point is the distrubition transformer as the capacity to ground shunts the RF signal to ground. Sparks W4EAS

Monty Northrup wrote in message <36a3e082.3029132@news.io.com>...
>Hi All!
>
>I've noticed in recent years the proliferation of new technologies
>that couple RF into the local AC (house) wiring for the purpose of
>controlling household lighting or appliances, intercoms, cable-less
>telephone extensions, etc. All this led me to thinking...
>
>Aside from the obvious danger from casual contact with powerline
>voltages, or catastrophic component breakdown (which, apparently,
>commercial manufacturers have managed to deal with):
>
>Could the AC line be used as an endfed receiving antenna? Given that
>most houses have 50-100 ft of wiring between the house and pole
>transformer, does this imply that the performance would be similar?
>How would one best (and most safely) couple to it?
>
>Assuming QRP power levels, would it make an effective transmitting
>antenna? Would RF effectively stop at the feed transformer, or couple
>easily across it to the higher-voltage power lines (for a VERRRRRY
>long -wire antenna). Would this make it effective at low HF
>frequencies, like 160 meters, or even VLF?
>
>Has this been tried by any of you?
>
>monty
>
>

708. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <36A417A5.3BAFD557@cadvision.com>
Source record: 74538

Just like any random wire, you can try it (taking appropriate precautions) and it may or may not suit your needs. Personally, string a little bit of any type of wire (or even bits hooked together), almost anywhere, and you would probably do just as well. At one time I had about 50 feet of bell wire in a plan helix under a living room rug which worked well for me. And don't forget the proverbial bedspring!

Irv VE6BP

Monty Northrup wrote:

> Hi All!
>
> I've noticed in recent years the proliferation of new technologies
> that couple RF into the local AC (house) wiring for the purpose of
> controlling household lighting or appliances, intercoms, cable-less
> telephone extensions, etc. All this led me to thinking...
>
> Aside from the obvious danger from casual contact with powerline
> voltages, or catastrophic component breakdown (which, apparently,
> commercial manufacturers have managed to deal with):
>
> Could the AC line be used as an endfed receiving antenna? Given that
> most houses have 50-100 ft of wiring between the house and pole
> transformer, does this imply that the performance would be similar?
> How would one best (and most safely) couple to it?
>
> Assuming QRP power levels, would it make an effective transmitting
> antenna? Would RF effectively stop at the feed transformer, or couple
> easily across it to the higher-voltage power lines (for a VERRRRRY
> long -wire antenna). Would this make it effective at low HF
> frequencies, like 160 meters, or even VLF?
>
> Has this been tried by any of you?
>
> monty

709. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <iMar+sDal8o2EwE3@jmwa.demon.co.uk>
Source record: 74539
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<36a3b0bf.0@news.netwalk.com>, Jim <jbolinger@lintek.com> wrote:
>
>John Woodgate wrote in message ...
>
>[...clipped...]
>>resonance, the voltage across either reactive component is a maximum -
>>so that's a parallel resonance, isn't it? But the current through either
>>component is *also* a maximum - so that's series resonance, isn't it?
>
>
>Not necessarily. In a 'conventional' parallel arrangement, in which the
>signal source is in parallel with the L and C, the L is a short circuit at
>DC and the capacitor is a short circuit at infinitely high frequencies. At
>these frequencies the current will be maximum.

This seems to me to be pointless pedantry. You have put a (presumably)
low-impedance source in parallel with the tuned circuit and then find no
*local * maximum of current in the reactive elements at any finite
frequency? What is the Q of the circuit with the source connected? To
see the resonance, you have to make your source a *current* source (high
impedance). The current at resonance *through both L and C* is then Q
times the input current. That ias why the voltage across them is high.
>
>In a conventional series resonant arrangement the source is in parallel with
>a series connected L and C. At resonance the current will then be maximum
>thru both.

Well, that's one way of connecting a source to a series tuned circuit,
but ...
>
>I challenge all on this newsgroup to show me the difference between series
>and parallel tuned with out hooking up a signal generator in one of these
>arrangements!!!
>
Well, at least we agree on that. In fact, I don't really see why you
challenged what I wrote before.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

710. Re: getting started

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Gary Danaher <gdanaher@flash.net>
Message-ID: <36A29BC2.807B3548@flash.net>
Source record: 74648

Let me suggest that you submit your question to the techs at arrl. They should be able to direct you to a reference book which has the info you are looking for. Find their home page at www.arrl.org

Gary
AB5RM

Chris Mcdonald wrote:
>
> Are there any webpages that take you step by step how a vhf
> transmitter works and what each part of the transmitters circuits do.
> Most of what I have seen so far just shows one part of the transmitter
> dose and dosen't explane how it is connected to the rest of the
> transmitter or shows a full transmitter with little or no explanation.
> I have been into building electronics for a few years but I still
> can't figure out how transmitters work, well except for the very
> simple ones.

711. Question re TDA7000 and/or other FM receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: pmbail01@spamtrampling-moocow.slug.louisville.edu
Message-ID: <A182436CA6876BA5.AD633AD8F76D1D90.0EAFCF3B0B3768D1@library-proxy.airnews.net>
Source record: 74649

Been doing quite a bit of searching on the Internet to find info, have had rather a fruitless time at it, so now I'm asking:

1) Does anyone know of a source where I can possibly get a TDA7000 IC for less than fifteen dollars US? :) (I have found all of *two* suppliers in the United States, and neither of them will sell in lots of less than twenty. I only want two or three, not *twenty*. :)

I would *strongly* prefer a United States-based seller; buying from overseas is not exactly an option, thanks to costs to convert currency and buy an International Money Order in Irish pounds, pounds Sterling, or Euros [not to mention shipping, not to mention the real possibility THEY don't sell in lots of less than twenty, either].

2) If nobody knows of a source in the US, are there any other FM IC's of that rough type (i.e. essentially FM radios on a chip) that are a) fairly cheap and b) one CAN get them without buying in lots of 25 or more through usual electronics suppliers (Mouser, etc.)?

Just FWIW, it would be a major plus if it could either go below the broadcast FM band or above (or both).

3) This last one is a *major* shot in the dark, but does anyone know if equivalents exist for the old TDA1071 chip?

Thanks in advance...

-moo

712. Re: Question re TDA7000 and/or other FM receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: stereodoc1@aol.com
Message-ID: <19990118002753.06087.00000665@ng-ch1.aol.com>
Source record: 74650

I have some TDA7000's at my shop. I may also have some technical info on that IC as well. I'll check.

713. hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Jim Pierpoint <pierpo@bellsouth.net>
Message-ID: <36A2C164.4F90@bellsouth.net>
Source record: 74651

Hi Guys :

Just wondering if I could easily make a hand cranked generator to power my HT... just for survival reasons. Is there any reason I could not use an old 12vdc auto generator... put a hand crank on it... and generate enough power for my HT???

If anyone knows a way to do this, or any other way to easily build a homebrew generator that runs at 12 volts and is capable of 5 to 20 watts output, I would like to hear about it.

Thanks in advance...

Jim Pierpoint

714. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <36A2DC33.27AB@wenzel.com>
Source record: 74652

Clifton T. Sharp Jr. wrote:
>
> Let's compare notes. What kind of transistors do you keep on hand, and
> why? Since I'm just starting to experiment a bit (after many years of
> ignoring it), I'm tending to build up a few general-purpose things like
> 2N2222, 2N3904, 2N3906, a few MPF102 and J-310, and the odd power TO-220. (clip)

My list is long but a few stand out :) The 2N4401 and 2N4403 are dirt cheap but have superlative performance. They both have excellent noise performance for low impedance sources, great saturation characteristics (including a zero temp-co saturation voltage with the right base current!), good gain and f-sub-t, and can handle 600 mA. The MPS A-18 is also on my short list due to its very high gain, even at very low collector current. The U310 JFET is great for grounded-gate circuits since the case is connected to the gate. I'll stop here!

715. Guide to the rec.radio Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <77ulr7$sd0@news.Hawaii.Edu>
Source record: 74653
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-intro

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups, as well as their Internet mailing list counterparts and complements. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to Jeffrey Herman, WH6U, (jeffreyh@hawaii.edu), or Paul Schleck, K3FU, pschleck@novia.net.

This message was last changed on 14 March, 1998.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

Over the years, as the net grew, the volume of discussion became progressively higher. First one by one, and then as part of two reorganizations, what was once one group became many. In the process, developments elsewhere on the net were reflected in the groups as they were created, most notably the change to place all of the ham radio groups in one hierarchy.

The collection of newsgroups continues to grow as more people join the net, and as more topics of discussion gain volume, I expect to see more groups be created as well. This follows what is happening on the rest of the net.

Nearly all of the radio newsgroups have corresponding mailing lists, the notable exception being rec.radio.swap. There are also a few mailing lists that don't have newsgroups.

The Current Groups
==================

It's important to post messages to the group that's appropriate for them, and not to the groups that aren't. The whole idea of having different newsgroups is so that folks who aren't interested in, say, homebrewing, don't have to wade through messages about homebrewing on the way to read about Field Day. Posting appropriately is just good etiquette.

The rec.radio.amateur.misc group is the catchall. It is what rec.ham-radio was renamed to during the first major reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, was removed on September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there. To answer a frequently asked question: No, there is no mailing list that goes along with this group. If you can't read Usenet news directly, you're out of luck.

The group rec.radio.amateur.policy was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate - it's now legal to order a pizza on the autopatch, if you're not in the pizza business - as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The group rec.radio.cb is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL

bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently David Dodell, WB7TPY. The email address for submissions to the group is rec.radio.info-moderator@primenet.com. Inquires and other adminis-trivia should be directed to rec.radio.info-request@primenet.com. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups r.r.amateur.antenna, .boatanchors, .dx, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, the older tube based amateur, military, and commercial gear, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter. The .dx group is devoted to long distance amateur communications. Each of these subgroups has its own charter and FAQ; please refer to the archives to find these documents.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

Mailing Lists

In addition to the mailing lists that mirror the Usenet newsgroups, there also are a few that stand alone. These cover specific areas of ham radio, and discussion is focused on just those areas.

The cq-contest mailing list is for discussions of contesting in ham radio. To join, send email with the word "subscribe" on a line by itself to cq-contest-request@tgv.com.

The DX mailing list covers the finer points of DXing. This one is also joined by mailing "subscribe" on a line by itself, this time to

dx-request@unbc.edu.

There's also a VHF mailing list, for VHF operators of the weak signal persuasion. You can join this one be sending "subscribe vhf" on a line by itself to vhf-request@w6yx.stanford.edu.

The QRP-L list is devoted to building and operating gear at low-power outputs. To subscribe, send an email to listproc@lehigh.edu and only write: subscribe qrp-l Your Name.

The TopBand e-list is devoted to all areas of operation on 160m. To subscribe, send an email to majordomo@contesting.com and only write: subscribe topband and follow the instructions you'll be sent.
This site, contesting.com, also hosts a couple dozen other ham-related e-lists. Use the above address, and only write: lists to get the entire index.

The Boatanchors e-list is devoted to the older tube-based ham, military, and commercial communications gear. To subscribe, send an email to: listserv@listserv.tempe.gov and only write: subscribe boatanchors

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to: majordomo@piobaire.mines.uidaho.edu and only write: subscribe glowbugs <your@address.here>

The VHF DX discussion list can be accessed by sending an email to: majordomo@blacksheep.org and only writing: subscribe VHF-DX-discuss.

We now have a list devoted to amateur radio history. To subscribe, send an email to: ham-radio-history-subscribe@egroups.com - leave the body of the message blank.

Qth.net hosts over 100 ham-related e-lists, including lists devoted to each state, manufacturer, mode, band - too many to state here. Send an email to majordomo@qth.net and only write: lists to get the complete index.

For one of the most complete indexes of email lists, see the excellent web site http://pw2.netcom.com/~ac6v/pageae.html

Please do NOT send subscription requests to the mailing lists themselves; that doesn't work very often, and is very annoying to those on the list. Also, please keep your electronic mail address current with any mailing lists you subscribe to, as dealing with returned email is a nuisance for the person maintaining the mailing list.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your

article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jeffrey Herman, WH6U (ex KH6OO), rec.radio.amateur working-group
jeffreyh@hawaii.edu

716. Re: Question re TDA7000 and/or other FM receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: rjpcorp@aol.com
Message-ID: <19990118064434.21394.00002663@ng146.aol.com>
Source record: 74654

Try DC Electronics...1-800-467-7736. They're based in Arizona...and are excellent for the hobbyist. Good luck.

717. Re: 6 meter amp wanted (Homebrew)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: rjpcorp@aol.com
Message-ID: <19990118064704.21394.00002664@ng146.aol.com>
Source record: 74655

>I'm looking for a home built 6 meter amp. I am willing to pay $600 for the
>right one. Does anyone know where I can find one?
>
>
> Dr.. Dee
>
>
>
>
>
>

What kind of gain are you looking for ?

718. Re: CONCLUSIVE EVIDENCE: Jesus *is* King of the Jews !!!! ! !! !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: "Robert M. Ganter" <robert.ganter@ascom.ch>
Message-ID: <36A31CE6.733C7FF2@ascom.ch>
Source record: 74656

Bry wrote:

> Yeah! What a handsome hero he must be!
>
> REALLY contributing to the hichly intellectual nature of the
> discussions here!

And You think, the contribution of that anonymous christian
fundamentalist Ayatollah was highly intellectual?

Get a life! It was spam and nothing else. If You have had a look at how
many newsgroups this asshole spammed I can understand Laurents reaction
(although I would not have done that).

And now lets leave these pseudo-religous "discussions" and go back to
talking about ham radio.

Thanks and 73

Robert HB9DNN

--
Robert M. Ganter / Ascom Business Systems AG / Software Engineering
Cellular Dep. CWECE / Ziegelmattstr.1, 4503 Solothurn, Switzerland
Tel: ++41 (0)32 624 3269 email: robert.ganter@ascom.ch
Fax: ++41 (0)32 624 3648 Amateur-Radio: HB9DNN

719. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: nobody@xxx.com
Message-ID: <36A339D0.CC0C6D8A@xxx.com>
Source record: 74657
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I have been thinking of building a
LOW IF amplifier with a IF about 10-15 KHZ
which would be run from the AM 455 IF you have mentioned.

This would provide the narrow band width SSB and CW
characteristics + should be a ideal platform for connecting a
DSP kit like the SHARC ADSP21061 or Motorola DSP56307.

The conversion from 455 Khz to 15 Khz could be done with
a 1 or TWO (I- Q) NE602 chips .

The 15 KHz IF filter and demodulator can be realised with either
OPAMPS (GYRATORS for filters, Opamp All Pass Hilbert transformers etc)

Alternately, a powerful DSP like DSP 56307 can implement all of the
15 Khz processing in Software.

No Hi Inductance coils should be necessary as , the Gyrator
circuit is said to be suitable for use in HiQ filters.

M.L. McCauley wrote:

> I am interested in adding SSB to an AM only tube receiver with a 455KHz last
> IF stage. Any suggestions on good ICs to check out?
>
> Thanks!
>
> Mike, WB5MYY

720. Info from PW mag

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be42ed$7467e1c0$LocalHost@simoncox>
Source record: 74658
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,uk.radio.amateur

Hi everyone, I can't get out to a newsagents but am told that there's a guy advertising in Wanted at the back of the mag for Racal items 121 & 168 amongst others. Can anyone who's got a copy of I believe January issue look up the phone number for me, the person who told me about it obviously took it down wrong and doesn't have the mag any longer, think the guy' s name was Rob on an 01636 code.

Thanks, Simon, G1DRY.

simon.cox@breathe.co.uk

721. Great Homebrew Information On-line!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: bry@NOSPAM.mnsinc.com
Message-ID: <36a35bf1.6211885@news.mnsinc.com>
Source record: 74659

"You Can Get Anything You Want At Alice's Restaurant!"

BUT, if you just want - GREAT AMATEUR RADIO Homebrew Information, see:

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

722. Re: Electrical Interference in 1995 Saturn SW-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36a76700.76466752@news.atl.bellsouth.net>
Source record: 74660

On 17 Jan 1999 22:44:00 GMT, cooperjim@aol.com (CooperJim) wrote:
>The roof of my Saturn station wagon is plastic. I had earlier checked the
>sedans and their roofs were metal, so when I tried my mag-mount and it would
>not stick, I was surprised. The only piece of metal big enough for a mag mount
>is the hood, so I put it there. Even though Im only using 0.5 / 5 watts, Im
>still unconfortable about the antennea lobes being in the plane of my eye.
>(Yeah, I use a speaker mike with my handheld to keep the antennea a little
>further away.)

At that power level, you're within safety limits. Of course the antenna would work better mounted on a metal roof (preferably via a thru-hole mount), but if the hood is the best you can do, it will suffice, and be safe in terms of RF exposure. (Whether it would be safe in terms of a flying projectile in case of a collision is another matter. I'd feel better with a permanently mounted antenna that couldn't become a heavy magnetic missile in a crash.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

723. Hickok TV-7 adaptor wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990118115415.11176.00000228@ng121.aol.com>
Source record: 74661

Hello, I'm looking for leads to purchase Hickok adaptor 1704 or an equivalent. This is the compactron tube adaptor. Thanks in advance, please respond via email.
Thank you,
Joe Pratt, Tubecntral@aol.com

724. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36a86873.76837746@news.atl.bellsouth.net>
Source record: 74662

On Mon, 18 Jan 1999 05:48:00 GMT, Jim Pierpoint <pierpo@bellsouth.net> wrote:
>Just wondering if I could easily make a hand cranked generator to power
>my HT... just for survival reasons. Is there any reason I could not use
>an old 12vdc auto generator... put a hand crank on it... and generate
>enough power for my HT???

I doubt you're up to hand cranking an auto generator at the required
speed. Unlike alternators, you have to spin up a generator pretty good
to get any reasonable amount of power from it. You'd do better with an
alternator. They produce good power at speeds as low as 600 RPM.
But you'd need a battery to excite the field of most auto alternators.

>If anyone knows a way to do this, or any other way to easily build a
>homebrew generator that runs at 12 volts and is capable of 5 to 20 watts
>output, I would like to hear about it.

There are alternators which use permanent magnets. These can operate
without battery excitation. Some of these are fairly small, so you might be
able to hand crank them through a gearing arrangement. I suspect you'd
want to rig up a way to *pedal* the alternator, however, since your legs are
likely to be able to keep up the motion longer than your arms can.

I know a fellow who coupled an alternator from some sort of garden tractor
to a weedwacker engine. That produced about 30 amps, was small, and very
noisy. He used it to recharge batteries. The advantage was that he could carry
it with one hand to the battery's location. That was useful for starting cars
which had discharged batteries. You wouldn't want to run it to power a
radio, but you could use it periodically to recharge a battery which was used
to run a radio.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

725. Re: Info from PW mag

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be4301$c8c16b60$20eeb094@simoncox>
Source record: 74663
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,uk.radio.amateur

Thanks guys I now have the number.

Simon Cox <simon.cox@breathe.co.uk> wrote in article
<01be42ed$7467e1c0$LocalHost@simoncox>...
> Hi everyone, I can't get out to a newsagents but am told
> that there's a guy advertising in Wanted at the back of the
> mag for Racal items 121 & 168 amongst others. Can anyone
> who's got a copy of I believe January issue look up the phone
> number for me, the person who told me about it obviously took
> it down wrong and doesn't have the mag any longer, think the
> guy' s name was Rob on an 01636 code.
>
> Thanks, Simon, G1DRY.
>
> simon.cox@breathe.co.uk
>

726. WTB HV Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Dave Thomas <dethomas@hiwaay.net>
Message-ID: <36A36CA7.D0835AEE@hiwaay.net>
Source record: 74664

Hello,

I'm looking for a transformer with 230V primary and 4800V CT @500MA
secondary OR something close.

Also would be interrested in 230V/1500-2400V @ 1A or better.

If you have something in this range,
please email me.

thanks,

Dave Thomas N4CLR

727. Re: Question re TDA7000 and/or other FM receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <77vvmj$4ks$1@nnrp1.dejanews.com>
Source record: 74665

In article
<A182436CA6876BA5.AD633AD8F76D1D90.0EAFCF3B0B3768D1@library-proxy.airnews.net
>, pmbail01@spamtrampling-moocow.slug.louisville.edu (Moocows hate spam.)
wrote:

> 1) Does anyone know of a source where I can possibly get a TDA7000 IC for
> less than fifteen dollars US? :) (I have found all of *two* suppliers
> in the United States, and neither of them will sell in lots of less
> than twenty. I only want two or three, not *twenty*. :)
>
> I would *strongly* prefer a United States-based seller; buying from
> overseas is not exactly an option, thanks to costs to convert currency
> and buy an International Money Order in Irish pounds, pounds Sterling,
> or Euros [not to mention shipping, not to mention the real possibility
> THEY don't sell in lots of less than twenty, either].

All of the European "hobbyist" suppliers will sell in onesies and
twosies. I've bought TDA7000s from Mainline, and TDA7010Ts (the SMD
version) from RS Components.

Credit cards are really handy for this, since credit card currency
conversion charges tend to be much less than what it costs to buy
a money order. And with the cost of long-distance these days, you
can usually phone them and tell them what you want for less than
the cost of an overseas stamp. Set your alarm and take advantage of
the cheap wee hours of the morning rates. Which aren't the wee hours
of the morning *there*...

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

728. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-18 00:00:00 UTC
From: Marshall Jose <Marshall.Jose@jhuapl.edu>
Message-ID: <36A36F67.547@jhuapl.edu>
Source record: 74666
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote:
>
> <369FA375.BBD7FF41@teleport.com>, Roy Lewallen <w7el@teleport.com> wrote:
> >John Woodgate wrote:
> >>
> >> An isolated tuned circuit cannot be unabiguously described as either
> >> series or parallel. It depends on how you couple to it.
> >>
> >That's an interesting thought, and not one I've encountered before. A
> >parallel LC will of course have a very high Z at one frequency and
> >lower Z at others (when measured directly across the parallel
> >combination), and a series LC circuit a very low Z at one frequency
> >and high Z at others (when measured directly across the series
> >combination). So how would I couple to a parallel LC to give the
> >characteristics of a series LC, i.e., low Z at resonance and higher Z
> >at other frequencies, or to a series LC to get a high Z at resonance?

Guys, Guys! C'mon! 8-)

Roy wants to simulate a parallel-resonant structure which is coupled to the source in the same way a microstrip is coupled: directly. It is not helpful to ask Roy what manner of coupling is being used; that choice has already been made for him.

Microstrip stubs are just transmission line stubs and will behave similarly. If you "look into" a 1/4-wave stub, it appears to be a low impedance, similar to how a series-LC network looks with the other end connected to ground. If you look into a 1/2-wave stub, it appears to be a high impedance, similar to how a parallel-LC network looks with the other end connected to ground.

What sets stubs apart from LC circuits is that they will resonate at higher frequencies, too. Specifically, the stub's impedance will be minimum when the stub's is 1/4 wavelength long, 3/4, 5/4, etc., and maximum when the stub is 1/2 wavelength long, 1, 3/2, 2, etc.

Of course, it's easier to see this by keeping the stub length the same and varying the frequency of observation. The impedance minima will then correspond to (say) fc, 3fc, 5fc..., and the maxima will correspond to 2fc, 4fc, 6fc....

> If you draw an L and C connected together as a circuit, you can see that
> they are in series and in parallel simultaneously. What appears to
> happen at resonance (neglecting the uncertainty about what the
> 'resonance' frequency is if the Q is low) depends entirely on how you

> couple the energy in, and how you couple it out. For example, at
> resonance, the voltage across either reactive component is a maximum -
> so that's a parallel resonance, isn't it? But the current through either
> component is *also* a maximum - so that's series resonance, isn't it?

I don't think this argument helps illuminate what is essentially a
distributed-reactance (i.e., transmission-line) problem. It's not
possible to analyze the microstrip from that point of view. Roy's
dealing with waves and fields, not with lumped elements.

I don't wish to step on toes (a futile wish, I know), but I've been in
the same place as Roy and felt obliged to speak up.
--
Marshall Jose, WA3VPZ
Johns Hopkins Univ. Applied Physics Laboratory
Marshall.Jose@jhuapl.edu

729. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Jason Cheng <jasoncmc@net.polyu.edu.hk>
Message-ID: <36A36B76.7D67@net.polyu.edu.hk>
Source record: 74540

>
> Germanium transistors had a lot more leakage than silicon transistors
> even when they were brand new. You mean they keep getting worse and
> worse?
>

Yes, they all seem to get worse especially those power types.

Jason

730. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990118194736.26987.00000180@ng53.aol.com>
Source record: 74541

>
>What about one of those bike generators? The one I have is an alternator and
>not a generator. It has permanent magnets for the field. This should
>produce enough power for an HT. They light a 10 or 15 watt bulb on a bike.
>The units are small also. Some sort of regulation would be necessary.
>
>
>john
>WA0VYZ
>
>
>
>
> John Stroppel | Internet: jstroppe@uhl.uiowa.edu
> The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
> Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
> Iowa City, IA 52242 | Fax: (319) 335-4555
>
>
>
>
>
>

How about just putting a bike with generator on an exercise stand. Cranking
with your legs would beat the heck out of doing it with your arms and all the
gearing is already taken care of.

731. CUSHCRAFT ANTENNA SUPPORT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be42e4$c56415c0$35d0a0cd@kovar.inav.net>
Source record: 74542

Responses and concerns of others with opinions to Cushcraft products
and customer support follow.

You can only turn your underwear inside out so many times before
something needs a change!
k0var

_ ---
My antenna was damaged in a storm two weeks after I bought it!: After Two
years of attempting to get Capacitors to fix my antenna Cushcraft has
decided not to sell parts for the ARX270N.
: Cushcraft stated they will not let their own employees
: repair them nor will they sell me or anyone small parts for it.
: They will only sell me the three sections at $160 to $190 each.
: OK !, the antenna now cost $$250 new, or they offered to replace three
: sections for $540. Let me put a pencil to this!! Darn! can't be!
: The Six capacitors will now cost me $540 to fix my antenna.
: I remember someone selling the Government toilet seats for about the same
: inflated price !
: Does anyone see the toilet seat relationship ????????
: : Now everytime I sit on a toilet seat Cushcraft will surface, in my
: thoughts.
: Anyone have any busted up ARX270's that would be willing to sell me
: some of those Capacitors?
: I am willing to throw in the kitchen sink and a toilet seat to make it
: worth: your time!!
: :-)
: Jack Kovar
: k0var
: Iowa

Dear O.M.
Thanks for warning me about cushcraft. I guess I won't be buying that
duo band antenna for the home qth.
Vry 73,
Eddie, K4MAS

HEY DUDE! I had an expirience with the Cushcraft "quality" .
I owned a AR-270 dual band for two years. I question the "db" figure
that they give, but upon inspecting it, I spotted corrosion inside the
aluminum base assembly. I couldn't remove the 3 ground plane elements!
I replaced it with the Larson BSA-270 dual band base antenna.
Same size & shape, but I doubled my UHF range!!!!!
The SWR was good on both antennas, but LARSON blows it away for

quality. ALso, Larson uses brass & stainless parts!

FYI, John KF2VW Rochester NY

Mr.Kovar, I have bought this same antenna and ended up selling it to a
friend
for a fraction of the original price. I have had nothing but problems with
their products so I have sworn never to purchase another Cush-crap product
ever again and tell all of my friends and anyone who will listen! Please
E-mail me and let me know I'm not alone. WB6KIO/Steve

Hi Jack.
Sorry to read about your problem on dejanews. Just wondering,
where are you in Iowa? I'm in Cedar Rapids.
The head of Cushcraft regularly reads postings to the TowerTalk
reflector on Contesting.Com. You may want to post there.
73,
Mark N3AVA/0 (Don't/Won't own any wimpy antennas!).

---

p. Similar problem here... took 7 months to get the wrong part. No phone
success, no e-mail success. You must get on the phone and use the phone
menu to get to a live operator. When you speak with her, DO NOT TAKE NO
FOR ANSWER.... Ask to speak with one of the owners. Call every hour if
necessary until they are so aggravated that someone will speak with you and
help you. After that... don't buy Cushcraft. Fred, K8PP
It's going to be awefully funny to see the guy with the
Cushcraft Tshirt, walking around under the dome with the
antenna stickingout of his ass!!!
Good luck...
(Goes to show what customer satisfaction has go to these
days...)

Hi Kovar:
I share your feelings and concerns but we will only get what we deserve
when we can get the amateurs to stand together. Maybe we could start a
news group dedicated to to exposing those dealers and manufacturers who do
not treat us with enough respect. Remember "If they don't appreciate you
for your money, they don't appreciate you at all". Good luck with your
antenna.
wa4puf --- Ralph

---

kovar,
I also own and operate Cushcraft antennas, and I found your posting on
the newsgroup.
I copied the letter you posted and attached it to a concerning letter I
wrote to the President of Cushcraft. I hope they get the message and do
you right. I would hate to be in your predicament.
It's too bad Business' are in it for the $buck$ now and do not give
reguard to their customers.
Sincerely,

Mr. Thomas Sexton

Wow!
I might be tempted to drive up to the Manchester Airport to just pick up
the units for you.
send me the exact description and part numbers, and if the weather breaks I
might just do it.
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.

Do yourself a big favor, Switch to a much better company HUSTLER !
PS. Mosley isnt any better than Cushcraft. For HF go with HYGAIN.......
WA2MC.. Marty.

Jack,
I'd have to agree with you that Cushcraft customer service (at least for
us hams) has a lot to be desired. I can't fathom why returning a phone
call or e-mail takes days if at all. I've had Cushcraft antennas for
years and am satisfied with their on the air performance (I'm not a big
gun DXer), and I've owned everything from their VHF/UHF yagis to the HF
A3/with 40M add-on.
I move every couple of years in the military, and inevitably some parts
need to be replaced when I disassemble and reassemble so often. When I
ordered replacement parts back in 1994, I got to speak to a real person who
took the time to help identify part numbers and get me back on the
air in the minimum amount of time. I appreciated that. More recently,
when I needed parts for my A3 (which included aluminum tubing sections),the
company recommended I buy a whole new antenna plus add-on 40m dipole
(probably totaling over $500). Needless to say, I eventually ordered just
the parts I needed, which came to much less than that. But it was painful.
E-mail not answered, calls to tech support not returned for days, and when
I called to check the status of the order, they couldn't even tell me if
the order had gone out and what the tracking number might be. In one
instance, I got a "Mr. xxx" doesn't work here any more" from the front desk
operator. However, I was still occasionally getting e-mail responses from
him! Wow---quite a difference in response from just a few years ago!
I should have written them a letter at the time, but I was just glad to
get back on the air. Then again, would a letter have made a difference?
73 Rick N6CY

If you post this a dozen or so times Ill bet you hear from them. Bet you
get service real quick. Nail em on the net. Good Luck. Paul. N9EMX

Is it time for me to give up

--
Jack Kovar
k0var
Iowa

732. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: graham@tyndale.demon.co.uk
Message-ID: <916707646snz@tyndale.demon.co.uk>
Source record: 74543
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <36a3ae1f.0@news.netwalk.com> jbolinger@lintek.com "Jim" writes:
>
> Gary Peach wrote in message <77po4j$ep8$1@plug.news.pipex.net>...
> >
> >Some years ago I read an excellent mathematical treatise on the phasing
> >method of producing SSB.
> >
> >I think the authors name was Smith, but I don't remember the title.
> >
> I'm not sure what books you are refering to, _Gary_ ;-) , but the original
> idea was developed by a guy named Weaver.

The Weaver or third method is a development of the phasing method but is
different to it. It removes the need for an accurate broad-band 90
degree AF phase shift network by using a sub-carrier oscillator with
quadrature outputs and a couple of extra mixer stages. Extra fun is
added to the circuit operation by placing the oscillator frequency in
the middle of the audio pass band and defining the audio passband with
two low pass filters with cutoff frequencies equal to half the audio
bandwidth.

--
Graham Nye
graham@tyndale.demon.co.uk

733. CUSHCRAFT! I like my A3S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be42e7$71ae9ce0$35d0a0cd@kovar.inav.net>
Source record: 74544

To be fair to Cushcraft, I have a A-3s the works
nice after I cleaned it up with ANTI oxidant AU/AU paste and installed $30
worth of new Trap caps that split out in three years.
Cushcraft is getting to be my money pit.
--
Jack Kovar
k0var
Iowa

734. Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: maddog@io.com
Message-ID: <36a3e082.3029132@news.io.com>
Source record: 74545

Hi All!

I've noticed in recent years the proliferation of new technologies that couple RF into the local AC (house) wiring for the purpose of controlling household lighting or appliances, intercoms, cable-less telephone extensions, etc. All this led me to thinking...

Aside from the obvious danger from casual contact with powerline voltages, or catastrophic component breakdown (which, apparently, commercial manufacturers have managed to deal with):

Could the AC line be used as an endfed receiving antenna? Given that most houses have 50-100 ft of wiring between the house and pole transformer, does this imply that the performance would be similar? How would one best (and most safely) couple to it?

Assuming QRP power levels, would it make an effective transmitting antenna? Would RF effectively stop at the feed transformer, or couple easily across it to the higher-voltage power lines (for a VERRRRRY long -wire antenna). Would this make it effective at low HF frequencies, like 160 meters, or even VLF?

Has this been tried by any of you?

monty

735. QRP HomeBuilder Freeware: plus info needed on T30-7 toroidal core

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: jenna@home.net
Message-ID: <E9Uo2.2201$9P6.7674569@newsgate.direct.ca>
Source record: 74546

Some QRP related software can be found on our website
at:

http://qrp.pops.net/qrp/software.htm

It is 100% freeware.

In addition, the CoilBuilder-99 program is lacking the AL value
for the T30-7 powdered iron toroid core.

In addition, from T80 on up to the T 184 size core, we have no
data for AL values for the number 7 core. We acknowledge that is quite
possible, that these core sizes in number 7 mix do not exist.

Does anyone have any data on the number 7 cores, particularily
the T30-7 core?

Yes, we have checked the Amidon and Micrometals web sites.

please post to this NG or email:

jenna_tashley@_REMOVE_THIS_hotmail.com or email via
web site address.

thanks!
sincerley
Jenna Tashley

736. Re: HELP - tone to turn on speaker

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: tv8news@aol.com
Message-ID: <19990118235357.16409.00001408@ng58.aol.com>
Source record: 74547

fyi the feds wont let you make selective calling either
dtmf or tone squelch

joe
kb0lqr

737. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Andy Lake <andy.lake@bt.com>
Message-ID: <36A4214C.61C2@bt.com>
Source record: 74548
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Graham Nye wrote:
>
> "Jim" writes:
> >
> > Gary Peach wrote:
> > >
> > >Some years ago I read an excellent mathematical treatise on the phasing
> > >method of producing SSB.
> > >
> > >I think the authors name was Smith, but I don't remember the title.
> > >
> > I'm not sure what books you are refering to, _Gary_ ;-) , but the original
> > idea was developed by a guy named Weaver.
>
> The Weaver or third method is a development of the phasing method but is
> different to it. It removes the need for an accurate broad-band 90
> degree AF phase shift network by using a sub-carrier oscillator with
> quadrature outputs and a couple of extra mixer stages. Extra fun is
> added to the circuit operation by placing the oscillator frequency in
> the middle of the audio pass band and defining the audio passband with
> two low pass filters with cutoff frequencies equal to half the audio
> bandwidth.

Do I remember correctly an article in RadCom several years ago ('80s?),
"SSB Phasing Transceiver"? I'm sure that decribed the third-method of
SSB generation.

73
Andy

> --
> Graham Nye
> graham@tyndale.demon.co.uk

738. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <dSrEpUAYkCp2EwL0@jmwa.demon.co.uk>
Source record: 74549
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<36A3E913.E898B491@teleport.com>, Roy Lewallen <w7el@teleport.com>
wrote:
>I think I've finally seen your way at looking at this.

No you haven't, but since you've bowed out, I don't see any point in
explaining again.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

739. List Of Stamp Applications [990119]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: cjX@hth.com
Message-ID: <36a444e4.6738986@news.buller.se>
Source record: 74550
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
Below is the latest index of L.O.S.A and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 What is L.O.S.A all about?
------------------------------

This list was started back in -95 when I heard about (more or less)
uniqe problems that was solved by using a BASIC Stamp. Especially
Guy Gustavson's story (see #001) about how he saved his beloved cat
Kesha gave me the inspiration to start writing L.O.S.A. I hope Kesha
still is alive and having a great life. Now 3 years later there are
130+ applications described and I hope you will enjoy reading all
(or parts) of them.

The main purpose of this list is to get an idea of what other people
are using their BASIC Stamps for and maybe get some inspiration or
hints for your own projects. Some of the projects described in the
list also have links to source code and schematics for download.

1.1 How can I contribute to this list ?
---------------------------------------

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
-------------------------

> = Indicates a new or updated application since last time.
# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
```

004 Scrolling LED Sign
005 Tone Decoder
006 Pager
007 HexWalker Mobile Robot
008 Robo Bug
009 EXPBOT Robot controlled by Stamp
010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector
044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule

054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device
060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Mobile Robot
074 R/C helicopter altitude control unit
075 Automobile Rally Odometer Interface to Laptop
076 LCD drivers
077 Stamp I / PC Interface Demo
078 Stamp Photo Meter
079 Stiquito(TM) 97 HexaPod Robot
080 XRaCS DTMF Radio X10 Control with Voice Response
081 Interfacing the Basic Stamp 2 with I2C Devices
082 The WeatherStamp Meteorological Station
083 Maxxum 7000 Remote Release Widget
084 Xs And Os games for college project
085 Stamp II Mouse Emulator (Version 6)
086 Basic Alarm System
087 Interfacing with a Printer
088 Dinosaur Quiz Game
089 Chemical Injection System
090 RS-232 connections between Stamp and host
091 Video Character Overlay Generator Controller
092 Suction tube depth measurement display
093 Electronic Compass with Basic Stamp 2
094 Event Logger with 8K 24C65 I2C memory
095 Fixing the depth of a suction-pipe with the BS 2
096 Superchaser
097 Corky'z Robotz
098 Cloudrider: analog network with BS2 and BS1's
099 Yet Another Real Time Clock, Dallas DS1287
100 Amateur RadioSatellite Tracking (Az/El) Controller
101 DTMF Decoder
102 PC to STAMP via RS232 routines
103 PC Frequency Counter

104 Sub-Millisecond Reaction Timer
105 Computerized Dynamics Cart
># 106 Ham Radio Interface Using the Basic Stamp 2
107 Remote tempsensors communicates over the power lines
108 Interfacing a BASIC Stamp to SRAM
109 Stepper controller pulse generator
110 Automatic rang caller
111 Automatic emergency broadcast system
112 BASIC Stamp I as an welding machine
113 PLM-24 to X-10 Gateway
114 Semi-Automated Combusitible Gas Indicator Tester
115 Counter-rotating Servos
116 Joystick Controlled Robotic Arm
117 Anti Traction Control Device
118 Cat Chasing Lego Robot and Other Circuits
119 Camlift
120 Control 15 Servos in Parallel
121 8 Digit "Smart" Alphanumeric Display
122 Cycle Testing AC Motor Controller
123 Controlling an LCD by BS2 via I2C Bus
124 The Newcastle Robotic Bilby Project
125 The EM1 (Electric mule)
126 Distance Measurement with GP2D02 SHARP Sensor
127 TI82 Interface
128 Operator Interface for Multiple Stamps
129 Infrared Glucose (Blood Sugar) Monitor
130 Fox For ham radio or Automated Propogation Beacon
131 GPS Data Overlay on Video
132 10Base-T Cable Tester
133 Kodak DC40/50/120 camera control
134 Implement S.N.A.P network protocol in a BASIC Stamp
135 Stamp/PC RS-485 Network
136 Easy-to-build BS keyboard/display w/ 10 keys/LEDs
137 Joystick control: BS2, 2 motors & 2 HBridges
138 Basic Stamp 2 Mobile Robot
139 Home Automation and Security System
140 UM3750 Read Code
># 141 Magnetic Stripe Reader
># 142 Telephone Remote Control and Remote Alarm
># 143 Tube preamplifier control section
># 144 Interrupt for PBASIC
># 145 dLOG
># 146 Compass
># 147 BS-2 serial VISCA interface
># 148 Servo tester
># 149 Small-bot
># 150 Repeater Controller

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

740. Component help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be4396$d7216d00$LocalHost@simoncox>
Source record: 74551
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I'm trying to identify a replacement for what I believe
to be an op amp of some type, 8 pin TO5 metal can
I think the N and S (shown as trade symbols) stand
for National Semiconductor and has the numbers
428 and 1820-0158 it's a few years old now and is
from a board in an HP sig gen. None of the catalogues
I've checked in list it and I have no cross reference books
CAN YOU HELP. HP say they don't keep spares for the
set any longer ????

simon.cox@breathe.co.uk

741. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Michael Lee <M.D.L@btinternet.com>
Message-ID: <781t1p$6fs$1@plutonium.btinternet.com>
Source record: 74552
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen wrote in message <369FA375.BBD7FF41@teleport.com>...
>John Woodgate wrote:
>>
>> An isolated tuned circuit cannot be unabiguously described as either
>> series or parallel. It depends on how you couple to it.
>
>That's an interesting thought, and not one I've encountered before. A
>parallel LC will of course have a very high Z at one frequency and
>lower Z at others (when measured directly across the parallel
>combination), and a series LC circuit a very low Z at one frequency
>and high Z at others (when measured directly across the series
>combination). So how would I couple to a parallel LC to give the
>characteristics of a series LC, i.e., low Z at resonance and higher Z
>at other frequencies, or to a series LC to get a high Z at resonance?
>
>Roy Lewallen, W7EL

Having read most of the postings in this thread, no one seemed to have mentioned that microstrip impedances are affected by the transmission mode. When coupling within coupled stripline filters for example, both odd and even mode impedances must be considered.
I would refer you to T E Edwards excellent book 'Foundations for microstrip design' or Young,Mathei & Jones 'Microwave filters,coupling structures and impedance matching networks'.

Lumped element models are useful, but are only valid for the narrow band case. They are useful for preliminary modelling, but anything more requires distrubuted effects to be considered. Consider also the restrictions in acheivable Q when using microstrip (about 200 max for microstrip, I think).

742. Re: 6 meter amp wanted (Homebrew)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be43a3$b87ecac0$04143bcb@default>
Source record: 74553

If anyone wanted to BUILD one I have a couple of Phillips dual power FETS
BLF278 Vdd 50V, Pout (CW class AB) 300W at 108 Mhz which could be used
at 50 MHz
AUD$200 (thats about US$130 at the current exchange)
Please E mail
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

RJPcorp <rjpcorp@aol.com> wrote in article
<19990118064704.21394.00002664@ng146.aol.com>...
> >I'm looking for a home built 6 meter amp. I am willing to pay $600 for
the
> >right one. Does anyone know where I can find one?
> >
> >
> > Dr.. Dee
> >
> >
> >
> >
> >
> >
>
> What kind of gain are you looking for ?
>
>

743. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <781tvgift1@plug.news.pipex.net>
Source record: 74554
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Jim wrote
>Gary Peach wrote >>
>>Jim wrote
>>>Read the posts by David Peach. He describes it better than I can without
>>>looking it up. It is essentially a 6 dB per octave RC filter.
>>Handle here is Gary OM, or should I be pleased to learn that I have a
>>relative in this NG ;-)
>
>Sorry, Gary...guess I shouldn't trust my short term..uh, er, oh
yes...memory

Er Fb OM I guess you're in the same old duffers club as me ;)
What ever happened to my short term memory I just can't think.

73
Gary7SLL

744. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <781vlk$nna@freenet-news.carleton.ca>
Source record: 74555

(c.c.tqbssz@handXcrank.killspam.us.com) writes:
> Gary Coffman (ke4zv@bellsouth.net) wrote:
>
> : There are alternators which use permanent magnets. These can operate
> : without battery excitation. Some of these are fairly small, so you might be
>
> Most (BMW is the exception I know of) motorcycle alternators are permanent
> rotor and might be suitable. The rectifiers/regulator are in a
> separate assembly, and the regulator is often a shunt type ensuring

Keep a look out for emergency lifeboat transceivers. They have
hand-cranked generators for 500kHz and 8364kHz transceivers and
will be obsolete at the end of this month. Should be thousands
of units coming available worldwide.

73 de va3rr@amsat.org

745. Re: Component help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be43ad$f25ae940$2cebb094@simoncox>
Source record: 74556
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

More on this, I've worked out that it's a buffer device
and seems to have a pin configuration as per RS cat
no 177-2166 a BUF 04G an 8 pin plastic device, help with
a comparison would be good before I buy one, stick it
in and then regret it.

Simon, G1DRY

Simon Cox <simon.cox@breathe.co.uk> wrote in article
<01be4396$d7216d00$LocalHost@simoncox>...
> I'm trying to identify a replacement for what I believe
> to be an op amp of some type, 8 pin TO5 metal can
> I think the N and S (shown as trade symbols) stand
> for National Semiconductor and has the numbers
> 428 and 1820-0158 it's a few years old now and is
> from a board in an HP sig gen. None of the catalogues
> I've checked in list it and I have no cross reference books
> CAN YOU HELP. HP say they don't keep spares for the
> set any longer ????
>
> simon.cox@breathe.co.uk
>

746. HP-8554B plug in wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7824fggrk2@news4.svr.pol.co.uk>
Source record: 74557

I'm looking for an HP-8554B plug-in for my HP-141T spectrum analyser.

If you have an HP-8554B plug-in for sale, not too expensive let me know.

747. Re: WTB HV Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: ptaylor <ptaylor@uswest.net>
Message-ID: <36A480CF.6DC4089D@uswest.net>
Source record: 74558

Hello..,

I THINK,(but I could be wrong) That Microwave oven X-frmrs are right around that voltage range,(it could be more,I'm not too sure),and around that current..

My idea is,that you could go to a local garage sale,or thrift store,and buy a cheap $20 microwave,and 'steal' the transformer out of it..??
It would also have a rectifier diode,and capacitor.... You might be able to kill a couple of birds with one stone..??

just an idea... P.Taylor..,

Dave Thomas wrote:
>
> Hello,
>
> I'm looking for a transformer with 230V primary and 4800V CT @500MA
> secondary OR something close.
>
> Also would be interrested in 230V/1500-2400V @ 1A or better.
>
> If you have something in this range,
> please email me.
>
> thanks,
>
> Dave Thomas N4CLR

748. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: rbmccammon@mmm.com
Message-ID: <36A49431.A60F8947@mmm.com>
Source record: 74559
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote:
> <36a3b0bf.0@news.netwalk.com>, Jim <jbolinger@lintek.com> wrote:

> >Not necessarily. In a 'conventional' parallel arrangement, in which the
> >signal source is in parallel with the L and C, the L is a short circuit at
> >DC and the capacitor is a short circuit at infinitely high frequencies. At
> >these frequencies the current will be maximum.

> >In a conventional series resonant arrangement the source is in parallel with
> >a series connected L and C. At resonance the current will then be maximum
> >thru both.

I note that Jim appears to be referring to source current
and John appears to be referring to component current.

Opinions expressed herein are my own and may not represent those of my employer.

749. Re: HELP - tone to turn on speaker

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <36A4975A.4432FCFB@umich.edu>
Source record: 74560

TV8NEWS wrote:
>
> fyi the feds wont let you make selective calling either
> dtmf or tone squelch
>
> joe
> kb0lqr

I don't recall any such regulation, but perhaps I missed it.
There was an article in Popular Electronics about 5 years ago
that gave complete details on building exactly what the original
poster wants - a DTMF-based squelch system for CB use. There
was no mention of legal complications in the article, as I
recall. Anyway - 'apolllo13', search through the Readers'
Guide in your local library for that article, and good luck!

73 de Bob, KI8AB

750. Re: Component help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Dan Rae <rae4@popd.ix.netcom.com>
Message-ID: <36A4A120.E7427CAE@popd.ix.netcom.com>
Source record: 74561
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Simon, 1820-0158 is the hp part number for a NS LM302H
73, Dan AC6AO G3NCR

751. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36A496D2.5606@pop.valley.net>
Source record: 74562

Monty Northrup wrote:
>
> Hi All!
><snip>
>
> Could the AC line be used as an endfed receiving antenna? Given that
> most houses have 50-100 ft of wiring between the house and pole
> transformer, does this imply that the performance would be similar?
> How would one best (and most safely) couple to it? <snip>

Hello--
In practice, various advertisers in the Sunday newsmagazines have been advertising a commercial receiving antenna product for years. The ads read something like this (emphasis deleted<g>):

TURN YOUR HOUSE WIRING INTO A GIANT TV ANTENNA!!!

What you get for your $19.99 plus s&h: a plastic enclosure with AC power prongs on one end, and a pair of screw terminals for 300-ohm line on the other.

What's inside: a couple of capacitors.

How it works: sort of, with lots of ghosts due to random orientation of stretches of AC in-wall wiring (unless your house has aluminum siding, in which case all bets are off).

A sizeable market for these gizmos exists-- the ads have been around since the 1950s.

So, if you want to try building one of these... use capacitors rated for AC-line voltage standoff (e.g., with UL/CSA/VDE ratings) such as are used in EMI filters. Make the caps small enough to avoid passing appreciable 60-Hz current but large enough to present low reactance at the frequencies of interest. Terminate the caps into a resistor of a few kilohms (higher than receiver's input impedance, but low enough to limit any nasty transients). Disconnet all AC-dimmer or phase-controlled products, and declare the house a vacuum cleaner-free zone when you're operating<g>.

And, let us know how it works.
73,
Brad AA1IP

752. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: nobody@xxx.com
Message-ID: <36A4A84C.16350C49@xxx.com>
Source record: 74563
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Hello,

The G3TDZ 73 Khz phasing SSB receiver used by lowfers should make
an excellent SSB addon at 455 khz just by changing the oscilator to 455 KHZ.
I intend to give this a try as soon as i can.
http://www.mnsinc.com/bry/73khz/g3tdz/g3tdz.htm
The URL is on BRYs pages, and the ckt diagram, and PCB layout are all there.
Also, the transmitter and receiver are on separate boards.
ALso, the receiver has a powerful audi amp, and use standard opamp +mc1496
chips.(No hard to get parts). Mc1496 may be better than Ne602, as it allows
nulling.

If anybody is using this G3TDZ design in this manner, I would like to hear it.

73's

nobody@xxx.com wrote:

> You dont have to USE DSP, if you dont want to.
>
> Simple OPAMP gyrator filters should provide enough selectivity at 15 KHZ
> and you can get away with 1 or 2 Ne602 + 1-2 quad opamps
> or
> you might want to build a low cost R2 like I-Q (to get opposite sideband
> rejection)receiver and get all the selectivity at audio with L-C or opamp
> lowpass filters. (This might be preferable)
>
> The TenTec Rx320 use a low IF of around 12 Khz and opamp filters
> + DSP filters. Its DSP filters really are great0 and beat my Collins R390a
> mechanical filters.(Less ringing and sharper skirts)
>
> Best of luck with your filters + 455 Khz approach, It would work and would be
> somewhat simpler, but hardly something very exciting.
>
> I would definitly try to do something like the R2 Receiver using Ne602 at 455
> Khz
> instead, as, all the filtering can be done at audio, and DSP interface is easy.
>
> Anyway, I definitely want to learn DSP processing, so will ultimately
> use this approach, but in simple easy to build and debug steps.
>
> The current stage is that I just got my R-2 (regular R2 receiver using SRA-1)
> up in the 20M band, but am having trouble with excessive oscilator radiation.
> Opposite sideband rejection is good and is atleast 40 db or so. Did build
> a 1 transistor + 2 diode AGC circuit for R2 to save my ears though.

>
> regards
>
> M.L. McCauley wrote:
>
> > nobody@xxx.com wrote in message <36A339D0.CC0C6D8A@xxx.com>...
> > >
> > >
> > >I have been thinking of building a
> > >LOW IF amplifier with a IF about 10-15 KHZ
> > >which would be run from the AM 455 IF you have mentioned.
> > >
> > >This would provide the narrow band width SSB and CW
> > >characteristics + should be a ideal platform for connecting a
> > >DSP kit like the SHARC ADSP21061 or Motorola DSP56307.
> > >
> > >
> > >The conversion from 455 Khz to 15 Khz could be done with
> > >a 1 or TWO (I- Q) NE602 chips .
> > >
> > >The 15 KHz IF filter and demodulator can be realised with either
> > >OPAMPS (GYRATORS for filters, Opamp All Pass Hilbert transformers etc)
> > >
> > >Alternately, a powerful DSP like DSP 56307 can implement all of the
> > >15 Khz processing in Software.
> > >
> > >No Hi Inductance coils should be necessary as , the Gyrator
> > >circuit is said to be suitable for use in HiQ filters.
> >
> > This sounds like a very slick approach. I'm sure DSP would yield great
> > results, but I don't have any DSP programming background, and something
> > tells me this would not be a trivial project.
> >
> > I was thinking of some sort of quick and dirty 1-2 IC approach, operating at
> > the IF freq, using filters of some sort.
> >
> > If you elect to press on with this, please post to the list how it comes
> > out. A few folks have replied to me RE a simpler approach, and I'll do the
> > same on my end.
> >
> > 73,
> >
> > Mike, WB5MYY

753. Re: Component help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be43c2$1de1b440$16e9b094@simoncox>
Source record: 74564
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

More news, bypassing the suspect component proves that
it is the item at fault.
I have been given 2 equivalent numbers SL7689 and LM302
neither appears to be a current device so we now need a new
equivalent to those.
1820-0158 are original HP numbers, thanks for that.

Simon Cox <simon.cox@breathe.co.uk> wrote in article
<01be43ad$f25ae940$2cebb094@simoncox>...
> More on this, I've worked out that it's a buffer device
> and seems to have a pin configuration as per RS cat
> no 177-2166 a BUF 04G an 8 pin plastic device, help with
> a comparison would be good before I buy one, stick it
> in and then regret it.
>
>
> Simon, G1DRY
>
> Simon Cox <simon.cox@breathe.co.uk> wrote in article
> <01be4396$d7216d00$LocalHost@simoncox>...
> > I'm trying to identify a replacement for what I believe
> > to be an op amp of some type, 8 pin TO5 metal can
> > I think the N and S (shown as trade symbols) stand
> > for National Semiconductor and has the numbers
> > 428 and 1820-0158 it's a few years old now and is
> > from a board in an HP sig gen. None of the catalogues
> > I've checked in list it and I have no cross reference books
> > CAN YOU HELP. HP say they don't keep spares for the
> > set any longer ????
> >
> > simon.cox@breathe.co.uk
> >
>

754. Re: workbench design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <36a4af3d.100478031@news>
Source record: 74565

On Mon, 18 Jan 1999 15:41:19 -0500, nicholas charles caruso
<caruson@certco.com> wrote:

>I've got a couple of home built wooden workbenches that I'm using for
>electronics assembly and light duty mechanical tasks.
>
>The work surface is 1/2 inch plywood with a top layer of medium density
>fiberboard. I've been planning on applying a few coats of polyurethane
>to seal the fiberboard, when it occurred to me that there might be a
>static dissipative finish I could apply.
>
>I've seen static dissipative floor polishes, but I was thinking of a
>permanent coating.
>
>Does anyone know of any finish that is static dissipative, which I could
>apply to MDF or plywood?
>
>Is there a way of treating polyurethane so that it becomes slightly
>conductive? I.e. mix in a certain amount of graphite, or some other
>conductive material? What about dusting the top layer with graphite
>while the polyurethane is still wet?
>
> thanks in advance, and 73
>
> ncc KB1DEJ

Your best bet is to buy a nice big anti-static mat that is designed to
cover the top of a bench. It is already set up for the proper
resistance (you don't want to just dump a static charge to ground,
you want to bleed it away slowly so it doesn't induce any unwanted
voltages in your apparatus). You can buy them through Newark, Allied,
maybe Digi-key for not much money. You have to ground the mat to the
power line safety ground (green wire) and wear a static wrist band to
be sure you don't zap your project.

73

Dave
K1MBO

755. Wanted Socket

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Mark N Dumont <mark@ciainc.com>
Message-ID: <782bi0agv1@east43.supernews.com>
Source record: 74566

Looking for a socket for 4cx1500b

Thank You

Mark
N1XTU

756. Re: Building an FM modulator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <782i57$br1$1@nnrp1.dejanews.com>
Source record: 74567
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <36A4214C.61C2@bt.com>,
Andy Lake <andy.lake@bt.com> wrote:

> Do I remember correctly an article in RadCom several years ago ('80s?),
> "SSB Phasing Transceiver"? I'm sure that decribed the third-method of
> SSB generation.

Both flavours of SSB have been in RadCom (mine are at home, or I could
point you at issues...). The most recent (1996?) was a nice Weaver rig
that used switched capacitor filters.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

757. PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <36A4AC5F.79C@alliedsignal.com>
Source record: 74568

I would like to use some common 4" plastic pipe and caps to make a weather-resistant cylindrical enclosure for a gps receiver.

Should I use PVC or ABS? I've heard that PVC is a "lossy" material to wind coils on, and I wonder if it would impede or degrade the GPS signal. Would ABS be a better choice?

Pete Friedrichs

758. Power plug for Bendix TA12

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Dave Bullock <daveb@ihr.mrc.ac.uk>
Message-ID: <36A49EBB.5B748B15@ihr.mrc.ac.uk>
Source record: 74569

Please look in your junk boxes and see if you have a chunky power plug
for a Bendix TA12.
Thanks ...
Dave Bullock
daveb@ihr.mrc.ac.uk

759. Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: goodmich <goodmich@isu.edu>
Message-ID: <36A4C523.C20E99B4@isu.edu>
Source record: 74570

What is the formula to calculate antenna length from the frequency? Or
what is the formula to tell me the waves length from the frequency
numbers?
I can't seem to find it anywhere I was hoping you guys could help

thanks

760. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a4c880.0@news.netwalk.com>
Source record: 74571
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>I think I've finally seen your way at looking at this. I define series
>and parallel cicuits just the way you have here. Both are two-terminal
>devices. There is no difference between an open-circuited parallel
>circuit and a short-circuited series circuit, where you're talking
>about opening or shorting those two terminals, and I assume that's
>what you mean when you say the two circuits are the same. But I can
>easily tell the difference between an open-circuited series LC and an
>open-circuited parallel LC without a direct connection, simply by
>coupling to the inductor with a small coil and observing the way the
>impedance of the coil changes with frequency. The same can be done to
>distinguish a short-circuited parallel circuit from a short-circuited
>series circuit.
>
>But I'm sure we all know this anyway, and the discussion is solely one
>of semantics. This is taking on the characteristics of one of those
>high-Q threads (which rings for a long, long time after being struck)
>that don't leave the participants any more knowledgeable at the end
>than at the start. So with this I respectfully bow out.
>
>Roy Lewallen, W7EL

Good for you, Roy. You (and I think one other) got my main point:

They ain't nothing until you hook a source to them! The question then becomes how the source is hooked in. Each would have different 2-port parameters.

There is another problem with using a link coupling into the L. This essentially becomes a transformer. You could work thru the math and find the lumped circuit equivalent and see that there are opportunities for multiple resonances. Perhaps this is where the 'series vs parallel resonance' question comes from?

Jim
N8EE

761. Maxon SL70. Programing an conversion info??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Graham <G4ILN@btinternet.com>
Message-ID: <782hj4dps1@uranium.btinternet.com>
Source record: 74572
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.homebrew

Does anyone know how to program a Maxon SL70 VHF handheld? Is conversion to
2 metres possible?

TIA

73 de Graham G4ILN

762. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990119132232.15944.00000733@ng107.aol.com>
Source record: 74573

El Cheapo power line antenna:

Follow procedure exactly or DEATH could occur.

1. Obtain a polarized SPT-2 line cord. This is the type using "zip" cord. Length should be at least 5 ft.

2. At the plug end, cut out about 1/2" of the wire connected to the wide terminal - thus disconnecting this wire from the plug. Place electrical tape over any exposed wire.

3. At the opposite end, separate the wires for a bout an inch, identify the wire connected to the narrow terminal, and clip it off. Use electrical tape to cover the clipped end. Strip and tin the remaining wire if it isn't already.

4. To double check, check continuity between the remaining wire and either of the prongs with an ohmmeter. There should be none. Connect the remaining wire to the antenna terminal of your radio, and plug in the cord.

The two adjacent wires in the "zip" cord form a capacitor which gives adequate coupling, and is perfectly safe IF the procedure above is followed.

Doug Moore

763. Re: HELP! Paralleling 2 switching supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Glen Ross <ross@zetnet.co.uk>
Message-ID: <19990119164926802 94@zetnet.co.uk>
Source record: 74574

The message <36ab92c1.8601462@news.dial.pipex.com>
from maad65@dial.pipex.com (Nick) contains these words:

> If the voltages are within .2V would I get
> >the full current of 22.5x2amps?

I could be wrong here but I seem to remember when I used these things commercially that the way to go was remote sensing with the return wire connected to sense terminals of as many psu as you wanted to parellel??? Essentially it means using one psu as the master. Does this make any sense??

Glen G8MWR

764. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: tbone107@aol.com
Message-ID: <19990119144723.25810.00001072@ng50.aol.com>
Source record: 74575

>What is the formula to calculate antenna length from the frequency? Or
>what is the formula to tell me the waves length from the frequency
>numbers?
>I can't seem to find it anywhere I was hoping you guys could help
>
>thanks
>
>

The formula to determine what the length of an antenna should be based on the known frequency is

468/Freq in Mhz

468 divided by the freq in Mhz. This gives you the total length of an antenna. For a dipole antenna, simply split the answer in half, to determine the length of each leg, or, the formula is modified as such:

234/F in Mhz. (to give the length of each leg, which is the same as the total length found by using 468/Freq in Mhz.)

de Tom KB2FIK
Tbone107@aol.com

765. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: wa2eaw@aol.com
Message-ID: <19990119151856.21956.00003398@ng13.aol.com>
Source record: 74576
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Tom:
If you want fractional turn effect why not homebrew an air core rotary inuctor (coil) and that way you can negotiate each turn and stop where ever you want . I did it. not too hard at all. No need to consider shorting turns with a "wiper". I made a form fitting wheel from washers to "ride" the wire of the coil.
e-mail me if interested. I can't wade thru all the posts and replys that are on this new group.
Bob de WA2EAW
<WA2EAW@AOL.COM>

766. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <782q3v$2gg$1@alice.walrus.com>
Source record: 74577

H. P. Friedrichs ("HPeter.Friedrichs"@alliedsignal.com) wrote:
: I would like to use some common 4" plastic pipe and caps to make a
: weather-resistant cylindrical enclosure for a gps receiver.

: Should I use PVC or ABS? I've heard that PVC is a "lossy" material to
: wind coils on, and I wonder if it would impede or degrade the GPS
: signal. Would ABS be a better choice?

: Pete Friedrichs

PVC is USUALLY OK-but 2 notes:
Use WHITE PVC only-the colored types generally have higher loss.
Test the PVC you plan to use:
1.take a piece of the PVC
2.take a cup of water
put both of the above into the microwave oven.
Run it for a few minutes.
If the PVC heats up, then don't use it(but remember that it will heat
slightly from the water heating up nearby).

767. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a4f034.0@news.netwalk.com>
Source record: 74578

goodmich wrote in message <36A4C523.C20E99B4@isu.edu>...
>What is the formula to calculate antenna length from the frequency? Or
>what is the formula to tell me the waves length from the frequency
>numbers?
>I can't seem to find it anywhere I was hoping you guys could help
>
>thanks
>

wavelength = 300,000,000 / frequency

with wavelength in meters and frequency in Hz.

A halfwave dipole antenna will be _approximately_ half this long.

A quarter wave vertical will be, obviously, _approximately_ one quarter this long.

Go to your public library. Look up the Ham Radio (or Amateur Radio) section. Hunt for the ARRL handbook. There may be other books. If your library does not have such books, go to the next town.

Soap box mode on:

It suprises me how many people do not know how to go to the library and look things up---and you are at a university? (ref: the .edu in your address). What do you think we did before there were such things as www.hotbot.com?

Soap box mode off:

768. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: smuther@my-dejanews.com
Message-ID: <7832kgque1@nnrp1.dejanews.com>
Source record: 74579

I recently used PVC as radome material for a 10GHz slot
antenna. In field tests, I could not measure any difference
in antenna gain with the radome on vs. off. This was the
white material. I also gave it a layer of spray paint to
slow the UV degradation.

See photos at:

http://w6yx.stanford.edu/~stevem/atv/photo/photoarch.html

Good Luck

Steve Muther
WF6R

In article <36A4AC5F.79C@alliedsignal.com>,
HPeter.Friedrichs@alliedsignal.com wrote:
> I would like to use some common 4" plastic pipe and caps to make a
> weather-resistant cylindrical enclosure for a gps receiver.
>
> Should I use PVC or ABS? I've heard that PVC is a "lossy" material to
> wind coils on, and I wonder if it would impede or degrade the GPS
> signal. Would ABS be a better choice?
>
> Pete Friedrichs
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

769. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <36A5063C.3DA@lsid.hp.com>
Source record: 74580

Clifton T. Sharp Jr. wrote:
>
> Let's compare notes. What kind of transistors do you keep on hand, and
> why? Since I'm just starting to experiment a bit (after many years of
> ignoring it), I'm tending to build up a few general-purpose things like
> 2N2222, 2N3904, 2N3906, a few MPF102 and J-310, and the odd power TO-220.
> What's your favorite, indispensable, wouldn't-do-without-it type? What do
> you have dozens of, never used and wish you'd never spent the money?
> What other types of discrete semiconductors do you keep around? (For me,
> a few 1N4001, 1N4007 and 1N4148 is just about it.)

Charles Wentzel already noted a couple I was going to add: '4401 and
'4403.
My latest additions all seem to start with things like "MMBT" instead of
"2N" with the exception of the 2N7002. That is, they come in things
like
SOT-23 packages. With some trepedation I got into surface mount, but
now
would hate to go back. I surface-mount thru-hole parts, too. Oh, I
should
also mention 2N/MMBT 5087 and 5089 as low noise, low current
transistors.
For certain source impedances (in the few-k-ohm range), the 5087 has
extremely good noise performance. Some JFets are also quite good in
that
range. For 100 ohm or so source impedance audio (sorry, I know that
folk here tend to think in terms of RF, but I do quite a bit of work at
audio), I've gotten extremely good performance from 2n/MMBT 2222's:
measured around 0.6nV/rtHz.

Cheers,
Tom

770. wtb 7.5VCT -42A transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36A507E5.FDBB4D31@buffnet.net>
Source record: 74581
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

--Anyone have any of these beasts?

73,

Jim N2go

771. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <36A50761.79BD@lsid.hp.com>
Source record: 74582

marc_k wrote:

> Test the PVC you plan to use:
> 1.take a piece of the PVC
> 2.take a cup of water
> put both of the above into the microwave oven.
> Run it for a few minutes.
> If the PVC heats up, then don't use it(but remember that it will heat
> slightly from the water heating up nearby).

I'd add (from personal experience): Keep a close eye on
what's going on in the microwave the whole time, and be
ready to stop the experiment. I tested (or was that
"toasted"?) some plastic that way, and ended up with a
serious fire inside the microwave. Melted/burned the
plastic cover on the stirring fan.

Cheers,
Tom

772. WTB aluminum panel/chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36A506DF.125FD7D7@buffnet.net>
Source record: 74583
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

OK, you aluminum hoarders, I know you're out there....

-I need some aluminum panel and chassis and Will buy / trade for it.

-13"x 17" x 3" aluminum chassis (also interested in 4" or 5" high

The following size 1/8" panel or relay rack panel
Painted or unpainted are OK.

19" width :

one 13 1/4" height (prefer un notched for this one)
two 21 3/4" height (one un notched preferred)
one 12 1/4" height

plus an Assortment equal to 35" height to cover the back of a bud
cabinet.

73,

Jim N2go

773. 11 meter Yagi antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: mtunst9236@aol.com
Message-ID: <19990119173858.28770.00000886@ng152.aol.com>
Source record: 74584

Trying to home build an beam antenna suitable for 11 meter use.Can anyone help.Thank's Marcus........

774. Re: Your ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7832rsrlh1@spock.tinet.ie>
Source record: 74585

H. P. Friedrichs <" HPeter.Friedrichs"@alliedsignal.com> > wrote in message
<36A39864.2A4B@alliedsignal.com>...
>A certain process generates a square wave frequency in the range of 1
>Mhz to 1.8 Mhz. I would like to be able to convert that frequency to an
>analog voltage of a given span, let's say 0-10 volts.
>
>Any ideas for a chip/circuit/website to accomplish this?
>
>Thanks
>
>Pete

The 4046B CMOS PLL, can be used as a frequency to
voltage converter. The standard CMOS version may not
work reliably at 1.8MHz. A 74HC4046 may be a better
choice.

Ed. EI9GQ.

--

****

Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

www.nettaxi.com/citizens/ei9gq/

****

775. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7832s1rlh2@spock.tinet.ie>
Source record: 74586

nicholas charles caruso wrote in message <36A385EC.87E96BC6@certco.com>...
>
>A lot of people speak highly of the 2N5179 and 2N5109 parts. Any good,
preferably
>cheap RF transistors that people here have had good experience with?
>
>
2N3866, 2N4427, 2N2369, 2N2222..................

Ed. EI9GQ.

--

****

Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

www.nettaxi.com/citizens/ei9gq/

****

776. Re: HELP! Paralleling 2 switching supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Piet Ibelings <nntp@ibelings.com>
Message-ID: <7834c3$9li$1@camel18.mindspring.com>
Source record: 74587

These power supplies have voltage sense on them. I was planning on putting a diode on each b+ and the sensor of each powersupply to the connection point. I still have the problem that both power supplies have a voltage adjust pot and might be at a different voltage. I guess I could reference both pots to the same voltage somehow.

Pieter

Glen Ross wrote in message <19990119164926802 94@zetnet.co.uk>...
>The message <36ab92c1.8601462@news.dial.pipex.com>
> from maad65@dial.pipex.com (Nick) contains these words:
>
>> If the voltages are within .2V would I get
>> >the full current of 22.5x2amps?
>
>I could be wrong here but I seem to remember when I used these things
>commercially that the way to go was remote sensing with the return
>wire connected to sense terminals of as many psu as you wanted to
>parellel??? Essentially it means using one psu as the master. Does
>this make any sense??
>
>Glen G8MWR
>
>

777. modification of IC-M5 Maritime Portable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Gervais Fillion <gfillio1@globetrotter.net>
Message-ID: <783daolob1@news.quebectel.com>
Source record: 74588

hi,i am looking for a way to modify a maritime Portable call icom ic-m5 .
his an old radio portable a used maritime ic-m5.

if you have an idea where i can find those info!

ve2ckn
gervais

778. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: rick@area.com
Message-ID: <783lo3$d5s$1@vax.area.com>
Source record: 74589

At hardware stores in CA, you can get 3 inch and 4 inch polyethylene drain pipe. Polyethylene is a very low RF loss material, rivaling Teflon. And it's cheaper than PVC.

Rick Karlquist N6RK
rick@area.com
www.karlquist.com

779. WTB HF quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <iKdp2.1449$lK6.2053@news3.ispnews.com>
Source record: 74590
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Title says it all If you have one contact me.

--
Marty Duplissey
Lone Star Business Systems
Specializing in development for the credit report retrieval industry
Desktop, Networks, Intranets and Internet Delivery
http://www.lsbs.com

780. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-19 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <uAdoN5AAcQp2Ewtg@jmwa.demon.co.uk>
Source record: 74591
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of newsgroup posts.

<36a4c880.0@news.netwalk.com>, Jim <jbolinger@lintek.com> wrote:
>Perhaps this is where the 'series vs parallel
>resonance' question comes from?

No, it comes from how you define 'resonance': maximum voltage across the C, across teh L or maximum current. In a low-Q circuit, they occur at slightly different frequencies. If the Q is much above 10, the differences are very small, being inversely proportional to Q-squared.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port configuration.

781. Re: 12AX7A tubes f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Charlie <marti149@tc.umn.edu>
Message-ID: <36A61E05.FCA8F3EC@tc.umn.edu>
Source record: 74468
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Thanks all for all the info on my SWAN 350 - im still getting emails by
the droves
so I cant answer all - (ill try though)
Im connecting a straight key to the back of the rig -

thanks all

782. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <785gptujt1@nnrp1.dejanews.com>
Source record: 74469

In article <784e00$4m9$1@nw003t.infi.net>,
"Harry, WA3PTG" <hhurst@delaware.infi.net> wrote:
> Where is a good cheap place to buy 2N5179 & 2n5109??
> nicholas charles caruso wrote in message <36A385EC.87E96BC6@certco.com>...
> >
> >A lot of people speak highly of the 2N5179 and 2N5109 parts

I stocked up at Mouser Electronics. They have (had) 2N5179s
and 2N5109s, as well as 2N4427s (another must-have for VHF
experimentation) new from SGS-Thomson. I had one 2N5179 (in a
bag of 25) that tested bad, so you might check 'em, too.

Dana K6JQ
Dana@Source.Net

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

783. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Michael Lee <M.D.L@btinternet.com>
Message-ID: <785gf6$7is$1@mendelevium.btinternet.com>
Source record: 74470
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Peter Bolch wrote in message <782rbg$2nh@news.netcologne.de>...

>there is a nice DOS/WIN shareware program named Faisyn which calculates
>(beside "standard" filters with lumped elements) distributed stepped
>impedance resonator filters and distributed parallel coupled line filters.
>
>I'm still looking for formulas to calculate magnetically coupled bandpass
>filters using microstrip lines instead of lumped inductors. I didn't find a
>way to simulate this type of filters with Puff and so I have to use the
>trial and error method which is a bit time consuming. Any ideas?
>

Peter,

I would refer you to T E Edwards excellent book 'Foundations for microstrip circuit design' or Young,Mathei & Jones 'Microwave filters,coupling structures and impedance matching networks'.

You will need to be familiar with S parameters to undertake any meaningful microstrip design work.

YM&J is a good 'cookbook' if you like, and can be sourced from internet booksellers for about £60.

784. RS 1023 tube ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Wilfried Derynck <w.derynck@planetinternet.be>
Message-ID: <785km8$74e$1@antwerpen.planetinternet.be>
Source record: 74471

Hello, a good friend gives me a few weeks ago a new rs1023 tube. It is marked SIEMENS RS1023. It is an metal-glass tube , who looks like an planar triode (2C39BA) but has a cooler like an 4CX 250. Is there anyone who has some data of this tube ????? I guess an anode dissipation of about 200 Watt, but what about V plate and V fillament ????

Thanks for any info from ON6EO

785. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <36A6561C.297E2AF@home.com>
Source record: 74472
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Michael Lee wrote:
>
> Peter Bolch wrote in message <782rbg$2nh@news.netcologne.de>...
>
> >there is a nice DOS/WIN shareware program named Faisyn which calculates
> >(beside "standard" filters with lumped elements) distributed stepped
> >impedance resonator filters and distributed parallel coupled line filters.
> >
> >I'm still looking for formulas to calculate magnetically coupled bandpass
> >filters using microstrip lines instead of lumped inductors. I didn't find a
> >way to simulate this type of filters with Puff and so I have to use the
> >trial and error method which is a bit time consuming. Any ideas?
> >
>
> Peter,
>
> I would refer you to T E Edwards excellent book 'Foundations for microstrip
> circuit design' or Young,Mathei & Jones 'Microwave filters,coupling
> structures and impedance matching networks'.
>
> You will need to be familiar with S parameters to undertake any meaningful
> microstrip design work.
>
> YM&J is a good 'cookbook' if you like, and can be sourced from internet
> booksellers for about ï¿½60.

On the contrary, you can design "meaningful" microstrip filters even if
you don't know your S-parameters from a hole in the ground! ;-)

If you choose to build narrowband bandpass filters with identical resonators,
you can empirically characterize the unloaded Q of your resonator and
empirically characterize the coupling between resonators as a function of
their spacing using Dishal's tuning technique. Then you can design any order
filter based on predistorted k and q parameters and analyze it as well.
See Zverev's Handbook of Filter Synthesis for details.

It works for microstrip resonators, stripline resonators, cavity resonators,
helical resonators, and LC resonators.

That is how we did it back in the olden days.

Don

786. Nicad charger

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: ok@ionet.net
Message-ID: <36a65b00.12261722@news.ionet.net>
Source record: 74473

any body have a good circuit for a nicad charger, one that would
charge a 1.5 and 9.0 volt battery . This charger would look at volts
and shut down when finished.
thanks

787. Nicad Charger

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: now@ionet.net
Message-ID: <36a65c1b.12544752@news.ionet.net>
Source record: 74474

anybod have a good circuit for a nicad battery charger, one that would charge a 1.5 and 9.0 battery. The circuit would determine when the battery is fully charged and shut off.
Thank you

788. What's LF 13741?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: jhoyos@hoth.gcn.ou.EDU
Message-ID: <19990120233108125.AAB222.209@200.25.66.50.ucaldas.edu.co>
Source record: 74475

The preamplifiers for the SO-4552 Heath scope use LF 13741.It
does not appear in ECG, STK, and NTE replacement manuals.
Someone knows if LF13741 can be replaced by a common 741
amplifier?

Thanks in advance.

Jorge Hoyos.

789. Re: WTB HF quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <Fhwp2.272$u%6.1550@news12.ispnews.com>
Source record: 74476
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Do you have a 5 bander (20 to 10)?

Richard Earl wrote in message <36A60FC5.562CDFB@juno.com>...
>Hi Marty,
>
>How about a delta loop?
>
>See web page @:
>
>http://homepage.interaccess.com/~jpearl/3x3-Graph-Compare-Detailed.html
>
>GL es 73
>
>Rich
>
>W9JUC
>
>Marty Duplissey wrote:
>>
>> Title says it all If you have one contact me.
>>
>> --
>> Marty Duplissey
>> Lone Star Business Systems
>> Specializing in development for the credit report retrieval industry
>> Desktop, Networks, Intranets and Internet Delivery
>> http://www.lsbs.com

790. LF Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: John Strunck III <1jhs9867@unixstew.tstc.edu>
Message-ID: <36a69ff8.0@news>
Source record: 74477

Hello,

Looking for Drake 2LF converter for 2B rec. Also, could a homebrew LF converter be built.

Thanks,

John Strunck III
kc5ngx

791. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Dan K Nelson <kf6knb@usa.net>
Message-ID: <786j7i$5gh$1@news-2.news.gte.net>
Source record: 74478

Joseph Mowery wrote in message <36A5E945.6357AFF0@nswc.navy.mil>...

>468/ freq in Mhz give you feet for a full wave.
>
>

Actually, it is a measurement in feet for a half wave antenna (typically a dipole).

73 de KF6KNB

>Jonesy wrote:
>
>> Tbone107 <tbone107@aol.com> wrote:
>>
>> : The formula to determine what the length of an antenna should be based on the
>> : known frequency is
>>
>> : 468/Freq in Mhz
>> : 468 divided by the freq in Mhz. This gives you the total length of an antenna.
>>
>> For what kind of antenna? A quarter wave , a 5/8th's wave , a half wave,
>> a full wave , or some other sized antenna?
>>
>> Measured in what? Inches , meters , feet , centimeters, furlongs?
>>
>> sigh....
>

792. Surplus Stores near Bramshill

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <788069$f49@news.netcologne.de>
Source record: 74479

Hi,

are there any RF measurement devices surplus stores not too far away (say
less then 1/2 hour by car) from Bramshill (near London)?

Peter

793. RADIO PART WITH 8 COLLINS TYPE SMALL CERAMIC VARIABLE CAPS on ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <78389kvtj1@nnrp1.dejanews.com>
Source record: 74592

looks like this was some kind of selector. has 8 clean, good looking small ceramic trimmer caps similar to those used in collins S-line stuff. interested? go to ebay and use their search engine to look for "radio part". no reserve. thanks robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

794. FS:VHF Power FETS 300W

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be43a4$2f0978c0$04143bcb@default>
Source record: 74593

Anyone wanting to build a 2 meter linear?
I have a couple of Phillips dual power FETS
BLF278 Vdd 50V, Pout (CW class AB) 300W at 108 Mhz which could be used
at 50 MHz
New AUD$200 (thats about US$130 at the current exchange)
Please E mail
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

RJPcorp <rjpcorp@aol.com> wrote in article
<19990118064704.21394.00002664@ng146.aol.com>...
> >I'm looking for a home built 6 meter amp. I am willing to pay $600 for
the
> >right one. Does anyone know where I can find one?
> >
> >
> > Dr.. Dee
> >
> >
> >
> >
> >
> >
>
> What kind of gain are you looking for ?
>
>

795. Re: 11 meter Yagi antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36A53484.E8EDC382@usit.net>
Source record: 74594

MTunst9236 wrote:
>
> Trying to home build an beam antenna suitable for 11 meter use.Can anyone
> help.Thank's Marcus.....

Get a copy of the ARRL antenna book. It has an excellent section on the
yagi. I dont know about later editions, but the one I bought a few years
ago came with some software. One of the programs was a yagi program
where you can play with designs and change the element diameters,
lengths and spacings. It calculates the impedance, gain, f/b, etc. It
doesnt care about frequency, so you could design antennas for any band.
The book will also give you a fairly firm footing in antennas generally.
Good luck

Don

796. Re: WTB aluminum panel/chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: "Dale R. Parfitt" <parinc@bellsouth.net>
Message-ID: <36A539B9.59FA2639@bellsouth.net>
Source record: 74595
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

James Skalski wrote:

> OK, you aluminum hoarders, I know you're out there....
>
> -I need some aluminum panel and chassis and Will buy / trade for it.
>
> -13"x 17" x 3" aluminum chassis (also interested in 4" or 5" high
>
> The following size 1/8" panel or relay rack panel
> Painted or unpainted are OK.
>
> 19" width :
>
> one 13 1/4" height (prefer un notched for this one)
> two 21 3/4" height (one un notched preferred)
> one 12 1/4" height
>
> plus an Assortment equal to 35" height to cover the back of a bud
> cabinet.
>
> 73,
>
> Jim N2go

For the panels, try Marlin P Jones & Associates in North Palm Beach, FL- they have an 800 #.= 1-800-652-6733 http://www.mpja.com
Rack panels both natural and painted from 1.75" high to 10.5" high w/ notches only.

Dale W4OP

797. Re: 11 meter Yagi antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: mtunst9236@aol.com
Message-ID: <19990119221428.09324.00000826@ng-fd1.aol.com>
Source record: 74596

Thank's for the info,I will give the ARRL book a try....Marcus

798. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Jonesy <jonesy@rmi.nospam.net>
Message-ID: <783gmg$qv7$1@news1.rmi.net>
Source record: 74597

Tbone107 <tbone107@aol.com> wrote:

: The formula to determine what the length of an antenna should be based on the
: known frequency is

: 468/Freq in Mhz
: 468 divided by the freq in Mhz. This gives you the total length of an antenna.

For what kind of antenna? A quarter wave , a 5/8th's wave , a half wave,
a full wave , or some other sized antenna?

Measured in what? Inches , meters , feet , centimeters, furlongs?

sigh....

799. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36A5935A.1F4FAF1F@home.com>
Source record: 74598

It's the "fillers" - some are added for strength, others for color or UV resistance, which they incorporate into plastics (not just PVC, but ABS/SAN/PP/PE) which cause the "heating up" in the microwave oven.

I would guess that you can get most of these molecules to vibrate at some frequency anyway, (didn't we do that in physical chem lab?) , but some of the fillers cited above are metals (Al, Si) and these, I would think, would be most "lossy".

Jack Walton

marc_k wrote:

> H. P. Friedrichs ("HPeter.Friedrichs"@alliedsignal.com) wrote:
> : I would like to use some common 4" plastic pipe and caps to make a
> : weather-resistant cylindrical enclosure for a gps receiver.
>
> : Should I use PVC or ABS? I've heard that PVC is a "lossy" material to
> : wind coils on, and I wonder if it would impede or degrade the GPS
> : signal. Would ABS be a better choice?
>
> : Pete Friedrichs
>
> PVC is USUALLY OK-but 2 notes:
> Use WHITE PVC only-the colored types generally have higher loss.
> Test the PVC you plan to use:
> 1.take a piece of the PVC
> 2.take a cup of water
> put both of the above into the microwave oven.
> Run it for a few minutes.
> If the PVC heats up, then don't use it(but remember that it will heat
> slightly from the water heating up nearby).

800. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: "Harry, WA3PTG" <hhurst@delaware.infi.net>
Message-ID: <784e00$4m9$1@nw003t.infi.net>
Source record: 74599

Where is a good cheap place to buy 2N5179 & 2n5109??
nicholas charles caruso wrote in message <36A385EC.87E96BC6@certco.com>...
>
>A lot of people speak highly of the 2N5179 and 2N5109 parts

801. Re: HELP! Paralleling 2 switching supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36A5C278.AD31DEA1@hevanet.com>
Source record: 74600

Paralleling works well for loads. It is almost never advisable for sources.
If you have any way to allocate loads to separate supplies, do that.

Paralleling can work if four conditions are met.
1)Both power supplies must have extremely well behaved transient behavior,
especially
in and out of current limit. (many don't)
2)Current limit must not fold back (many do)
3)Each supply must be capable of running at full load continuously
while the other is unloaded. (significant reduction in system reliability)
4)Your load can tolerate some change in voltage at around 1/2 load. (many can)

Set both supplies for the same voltage. They'll be slightly different,but you
want to minimize this.
Hook 'em in parallel and forget about it.
One supply will supply ALL the load up to it's limit.
At that point it will current limit and the voltage will drop to
the voltage of the second supply which will take the load up to
the total limit of the two supplies.
You'll get a step at the point where this current limits equal to the
difference
in the voltage of the two supplies.

This works ONLY if the supplies are extremely well behaved. Any oscillation
or instability can set up conditions that can destroy the supplies and/or the
load.
The supplies I build have slightly negative output resistance. This complicates
further.

There are some disadvantages.
1) System reliability is worst at 1/2 load with one at max, and may be MUCH
worse than
two supplies each running at 1/2 load.
2)If you have overvoltage protection, there may be some interesting things
happening
at turn-on if one comes up much faster than the other, or if one blows a fuse
and crowbars
the other.

miker

Piet Ibelings wrote:

> These power supplies have voltage sense on them. I was planning on putting a
> diode on each b+ and the sensor of each powersupply to the connection point.
> I still have the problem that both power supplies have a voltage adjust pot

> and might be at a different voltage. I guess I could reference both pots to
> the same voltage somehow.
>
> Pieter
>
> Glen Ross wrote in message <19990119164926802 94@zetnet.co.uk>...
> >The message <36ab92c1.8601462@news.dial.pipex.com>
> > from maad65@dial.pipex.com (Nick) contains these words:
> >
> >> If the voltages are within .2V would I get
> >> >the full current of 22.5x2amps?
> >
> >I could be wrong here but I seem to remember when I used these things
> >commercially that the way to go was remote sensing with the return
> >wire connected to sense terminals of as many psu as you wanted to
> >parellel??? Essentially it means using one psu as the master. Does
> >this make any sense??
> >
> >Glen G8MWR
> >
> >

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

802. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <Pxo8pDA7mYp2Ewrs@ifwtech.demon.co.uk>
Source record: 74601

Richard Karlquist wrote:
>
>At hardware stores in CA, you can get 3 inch and 4 inch polyethylene
>drain pipe. Polyethylene is a very low RF loss material, rivaling
>Teflon. And it's cheaper than PVC.

You cannot judge any commercial plastic simply by the name of its main constituent. (Would you try to judge beers that way? Hey, they're all basically water - if it's the right color, that'll be close enough...)

Pure polyethylene is excellent for RF, and that is what's used in coax for example; but drainpipe is very unlikely to be the pure material. Likewise someone else mentioned good results with "the white PVC". Make that "SOME KIND OF white PVC".

The base material, and possibly the color and the intended use, are all pointers in the right direction, but you always need to test the actual material that you have.

The microwave oven test is the best comparative test of RF losses available to amateurs. If you put several different samples in a turntable oven so that they're all exposed uniformly, it's easy to judge which ones get warmer than the others, allowing of course for the mass and shape.

(Don't forget the half-glass of water, and make an early check in case something is cooking rapidly, to avoid Tom B's little problem...)

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

803. Needed - Dual gang Vari-cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <784sap$b7v$1@nnrp1.dejanews.com>
Source record: 74602

I am in need of a dual gang variable capacitor, at 365 pf per section. This is not carrying any power, so one from an old broadcast band receiver would be fine. An air spaced unit with 1/4" shaft is what I'd really like. Also, if anyone has a couple of little inductors at 100microH, I need them as well. Can't see paying the $8 shipping for $1 worth of parts. Please e-mail to <ve6inm@telusplanet.net>. Thank you. 73 de VE6INM (Glenn)

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

804. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <aJV1PnAgvZp2Ewbj@jmwa.demon.co.uk>
Source record: 74603
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of newsgroup posts.

<782rbg$2nh@news.netcologne.de>, Peter Bolch <nc-bolchpe@netcologne.de> wrote:
>I'm still looking for formulas to calculate magnetically coupled bandpass
>filters using microstrip lines instead of lumped inductors. I didn't find a
>way to simulate this type of filters with Puff and so I have to use the
>trial and error method which is a bit time consuming. Any ideas?

LAYAN may be able to do this: I don't know. But the mutual inductance between two parallel strips is a textbook matter: unfortunately, I can't give a specific reference.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port configuration.

805. curved v. chamfered microstrips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: ghole@my-dejanews.com
Message-ID: <784v6mdup1@nnrp1.dejanews.com>
Source record: 74604

What's the best topology for a microstrip? Nicely curved from source to load
Or straight lines with chamfered 90 degrees corners? My CAD program allows me
to easily do curved traces. If I want chamfered I have to draw them myself.

Anybody?
CAD program is PADS... if you want to now

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

806. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Joseph Mowery <jmowery@nswc.navy.mil>
Message-ID: <36A5E945.6357AFF0@nswc.navy.mil>
Source record: 74605

468/ freq in Mhz give you feet for a full wave.

Jonesy wrote:

> Tbone107 <tbone107@aol.com> wrote:
>
> : The formula to determine what the length of an antenna should be based on the
> : known frequency is
>
> : 468/Freq in Mhz
> : 468 divided by the freq in Mhz. This gives you the total length of an antenna.
>
> For what kind of antenna? A quarter wave , a 5/8th's wave , a half wave,
> a full wave , or some other sized antenna?
>
> Measured in what? Inches , meters , feet , centimeters, furlongs?
>
> sigh....

807. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Joseph Mowery <jmowery@nswc.navy.mil>
Message-ID: <36A5E90A.7BB66AE6@nswc.navy.mil>
Source record: 74606

Be careful of "PVC Drain" pipe. Check to be sure that if you
are using it outdoors it has the UV inhibitors or else you will
be replacing it in a few short years.

Joe
KF4YYA

Richard Karlquist wrote:

> At hardware stores in CA, you can get 3 inch and 4 inch polyethylene
> drain pipe. Polyethylene is a very low RF loss material, rivaling
> Teflon. And it's cheaper than PVC.
>
> Rick Karlquist N6RK
> rick@area.com
> www.karlquist.com

808. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <36A5F797.3986@alliedsignal.com>
Source record: 74607

Thanks so much to all who replied. As is usually the case for this ng, exceptional response, excellent information.

Pete

809. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <36A5F7CD.794BDF32@my-dejanews.com>
Source record: 74608

Joseph Mowery wrote:
>
> 468/ freq in Mhz give you feet for a full wave.
>
> Jonesy wrote:
>
> > Tbone107 <tbone107@aol.com> wrote:
> >
> > : The formula to determine what the length of an antenna should be
> > : based on the known frequency is
> >
> > : 468/Freq in Mhz
> > : 468 divided by the freq in Mhz. This gives you the total length
> > : of an antenna.
> >
> > For what kind of antenna? A quarter wave , a 5/8th's wave ,
> > a half wave, a full wave , or some other sized antenna?
> >
> > Measured in what? Inches , meters , feet , centimeters, furlongs?
> >
> > sigh....

I am sure that this was an oversight, and you can probably expect everyone in the NG to let you know, but the formula that you presented is for a half wave antenna.

But also, to the original poster, go to one of your local book stores and pick up a copy of the Amateur Radio Handbook. All the antenna formulas and explanations you can stand are there.

Martin

--
Martin E. Meserve martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin Tactical Defense Systems - AZ lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

810. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: vincent coppola <vcoppola@snet.net>
Message-ID: <36A6216A.7168@snet.net>
Source record: 74609

>
> Where is a good cheap place to buy 2N5179 & 2n5109??
> nicholas charles caruso wrote in message <36A385EC.87E96BC6@certco.com>...
> >

I believe Jameco sells them both, but I was impressed with the price on
the 2n5179. I can't say about the 2n5109.

811. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: smuther@my-dejanews.com
Message-ID: <78564i$kh0$1@nnrp1.dejanews.com>
Source record: 74610

In article <Pxo8pDA7mYp2Ewrs@ifwtech.demon.co.uk>,
"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

> The microwave oven test is the best comparative test of RF losses
> available to amateurs. If you put several different samples in a
> turntable oven so that they're all exposed uniformly, it's easy to judge
> which ones get warmer than the others, allowing of course for the mass
> and shape.

My only problem with Ian's microwave oven test is that it is only
and indicator of a material's absorption at 2450MHz, the frequency of
the oven (at least US models). Measure the performance of the material
at the frequency of use. Changes in the antenna return loss or measured
degradation of gain on a makeshift test range as materials are substituted
are reasonable measures of a material's suitability as a radome. Its not
realistic to assume that a meterial will be unusable for all RF
applications because of a single frequency data point.

Steve Muther
WF6R

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

812. Re: WTB HF quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Richard Earl <w9juc@juno.com>
Message-ID: <36A60FC5.562CDFB@juno.com>
Source record: 74611
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Marty,

How about a delta loop?

See web page @:

http://homepage.interaccess.com/~jpearl/3x3-Graph-Compare-Detailed.html

GL es 73

Rich

W9JUC

Marty Duplissey wrote:
>
> Title says it all If you have one contact me.
>
> --
> Marty Duplissey
> Lone Star Business Systems
> Specializing in development for the credit report retrieval industry
> Desktop, Networks, Intranets and Internet Delivery
> http://www.lsbs.com

813. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a60ad8.221673@news.online.no>
Source record: 74612
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Tue, 19 Jan 1999 10:44:13 -0500, nobody@xxx.com wrote:

>Hello,
>
>
>The G3TDZ 73 Khz phasing SSB receiver used by lowfers should make
>an excellent SSB addon at 455 khz just by changing the oscilator to 455 KHZ.
>I intend to give this a try as soon as i can.
>http://www.mnsinc.com/bry/73khz/g3tdz/g3tdz.htm
>The URL is on BRYs pages, and the ckt diagram, and PCB layout are all there.
>Also, the transmitter and receiver are on separate boards.
>ALso, the receiver has a powerful audi amp, and use standard opamp +mc1496
>chips.(No hard to get parts). Mc1496 may be better than Ne602, as it allows
>nulling.
>
>
Some years ago I made a theoretical design of plug-in product detector
to go into BFO valve socket of AR88 with minimum amount of changes to
the receiver. If you are interested to see it, please send an email, it
is 15kb gif file
The general rule for design met are; if the original BFO is ECO type the
product detector should use E-C-Oscillator, and if it was Hartley it
should continue to be. Suggested valve for product detector is
6AJ8/ECH81, with noval base holder mounted into an octal socket, with
some additional components. Believe this circuit may be adapted for
BC342, but not for BC348 and Hallicrafter S-40A

73
jan-martin LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

814. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Joseph Mowery <jmowery@nswc.navy.mil>
Message-ID: <36A61035.2BED4617@nswc.navy.mil>
Source record: 74613

Martin,
You are correct. Headspace error on my part. Well, 468 is the rounded
off
number to make the calculations simple. Works with some trimming. Thanks

for the info on the end fed antenna. Going to order the wire in the very
near
future and string it while the leaves are off the trees.

Joe,
KF4YYA

Martin Meserve wrote:

> Joseph Mowery wrote:
> >
> > 468/ freq in Mhz give you feet for a full wave.
> >
> > Jonesy wrote:
> >
> > > Tbone107 <tbone107@aol.com> wrote:
> > >
> > > : The formula to determine what the length of an antenna should be
> > > : based on the known frequency is
> > >
> > > : 468/Freq in Mhz
> > > : 468 divided by the freq in Mhz. This gives you the total length
> > > : of an antenna.
> > >
> > > For what kind of antenna? A quarter wave , a 5/8th's wave ,
> > > a half wave, a full wave , or some other sized antenna?
> > >
> > > Measured in what? Inches , meters , feet , centimeters, furlongs?
> > >
> > > sigh....
> >
> I am sure that this was an oversight, and you can probably expect
> everyone in the NG to let you know, but the formula that you presented
> is for a half wave antenna.
>
> But also, to the original poster, go to one of your local book
> stores and pick up a copy of the Amateur Radio Handbook. All the
> antenna formulas and explanations you can stand are there.
>
> Martin

>
> --
> Martin E. Meserve martin.e.meserve
> Engineer, Program/Project Specialist AT
> Lockheed Martin Tactical Defense Systems - AZ lmco.com
>
> I respond to news groups and E-Mail on my own time and therefore my
> responses may not be as timely as you, or I, would like them to be. If
> I seem to be ignoring you, send me another E-Mail to jog my memory.
> Opinions are my own and do not reflect the opinions of my employer.
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

815. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a61755.0@news.netwalk.com>
Source record: 74614

Jonesy wrote in message <783gmg$qv7$1@news1.rmi.net>...
>Tbone107 <tbone107@aol.com> wrote:
>
>: The formula to determine what the length of an antenna should be based on
the
>: known frequency is
>
>: 468/Freq in Mhz
>: 468 divided by the freq in Mhz. This gives you the total length of an
antenna.
>
>For what kind of antenna? A quarter wave , a 5/8th's wave , a half wave,
>a full wave , or some other sized antenna?
>
>Measured in what? Inches , meters , feet , centimeters, furlongs?
>
>sigh....

if you have a high level language or spread sheet on your computer, try:

1000*rand()/Freq

It will give you the length of a random wire antenna up to 1000 ;-)

816. Re: curved v. chamfered microstrips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a618ec.0@news.netwalk.com>
Source record: 74615

ghole@my-dejanews.com wrote in message <784v6mdup1@nnrp1.dejanews.com>...
>What's the best topology for a microstrip? Nicely curved from source to
load
>Or straight lines with chamfered 90 degrees corners? My CAD program allows
me
>to easily do curved traces. If I want chamfered I have to draw them myself.
>
>Anybody?
>CAD program is PADS... if you want to now

Except for special applications I have always seen strip line circuits layed
out so that everything is in a straight line (input to output).

Resonant circuits and/or matching circuits run at right angles to the main
line

Something like this:

```
I------A--------O
* *
* *
* *
```

I is the input. O is the output. A is the amplifier.

The * would be perhaps a quarter wave section for filtering.
The '---' is the main strip line.

Anything else would probably have a problem with unwanted coupling.

The only time I saw a curved one was on a 2.5GHZ vco, where a strip line was
curved into a circle to form the resonant circuit for the oscillator.

817. Re: curved v. chamfered microstrips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-20 00:00:00 UTC
From: Marty Jones <see.the.text@see.the.text>
Message-ID: <36A61B84.A238260F@see.the.text>
Source record: 74616

What's your frequency of application, and do you have
EM simulation tools or a good curved-microstrip model?
Curved microstrip is less dispersive and can produce
networks having better loss characteristics.

Also, the "best" miter for producing constant-impedance
"chamfered" microstrip actually reduces the minimum width
at a 90-degree bend, which is important if you're also using
the line to carry DC-bias current.

Bottom line - used curved microstrip unless you have no
means of modelling the true electrical length (which is
slightly shorter than the centerline length, % depends on
bend radius), or unless you don't care about the other
factors and want to draw your layout the lazy way.

best regards,

Marty Jones
mjones at ti dot com

ghole@my-dejanews.com wrote:

> What's the best topology for a microstrip? Nicely curved from source to load
> Or straight lines with chamfered 90 degrees corners? My CAD program allows me
> to easily do curved traces. If I want chamfered I have to draw them myself.
>
> Anybody?
> CAD program is PADS... if you want to now
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

818. Re: What's LF 13741?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36A6C0D4.C7D9052C@home.com>
Source record: 74480

This is a low slew rate noisy op-amp - '741. Check out natsemi's web page - www.nsc.com for a better pin for pin replacement.

jhoyos@hoth.gcn.ou.EDU wrote:

> The preamplifiers for the SO-4552 Heath scope use LF 13741.It
> does not appear in ECG, STK, and NTE replacement manuals.
> Someone knows if LF13741 can be replaced by a common 741
> amplifier?
>
> Thanks in advance.
>
> Jorge Hoyos.

819. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <KO7NWDA3jnp2Ew4I@ifwtech.demon.co.uk>
Source record: 74481

WF6R wrote:
>In article <Pxo8pDA7mYp2Ewrs@ifwtech.demon.co.uk>,
> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>
>> The microwave oven test is the best comparative test of RF losses
>> available to amateurs. If you put several different samples in a
>> turntable oven so that they're all exposed uniformly, it's easy to judge
>> which ones get warmer than the others, allowing of course for the mass
>> and shape.
>
>My only problem with Ian's microwave oven test is that it is only
>and indicator of a material's absorption at 2450MHz, the frequency of
>the oven (at least US models). Measure the performance of the material
>at the frequency of use. Changes in the antenna return loss or measured
>degradation of gain on a makeshift test range as materials are substituted
>are reasonable measures of a material's suitability as a radome. Its not
>realistic to assume that a meterial will be unusable for all RF
>applications because of a single frequency data point.

It's more than a single data point, because the losses can be expected
decrease in a pretty uniform way with frequency. For the kinds of
materials you'd reasonably consider as RF insulators, there are unlikely
to be any molecular resonances in the UHF/VHF/HF region that would bring
nasty surprises. So if a material tests out good at 2450MHz, it should
be even better at lower frequencies.

If a material gets warm at 2450MHz, it may still be usable at lower
frequencies in a light-duty situation. But even the best RF insulating
materials can still fail if they're put in an impossible situation, eg:

* locations where the electric field is particularly fierce, like the
top of a poorly-designed loading coil

* situations where they can be burned by arcing (that will even damage
Teflon)

* situations where skin losses make conductors hot enough to melt the
dielectric (a probalem with polystyrene and polyethylene).

The only guaranteed way to be sure about any insulator is to try it in
the end product. The microwave oven test is only useful for pre-sorting.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

820. Re: curved v. chamfered microstrips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: ghole@my-dejanews.com
Message-ID: <7878o4dve1@nnrp1.dejanews.com>
Source record: 74482

In article <36A61B84.A238260F@see.the.text>,
see.the.text@see.the.text wrote:
> What's your frequency of application, and do you have
> EM simulation tools or a good curved-microstrip model?

Radio frequency is 2.4 GHz , IF 200 MHz.
I have no EM simulation tool... perhaps in the future.

> Curved microstrip is less dispersive and can produce
> networks having better loss characteristics.
>
> Also, the "best" miter for producing constant-impedance
> "chamfered" microstrip actually reduces the minimum width
> at a 90-degree bend, which is important if you're also using
> the line to carry DC-bias current.
>
> Bottom line - used curved microstrip unless you have no
> means of modelling the true electrical length (which is
> slightly shorter than the centerline length, % depends on
> bend radius),

I've searched for a formula in the books I have, but I found none that
described a curved microstrip. Do you know of one? Or perhaps a
spreadsheet...
Perhaps a stupid remark:
All my impedances are 50 ohm (or i do impedance matching with LC close to the
port), so does the electrical length matter? I don't want do do quarter wave
matching.

>or unless you don't care about the other
> factors and want to draw your layout the lazy way.

Nah... I want do to it right... the problem is lack of experience.

Kind regards.

Ghole

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

821. Re: curved v. chamfered microstrips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Ghole@usa.net
Message-ID: <787aapfbi1@nnrp1.dejanews.com>
Source record: 74483

In article <36a618ec.0@news.netwalk.com>,
"Jim" <jbolinger@lintek.com> wrote:

> Except for special applications I have always seen strip line circuits layed
> out so that everything is in a straight line (input to output).

Have a look at almost all Triquint's eval boards... I sure will try to put
everything in a straight line, but I don't think this is possible.

>
> Resonant circuits and/or matching circuits run at right angles to the main
> line
>
> Something like this:
>
> I------A--------O
> * *
> * *
> * *
> I is the input. O is the output. A is the amplifier.
>
> The * would be perhaps a quarter wave section for filtering.
> The '---' is the main strip line.
>
> Anything else would probably have a problem with unwanted coupling.
>
> The only time I saw a curved one was on a 2.5GHZ vco, where a strip line was
> curved into a circle to form the resonant circuit for the oscillator.
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

822. Re: LF Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <36A74D73.91F0E53E@mlecmn.net>
Source record: 74484

There is a design for a high-performance converter in the File Libraries section of the Longwave Club of America's web site -- <http://members.aol.com/part15/lfconvtr.htm> If you don't have too many nearby AM broadcast stations, you can get by with a very simple circuit using an NE-602.

Lyle, K0LR

John Strunck III wrote:

> Hello,
>
> Looking for Drake 2LF converter for 2B rec. Also, could a homebrew LF
> converter be built.
>
> Thanks,
>
> John Strunck III
> kc5ngx

823. Want: MAX232 Schematic for Icom Computer interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: kenf@enter.net
Message-ID: <36a757b0.7131634@news.enter.net>
Source record: 74485
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.swap

HI, I'm looking for a schematic for an Icom Radio/PC interface (CT-17). I have in my possession a couple of Max 232A chips which should work. I am looking for schematics that use these chips (or the 232). I know there have been a couple in QST, but my issues seem to have been misplaced (april 97 is one). If anyone can scan me a copy of any I would certainly appreciate it. Or if you can point me to a web page, that would be great also. I have a copy of a schematic for one that uses 22uF caps, but the MAX literature says the 232 only needs 1 uF and the 232a only needs .5uF. So I don't know if that one would work or not. Any help or info is appreciated. Thanks in advance.

De Ken... WA3KF

824. Toroid help FT-37-43 and ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Tim Hynde <ka8ddz@eaglequest.com>
Message-ID: <787o4e$9o0$1@smithers.eaglequest.com>
Source record: 74486

I've got some toroids that I bought from Amidon and I've lost the ID tag for them. They are the same size as an FT-37-43 but wider, just under twice as wide. Does anyone have an idea of what they might be, I'll eventually figure it out because everything I bought was for projects in the W1FB notebook but I could use a hand if anyone has an idea. Same powerdered iron color, not colored.

Tim

825. Re: WTB HF quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Richard Earl <w9juc@juno.com>
Message-ID: <36A7670E.D38EF400@juno.com>
Source record: 74487
Cross-posted to: rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Marty,

Currently we are marketing only Delta Loop driven array Monobanders.

Driven array multibanders of this design present some unusual mechanical
and feed point problems. (i.e. Plumbers delight vs parasitic array).

Currently we are looking at one proposal for a single feed multiband
version where the lowest freq band will be plumbers delight and the
others are parasitic elements.

If all goes well this will be available in winter of 1999.

Thank you for your inquirey!

GL es 73

Rich

W9JUC

Marty Duplissey wrote:
>
> Do you have a 5 bander (20 to 10)?
>
> Richard Earl wrote in message <36A60FC5.562CDFB@juno.com>...
> >Hi Marty,
> >
> >How about a delta loop?
> >
> >See web page @:
> >
> >http://homepage.interaccess.com/~jpearl/3x3-Graph-Compare-Detailed.html
> >
> >GL es 73
> >
> >Rich
> >
> >W9JUC
> >
> >Marty Duplissey wrote:
> >>
> >> Title says it all If you have one contact me.
> >>
> >> --
> >> Marty Duplissey

> >> Lone Star Business Systems
> >> Specializing in development for the credit report retrieval industry
> >> Desktop, Networks, Intranets and Internet Delivery
> >> http://www.lsbs.com

826. Re: Want: MAX232 Schematic for Icom Computer interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: JOHN WARD <HITECH@EROLS.COM>
Message-ID: <787q0q$1tp$1@winter.news.rcn.net>
Source record: 74488
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.swap

send address will send schematic
Ken Florence wrote in message <36a757b0.7131634@news.enter.net>...
>HI, I'm looking for a schematic for an Icom Radio/PC interface
>(CT-17). I have in my possession a couple of Max 232A chips which
>should work. I am looking for schematics that use these chips (or the
>232). I know there have been a couple in QST, but my issues seem to
>have been misplaced (april 97 is one). If anyone can scan me a copy of
>any I would certainly appreciate it. Or if you can point me to a web
>page, that would be great also. I have a copy of a schematic for one
>that uses 22uF caps, but the MAX literature says the 232 only needs 1
>uF and the 232a only needs .5uF. So I don't know if that one would
>work or not. Any help or info is appreciated. Thanks in advance.
>
>De Ken... WA3KF

827. Re: What's LF 13741?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <787rm1vnh1@nnrp1.dejanews.com>
Source record: 74489

In article <36A6C0D4.C7D9052C@home.com>,
"Jeanette D. Walton" <jdwalton@home.com> wrote:
> This is a low slew rate noisy op-amp - '741. Check out natsemi's web
> page - www.nsc.com for a better pin for pin replacement.

I believe this is really a 741 op-amp with the addition of
JFET source-follower inputs, isn't it? Not just any 741
will swap for it if you want the low input current.

> jhoyos@hoth.gcn.ou.EDU wrote:
>
> > The preamplifiers for the SO-4552 Heath scope use LF 13741.It
> > does not appear in ECG, STK, and NTE replacement manuals.
> > Someone knows if LF13741 can be replaced by a common 741
> > amplifier?
> >
> > Thanks in advance.
> >
> > Jorge Hoyos.
>
>

Dana K6JQ
Dana@Source.Net

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

828. Re: Toroid help FT-37-43 and ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <916948103.556824@cs1.sdd.hp.com>
Source record: 74490

Tim OM,

Have you considered winding a core with say 10 turns, then measure the inductance with a grid-dip meter
or bridge or whatever you can get access to? You can then work backwards and compute
the Al factor (uH or mH/1000 turns) easily. This won't tell you the correct frequency range necessarily
of the core, but by measuring the Q, you can get a general idea of this too. This is just ordinary
old amateur-boy measurement stuff; use your own ingenuity to work with what you
73 and GL,
Don, W6JL

829. Re: Toroid help FT-37-43 and ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <916948457.993322@cs1.sdd.hp.com>
Source record: 74491

Tim,

I suggest just winding a test winding, say 10 turns, on a core and measuring the inductance
using any one of several methods. Then you can work backwards to come up with the
permeability or AL factor. That is what I do with junkbox cores. It will at least tell you whether
it is ferrite or powdered iron core.
FT refers to a ferrite core, 43 refers to the type of ferrite material, per Amidon's data sheet.

73 and GL,
Don, W6JL

830. WTB UNC 4-40 screws

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be4574$1b655060$LocalHost@simoncox>
Source record: 74492
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Can someone help with a source, in the UK, of UNC 4-40
screws 1/2" long for a piece of Racal equipment. RS etc. etc.
don't sell such unless you count D connector screws. The
screws required are 6 BA or 2.5mm look alikes. I need 30.

Thanks, simon.cox@breathe.co.uk

831. WTB B&W fil choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36A78B2E.B50528F2@buffnet.net>
Source record: 74493
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

--
I need a B&W FC-30A filament choke.

I also need a couple contacts for a B&W 850 series bandswitch.
Cuz mine fried and died.

73,

Jim N2go

832. Re: Nicad Charger

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Edward T Grant <etg@geol.com>
Message-ID: <36A780EF.29C87ADF@geol.com>
Source record: 74494

I have been using something for years that my dad came up years before that with no problems at all.

Simply connect a christmas tree bulb (aprox. 3-5 watts) in series with a diode and your battery. It is a trickle charger but works very well and will charge anything from 1 volt to about 50 volt batteries. Naturally the larger the battery the longer it takes. You can adjust the charging rate/current by putting different wattage bulbs in. I use a blinking bulb which will be on steady until it is charged then begin blinking.
Note: this circuit can be dangerous because of the potential for shock.
I wired the battery between the bulb and the diode with the hot going to the bulb and have never been shocked by it but caution should be exercised.
73
-Ed-
KF4FDT

now@ionet.net wrote:
>
> anybod have a good circuit for a nicad battery charger, one that would
> charge a 1.5 and 9.0 battery. The circuit would determine when the
> battery is fully charged and shut off.
> Thank you

833. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: technolad@webtv.net
Message-ID: <8016-36A78A33-38@newsd-232.iap.bryant.webtv.net>
Source record: 74495

What about that Bayliss generator?

I am also trying to take my handie talkie with me hiking, due to
antenna restrictions, it also gives me a good excuse to go out and get
some fresh air.
I recently purchased a Cherokee all-mode
(since I added cw) walkie talkie, A H 100
with the intent of converting it to ten meters
or adding a transverter, since no one makes an all-mode ham walkie
talkie, although the radio did not come with any technical or schematic
info, I should have known better!
Does anyone know how to convert this radio to ten meters?
It would hopefully not involve pulling the boards with surface
mount components apart
as they are just hanging by a thread anyway!
when purchased from the factory.

P.S. this radio is useless on 11 meters!

834. FS: OLD RADIO TEST ITEMS:

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2101991357190001@murphy1.cts.com>
Source record: 74496
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

WOOD BOXED RADIO AND ELECT TEST ITEMS.

FROM THE 30' AND 40'S

INFO AND PICT AT:

http://209.239.34.153/murphyjunk/4_MORE_SURPLUS_STUFF

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

835. FS: 12 VDC 2.4 AMP DC POWER SUPPLIES 3 FOR $10

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2101991401500001@murphy1.cts.com>
Source record: 74497
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

120 VAC 60 HZ IN 12 VDC 2.4 AMP OUT. "BASIC" POWER SUPPLIES.

WITH TRANSFORMER, BRIDGE RECT. FILTER CAP, $3.50 EA. 3 FOR $10

PICT AT:

http://209.239.34.153/murphyjunk/1_SPECIALS_UPDATED_FREQUENTLY

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

836. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <oP8NoKACr6p2Ewsn@falstaf.demon.co.uk>
Source record: 74498
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Some Months ago, last year I think, there was an add-on for an RA17
published in RaDCOM. This was a valve design and should be modifiable
to almost anything.

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

837. old radio telephone

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <24306-36A7A1A2-53@newsd-123.bryant.webtv.net>
Source record: 74499

i have the box for an old style radio phone but not the hand set part.
could this be used to get on the air? if it could be used or modified
to be a tranciever then i would give it to a ham or someone. if not,
then out to the trash.

838. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Steve Smith <steves@kotamicro.com>
Message-ID: <36A7B200.B82D8A4@kotamicro.com>
Source record: 74500
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Since I've been looking for a good (practice and theory, mostly practice) book on microstrip, I took the advice in this thread and went looking for "Foundations for Microstrip Design" by Edwards. Despite the information on web pages turned up in a search, the book seems to be out of print. I tried several used book sources (Powells, Bibliofind, ..) to no avail.

1. Does anyone have a copy they would be willing to sell?

2. Does anyone have an alternate title to recomend?

Thanks,
Steve Smith

839. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: johnoz@indy.net
Message-ID: <36a7b8b8.9176701@news.indy.net>
Source record: 74501

On Mon, 18 Jan 1999 05:48:00 GMT, Jim Pierpoint <pierpo@bellsouth.net>
wrotz:

>Hi Guys :
>
>Just wondering if I could easily make a hand cranked generator to power
>my HT... just for survival reasons. Is there any reason I could not use
>an old 12vdc auto generator... put a hand crank on it... and generate
>enough power for my HT???
>
>If anyone knows a way to do this, or any other way to easily build a
>homebrew generator that runs at 12 volts and is capable of 5 to 20 watts
>output, I would like to hear about it.
>
>Thanks in advance...
>
>Jim Pierpoint

A hand cranked generator was standard issue in WW2, don't know how
many survived. From memory they were mounted on a tripod and there was
a seat attached to one of the legs so that the user was fairly
comfortable while cranking. Can't remember what the output was even
though I owned one for field day use.
When I was a young ham in Oz VK3ALZ powered a complete 2 meter AM
station with one using a pair of 6AK5s in the final. The power had not
reached his QTH. His signal was quite characteristic because of the
mechanical generator noise. Strangely enough the "Grinder" as we
affectionately called him worked more DX than any of us with AC
powered stations.

John. KB9MIE.

840. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: "Paul F. McCarron" <w1hzy@cybertours.com>
Message-ID: <36A7CBAB.BF0F7536@cybertours.com>
Source record: 74502

Do a search, there are several pages that give the ten meter conversion, I have it on my other computer if you can't find it. It's a very simple thing to do. As I recall, it consists of putting a blob of solder on three open trades just behind the push to talk switch. In some cases, you have to let the internal battery discharge before it will work. To activate on 10 meters, you power up the radio with the Ch 9 button depressed. you can then switch from a group of channels that will cover most of the bandThe problem is that you can't get 5k steps. There is a post that gives a mod for 5k steps, but the post has mistakes in it and the author has not corrected it and has not replied to my e-mails.If you turn the radio on without holding the Ch 9 button down, it reverts back to normal CB use.I have tried to make 10 mtr contacts with mixed results. With the band open and on a 3 foot antenna, I have made a few contacts. Good luck, Paul

technolad@webtv.net wrote:

> What about that Bayliss generator?
>
> I am also trying to take my handie talkie with me hiking, due to
> antenna restrictions, it also gives me a good excuse to go out and get
> some fresh air.
> I recently purchased a Cherokee all-mode
> (since I added cw) walkie talkie, A H 100
> with the intent of converting it to ten meters
> or adding a transverter, since no one makes an all-mode ham walkie
> talkie, although the radio did not come with any technical or schematic
> info, I should have known better!
> Does anyone know how to convert this radio to ten meters?
> It would hopefully not involve pulling the boards with surface
> mount components apart
> as they are just hanging by a thread anyway!
> when purchased from the factory.
>
> P.S. this radio is useless on 11 meters!

841. Re: Toroid help FT-37-43 and ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36A7D8EE.4D435199@teleport.com>
Source record: 74503

Amidon sells a core that's the diameter of the FT-37 but twice as thick -- believe they call it an FT-37B. There are a number of tests you can run to pin down the ferrite type, but to make any suggestions I'd have to know what kind of test equipment you have. One quick test you can do is measure the resistance of the core with an ohmmeter. Where you put the probes doesn't matter for this test. If it's 43, it'll measure open (at least greater than several megohms). If you measure any amount of resistance other than open, it's probably one of the 70-series ferrites or similar. 60-series ferrites will measure open, too, so you can't use this test to distinguish between them and 43.

Roy Lewallen, W7EL

Tim Hynde wrote:
>
> I've got some toroids that I bought from Amidon and I've lost the ID tag for
> them. They are the same size as an FT-37-43 but wider, just under twice as
> wide. Does anyone have an idea of what they might be, I'll eventually figure
> it out because everything I bought was for projects in the W1FB notebook but
> I could use a hand if anyone has an idea. Same powerdered iron color, not
> colored.
>
> Tim

842. Re: Toroid help FT-37-43 and ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Tim Hynde <ka8ddz@hotmail.com>
Message-ID: <788mcm$110$1@smithers.eaglequest.com>
Source record: 74504

Thanks Don, yea that was my next move, just as soon as I fix my GDO. :)

Tim ka8ddz

Don W6JL wrote in message <916948103.556824@cs1.sdd.hp.com>...
>Tim OM,
>
> Have you considered winding a core with say 10 turns, then measure the
>inductance with a grid-dip meter
>or bridge or whatever you can get access to? You can then work backwards
>and compute
>the Al factor (uH or mH/1000 turns) easily. This won't tell you the
correct
>frequency range necessarily
>of the core, but by measuring the Q, you can get a general idea of this
>too. This is just ordinary
>old amateur-boy measurement stuff; use your own ingenuity to work with what
>you
> 73 and GL,
> Don, W6JL
>
>
>

843. Re: A tube question for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Freeland <Freeland@chickasaw.com>
Message-ID: <xXSp2.599$4a1.3608512@news.goodnet.com>
Source record: 74505
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.tubes

the 8874 has 400 watt disipiation.
max plate voltage 2200.
max plate current 250ma.
500mhz range.
amplification factor 160.
6.3 volt at 3.2amps on cathode. (I think this is heater voltage
and current.)
suppose to be operated AB2
it says here, the approximate output power is 505 watts.
the book says nothing about pin configuration, but if it is like
the 8873 it is like this,

*H *G1
*H *K
*G1 *K
*K *K
*K *G1
*K*P

counting clock wise from the Plate(P)
1=k,2=k,3=k,4=g1,5=h,6=h,7=g1,8=k,9=k,10=k,11=g1.
hope this helps.
Bry wrote in message <36a7dedb.385268@news.mnsinc.com>...
>Hi guys!
>
>An EIMAC 8874 Question:
>
>Does anyone have the pin-outs for this 11-pin base tube?
>
>I also need to know what the heater voltage and current
requirement is!
>
>Can anyone with an old EIMAC catalog or spec sheet help me???
>
>Thanks - Bry, AF4K
>

844. Re: What's LF 13741?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990121231639.6730B-100000@Ocean.CAM.ORG>
Source record: 74506

Dana's right, and I sure didn't catch this when I read the earlier
announcement.

I just checked my twenty year old National Semiconductor databook,
and the LF13741 isa "monolithic JFET input operational amplifier".

It goes on to say that "The LF13741 is a 741 with BI-FET input followers
on the same die. Familiar operating characteristics - THOSE OF THE 741 --
with the added advantage of low input bias current make the LF13741 easy
to use."

The schematic shows two fet's on the inputs to the op-amp (and two other
fets as current sources) and then shows the op-amp with a block diagram
labelled "741".

Obviously it was chosen in the scope because of it's high input impedance,
which in retrospect looks like a clue that it isn't a run of the mill 741.

It does have identical pinout to the 741, though the databook shows it
available only in a round package.

Any more recent op-amp will have better specs in terms of slew rate and
frequency response. And virtually all single-package op-amps will have
the same pinout.

The important thing to get is something that has JFET's on the input.

Michael VE2BVW

On Thu, 21 Jan 1999, Dana H. Myers K6JQ wrote:

> In article <36A6C0D4.C7D9052C@home.com>,
> "Jeanette D. Walton" <jdwalton@home.com> wrote:
> > This is a low slew rate noisy op-amp - '741. Check out natsemi's web
> > page - www.nsc.com for a better pin for pin replacement.
>
> I believe this is really a 741 op-amp with the addition of
> JFET source-follower inputs, isn't it? Not just any 741
> will swap for it if you want the low input current.
>
> > jhoyos@hoth.gcn.ou.EDU wrote:
> >
> > > The preamplifiers for the SO-4552 Heath scope use LF 13741.It
> > > does not appear in ECG, STK, and NTE replacement manuals.
> > > Someone knows if LF13741 can be replaced by a common 741
> > > amplifier?
> > >

> > > Thanks in advance.
> > >
> > > Jorge Hoyos.
> >
> >
>
> Dana K6JQ
> Dana@Source.Net
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>
>

845. Re: Needed - Dual gang Vari-cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-21 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990121233058.6730C-100000@Ocean.CAM.ORG>
Source record: 74507

On Wed, 20 Jan 1999 ve6inm@telusplanet.net wrote:

> I am in need of a dual gang variable capacitor, at 365 pf per section. This
> is not carrying any power, so one from an old broadcast band receiver would
> be fine. An air spaced unit with 1/4" shaft is what I'd really like. Also, if
> anyone has a couple of little inductors at 100microH, I need them as well.
> Can't see paying the $8 shipping for $1 worth of parts. Please e-mail to
> <ve6inm@telusplanet.net>. Thank you. 73 de VE6INM (Glenn)
>
You're right about the shipping. I once mailed someone a couple of IC's
I'd pulled off a circuit board, and the cost of mailing them was
ridiculous.

I've said it before, but those "365-pF variables" tend to be a term for a
generic variable capacitor. The place to look is in an old radio. I've
found plenty in the garbage. Garage sales are also good, though this is
hardly the weather for those. You might also check the Salvation Army or
some other place that accepts donations of old household items and sells
them for very little.

The exact variable that you get will vary with the radio. In really
recent radios there may not be variables, but will be voltage tuned with
varactors, but I'm still finding cheap radios with actual variable
capacitors. More recent radios will tend to be two section, with one
about 365pF and the other maybe 160pF or so; of course, if it's an AM/FM
radio there will be additional sections for the FM side. Older radios
will have three sections, one for RF, another for mixer input, and the
third with somewhat less capacitance for the local oscillator. Although
I've seen 2 section 365pF variables, I don't think I've ever taken one out
of a radio; they'll either be two unequal size or two equal and one
lesser section.

More recent radios, especially smaller ones, will not have air spacing,
but mica (or is it some other material?).

What you can use will vary with the application. Often two sections are
specified in order to get greater maximum capacitance; you might get by
with a 365pF or so section and the local oscillator section. If it's not
handling power or the variable element in a variable oscillator, you may
not need an air variable.

Michael VE2BVW

846. Wanted Heath KS-1 PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Andy Micheals <anigma@gte.net>
Message-ID: <78bemu$64t$1@news-2.news.gte.net>
Source record: 74370

Looking for HeathKit KS-1 power supply.

Andy

anigma@gte.net

847. Camera TV interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: beau winburn <flacsi@mindspring.com>
Message-ID: <36A94387.49BFAD18@mindspring.com>
Source record: 74371

Has anyone any info on how to connect one of the new "fish eye" cameras to a standard tv? I am looking for an alternative way to replace my defunct rear monitoring system on my motor home.
beau

848. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: marty <martyg@mindspring.com>
Message-ID: <36A956B5.5580@mindspring.com>
Source record: 74372
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

crown royal perhaps?

849. Re: microstrip question - twisted wires for a capacitor Vs inductance...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Jim <I.hate.SPAM@nospam.com>
Message-ID: <78bp3c$nkd@dfw-ixnews12.ix.netcom.com>
Source record: 74373
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Using a pair of twisted wires as a VERY few pF capacitor has been done for many years. Doing it at Microwave, however, creates a problem.

Consider the assembly. There is some wire length, which is inductive, and capacitance between the two wires.

Yep.... A series resonant circuit.

Down on the HF bands, it doesn't matter. The 3 or 4 nH of inductance leaves the self-resonant point up in the hundreds of Megahertz.

Of course, if you are up at several GHz, well..... The combination is ABOVE self-resonance and now it behaves as a primarily inductive component.

Jim

I sure wish I didn't have to do this to my address, but spambots are a real irritation to me. I get too much bulk email as it is !!!

jpennell at ix dot netcom dot h a t e s p a m dot com

850. spectum analyzer build

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: MX <elflash@eunet.yu>
Message-ID: <78h22e$1km$1@SOLAIR2.EUnet.yu>
Source record: 74374

Hi!
Want to exchange experience or schemes with people who build spectrum
analyzer (oscilloscope + TV tuner+sweep gen.). Regards

Flash
elflash@nonospam.eunet.yu (please remove nonospam from address)

851. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <YgUp2.234$VB.212680@news4.mia>
Source record: 74419
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen wrote in message <369E1635.D43F8827@teleport.com>...
<snip>

>Alternatively, make the line about 1/2 wavelength long and leave the
>far end open. The line will end up a little shorter than 1/2
>wavelength due to fringing at the open end. Of course, you can't tap
>up on this one like you can the 1/4 wavelength line.

Isn't a very small capacitor required to couple to a 1/2 wave resonator? I was reading this in "Microwave Engineering" by David Pozar. Capacitor was 0.001 picofarad. That is very difficult. It is kind of big for a gap capacitor, and kind of small for a surface mount capacitor.

I have been experimenting with placing the coupling capacitor somewhere in the middle of a 1/2 wave resonator. It seems that the impedance is lower towards the middle, allowing the use of a realizable capacitor (or varactor) to couple to the 1/2 wave resonator.

852. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <vSUp2.268$VB.228261@news4.mia>
Source record: 74420
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Marshall Jose wrote in message <36A36F67.547@jhuapl.edu>...
<snip>

>Microstrip stubs are just transmission line stubs and will behave
>similarly. If you "look into" a 1/4-wave stub, it appears to be a low
>impedance, similar to how a series-LC network looks with the other end
>connected to ground. .

Don't you have that backwards? Others have said in this same thread that a
1/4 wave shorted stub is high impedance at resonance.

853. VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <11Vp2.280$VB.232507@news4.mia>
Source record: 74421
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Thanks for all the help with previous questions. I am pulling my hair out again.

Ok. I have an oscillator. It works. I have some varactors. Now what is the normal way that varactors are used to control the frequency of an oscillator?

My oscillator is a common base, negative resistance, microstrip 2.4 GHZ.

854. Re: curved v. chamfered microstrips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <%5Vp2.286$VB.234719@news4.mia>
Source record: 74422

ghole@my-dejanews.com wrote in message <784v6mdup1@nnrp1.dejanews.com>...
>What's the best topology for a microstrip? Nicely curved from source to
load
>Or straight lines with chamfered 90 degrees corners? My CAD program allows
me
>to easily do curved traces. If I want chamfered I have to draw them myself.
>
>Anybody?

As I recall, from my recent reading, mitered corners are superior to rounded
corners.

855. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990122012435.9168A-100000@Ocean.CAM.ORG>
Source record: 74423

On Wed, 20 Jan 1999, Harry, WA3PTG wrote:

> Where is a good cheap place to buy 2N5179 & 2n5109??
> nicholas charles caruso wrote in message <36A385EC.87E96BC6@certco.com>...
> >
> >A lot of people speak highly of the 2N5179 and 2N5109 parts
>
>
One place would be
Linkname: Dan's Small Parts and Kits
URL: http://www.fix.net/dans.html
I ordered from them some years ago and the service was fine. I was all
set to order last year but being in Canada created a problem because he
changed his policy, first to no orders outside the US, and then a fifty
dollar minimum. I see he's changed it again to just ten dollars for
shpping and handling to Canada, so I guess it's time to go through the
list again.

He's pertinent to this thread because while he has good prices, he is
dealing with the sort of devices that commonly show up in the amateur
magazines and books. If it's common, he likely has it, and likewise
if he has it, it's likely to be common.

An advantage to his company is that while you are likely to get common RF
active parts, he also carries important RF parts like variable capacitors
and toroids and sometimes crystals and feedthrough capacitors etc. If you
need parts, ordering from him may mean that you can get all the parts you
need, whereas if you ordered from more general electronic suppliers you
might have to get semiconductors from one place and toroids from another,
etc. I am forever putting projects aside because I need one little thing,
and being able to take care of a number of items with one order is a
certain means of getting those projects out of the way.

Michael VE2BVW

856. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36A83139.1987@pop.removethistomailme.net>
Source record: 74424
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
>
> Thanks for all the help with previous questions. I am pulling my hair out
> again.
>
> Ok. I have an oscillator. It works. I have some varactors. Now what is
> the normal way that varactors are used to control the frequency of an
> oscillator?
>
> My oscillator is a common base, negative resistance, microstrip 2.4 GHZ.

Snag a copy of this:

http://www.amazon.com/exec/obidos/isbn=0070524157

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

857. Re: WTB UNC 4-40 screws

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <36A836C1.757B8F2C@rl.ac.uk>
Source record: 74425
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Simon Cox wrote:

> Can someone help with a source, in the UK, of UNC 4-40
> screws 1/2" long for a piece of Racal equipment. RS etc. etc.
> don't sell such unless you count D connector screws. The
> screws required are 6 BA or 2.5mm look alikes. I need 30.

There are a few sources, but why not just order them direct from the
USA?
There is a web site www.screws.com but it is not active.
Dan's Small Parts (really!) would be a good starting place.

858. Cerco MP3 Italiani

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Use1 <use1@freemail.it>
Message-ID: <GQ03VZeR#GA.166@news.galactica.it>
Source record: 74426

Dove posso trovare Mp3 italiani?

859. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: leafs@ozemail.com.au
Message-ID: <789ib4$h9j$1@reader1.reader.news.ozemail.net>
Source record: 74427
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

To be facetious -

with great care unless you want poor phase noise, large amplitude variations and other problems.

Couple the reversed biased varactor into the oscillator using a small high-Q capacitor or nearby coupled track. Make the varactor coupling as small as possible to acheive the tuning range sufficient to swallow up any uncertainty and any temperature effects and no more.

There are several places you can couple the varactor but on the collector of the transitor is not uncommon but does seem to cause signifocant Pout variation. In fact you can couple anywhere where there is significant circulating power.

Ian Wilson

"Bert Douglas" <bertdNOSPAM@dibbs.net> wrote:

>Thanks for all the help with previous questions. I am pulling my hair out
>again.

>Ok. I have an oscillator. It works. I have some varactors. Now what is
>the normal way that varactors are used to control the frequency of an
>oscillator?

>My oscillator is a common base, negative resistance, microstrip 2.4 GHZ.

Considered Solutions
considered@ozemail.no.spam.com.au

(do the no spam thing to make a valid email address)

860. Re: Needed - Dual gang Vari-cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <789ksn$jt9$9@alice.walrus.com>
Source record: 74428

Michael Black (blackm00@CAM.ORG) wrote:

: On Wed, 20 Jan 1999 ve6inm@telusplanet.net wrote:

: > I am in need of a dual gang variable capacitor, at 365 pf per section. This
: > is not carrying any power, so one from an old broadcast band receiver would
: > be fine. An air spaced unit with 1/4" shaft is what I'd really like. Also, if
: > anyone has a couple of little inductors at 100microH, I need them as well.
: > Can't see paying the $8 shipping for $1 worth of parts. Please e-mail to
: > <ve6inm@telusplanet.net>. Thank you. 73 de VE6INM (Glenn)
: >
: You're right about the shipping. I once mailed someone a couple of IC's
: I'd pulled off a circuit board, and the cost of mailing them was
: ridiculous.

: I've said it before, but those "365-pF variables" tend to be a term for a
: generic variable capacitor. The place to look is in an old radio. I've
: found plenty in the garbage. Garage sales are also good, though this is
: hardly the weather for those. You might also check the Salvation Army or
: some other place that accepts donations of old household items and sells
: them for very little.

: The exact variable that you get will vary with the radio. In really
: recent radios there may not be variables, but will be voltage tuned with
: varactors, but I'm still finding cheap radios with actual variable
: capacitors. More recent radios will tend to be two section, with one
: about 365pF and the other maybe 160pF or so; of course, if it's an AM/FM
: radio there will be additional sections for the FM side. Older radios
: will have three sections, one for RF, another for mixer input, and the
: third with somewhat less capacitance for the local oscillator. Although
: I've seen 2 section 365pF variables, I don't think I've ever taken one out
: of a radio; they'll either be two unequal size or two equal and one
: lesser section.

: More recent radios, especially smaller ones, will not have air spacing,
: but mica (or is it some other material?).

Not mica-some form of plastic, polypropelene maybe.

: What you can use will vary with the application. Often two sections are
: specified in order to get greater maximum capacitance; you might get by
: with a 365pF or so section and the local oscillator section. If it's not
: handling power or the variable element in a variable oscillator, you may
: not need an air variable.

: Michael VE2BVW

861. Re: Needed - Dual gang Vari-cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Glen Ross <ross@zetnet.co.uk>
Message-ID: <19990122113616802 94@zetnet.co.uk>
Source record: 74429

The message <789ksn$jt9$9@alice.walrus.com>
from marc_k@walrus.com (marc_k) contains these words:

> Older radios
> : will have three sections, one for RF, another for mixer input, and the
> : third with somewhat less capacitance for the local oscillator.

Most valved domestic radios built in Europe up until 1960 used a twin gang 500pf variable. The lower value was more common in the USA. Sometimes the plates on the osc section were shaped but this was not common. It was cheaper to assemble from identical plates.

The effective capacitance of the osc section was reduced using a series capacitor, known as a padder and placed in the earth lead of the tuning coil. By using a suitable variable trimmer capacitor across the coil and the variable padder capacitor in series with the coil it was then possible to get what was known as "3 point tracking"

This means that the Mixer and Osc sections [plus the RF section in a 3 gang tuner] were only exactly in correspondence at three frequencies within, say, the medium waveband. The trimmer was usually set at about 1.4Mhz and the padder somewhere around 700Khz when dealing with the MW BC band. At all other points there was a slight divergence of tuning but this was not great enough to seriously degrade the performance of the RX.

The shaped oscillator vanes were actually made in two versions:-

SLF [Straight line frequency.]
SLW [straight line wavelength]

You made your choice depending on the dial calibration you required.

Another point to keep in mind is that the shaped vanes were only suitable for use over a particular frequency range. The *law* of the plates was designed to keep the osc in step over a specified frequency range [usually MW] If you wanted a multi-band design the shaped plates were not an option.

Glen G8MWR

862. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <36A87867.5ED4@ix.netcom.com>
Source record: 74430

goodmich wrote:
>
> What is the formula to calculate antenna length from the frequency? Or
> what is the formula to tell me the waves length from the frequency
> numbers?
> I can't seem to find it anywhere I was hoping you guys could help
>
> thanks

Take a look at The Antenna Elmer at URL:
http://www.qth.com/antenna/antenna.htm

Lots of formulas and homebrew antenna info.

Lots more at URL:
http://www.ac6v.com/pageant.html
--
73 from Rod in San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 275,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

863. Re: Surplus Stores near Bramshill

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <789tg2$s1v$1@news5.svr.pol.co.uk>
Source record: 74431

Look in Electronics World magazine.
You will find several adverts from shops selling surplus RF test gear.

Find the magazine in W.H. Smiths.

John G3UGY

Peter Bolch wrote in message <788069$f49@news.netcologne.de>...
>Hi,
>
>
>are there any RF measurement devices surplus stores not too far away (say
>less then 1/2 hour by car) from Bramshill (near London)?
>
>
>Peter
>
>

864. Re: Needed - Dual gang Vari-cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <78a5n2$up5$1@nnrp1.dejanews.com>
Source record: 74432

In article <Pine.GSO.3.94.990121233058.6730C-100000@Ocean.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:

> with a 365pF or so section and the local oscillator section. If it's not
> handling power or the variable element in a variable oscillator, you may
> not need an air variable.
>
> Michael VE2BVW
>
>

Thanx to all who replied with possible sources. Dan's Small Parts has a unit that is just what I need, at $15US. Since this is going into a homebrew sig. gen. the power handling is not critical. Actually the value can be anywhere from 250pf to 500pf, but the 2 sections of the oscillator circuit have to track with some linearity. My design is a 6 band overlapping range idea, and the 365pf value was chosen because of availability. The problem is that the old tube BC rcvrs are getting harder to find. In worst case, I suppose I could use 2 unmatched sections, and change the values on the 6 inductors in one half to try and get the same resonance freq. in each section.

To think of all the old 5 tube BC rcvrs that I scavenged for a couple tubes and tossed into the landfill. That's reason enough to convince the XYL to allow another accumulation of Junque. 73's and thanx again to the group.
VE6INM (Glenn)

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

865. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <GT0q2.296$oi.402855@news3.mia>
Source record: 74433
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Miles wrote in message <36A83139.1987@pop.removethistomailme.net>...
>Snag a copy of this:
>
> http://www.amazon.com/exec/obidos/isbn=0070524157

I already did. And I feel I wasted my money. This book contains little
useful information on either theory or practice.

What it does contain are:

Simplistic overviews
Designs without explanation
Screen shots of CAD programs

One wonders if it is an advertisement for =SuperStar=.

866. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <Y11q2.299$oi.407326@news3.mia>
Source record: 74434
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Ian Wilson wrote in message
<789ib4$h9j$1@reader1.reader.news.ozemail.net>...
>To be facetious -
>
>with great care unless you want poor phase noise, large amplitude
>variations and other problems.
>
>Couple the reversed biased varactor into the oscillator using a small
>high-Q capacitor or nearby coupled track. Make the varactor coupling
>as small as possible to acheive the tuning range sufficient to swallow
>up any uncertainty and any temperature effects and no more.

Thanks. What about using two back to back varactors? This would halve the capacitance. One of my problems seems to be that none of my varactors will produce a capacitance as low as is needed.

Isn't there "large circulating power" almost everywhere in an oscillator?

Thanks,
Bert

867. Re: Needed - Dual gang Vari-cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <36A89DB9.879024F9@mlecmn.net>
Source record: 74435

Unfortunately, the variable capacitors found in most of the AM transistor radios (the ones that don't use varactors) have an antenna section of about 140 pF and an oscillator section of about 60 pF, so they aren't suitable for circuits that require a dual-gang 365 pF capacitor.

Lyle, K0LR

Michael Black wrote:

> The exact variable that you get will vary with the radio. In really
> recent radios there may not be variables, but will be voltage tuned with
> varactors, but I'm still finding cheap radios with actual variable
> capacitors. More recent radios will tend to be two section, with one
> about 365pF and the other maybe 160pF or so; of course, if it's an AM/FM
> radio there will be additional sections for the FM side. Older radios
> will have three sections, one for RF, another for mixer input, and the
> third with somewhat less capacitance for the local oscillator. Although
> I've seen 2 section 365pF variables, I don't think I've ever taken one out
> of a radio; they'll either be two unequal size or two equal and one
> lesser section.
>
> More recent radios, especially smaller ones, will not have air spacing,
> but mica (or is it some other material?).
>
> What you can use will vary with the application. Often two sections are
> specified in order to get greater maximum capacitance; you might get by
> with a 365pF or so section and the local oscillator section. If it's not
> handling power or the variable element in a variable oscillator, you may
> not need an air variable.
>
> Michael VE2BVW

868. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01be4622$406bedc0$6760b6cd@cbx-nt>
Source record: 74436
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

First off, I am a REAL novice at this, so please set your flame-throwers to 'lightly singe'.....:-)

> Thanks. What about using two back to back varactors? This would halve the
> capacitance. One of my problems seems to be that none of my varactors will
> produce a capacitance as low as is needed.

From what I understand, front to front. This would actually help reduce your phase problem as well as the capacitance would be seen equally through out the sin wave cycle.

Christopher Cox
KC8FRJ

869. VINTAGE ELECTRONICS CATALOGS / LIT F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: tubelit@aol.com
Message-ID: <19990122111048.10189.00001131@ng149.aol.com>
Source record: 74437

Hello, as promised I'd come through with more complete,
original, good to excellent condition Antique electronic
and audio catalogs/sales brochures.
All are as represented, ALL SALES FINAL on literature.
Prices below are firm, and INCLUDE SHIPPING to anywhere
in the lower 48 U.S. states. Others by quote. Some of
these catalogs have stuff YOU ONLY CAN DREAM ABOUT...
Thanks, first come, first served ! You will enjoy these.....
Please send your orders via Email to : Tubelit@aol.com

Regards, Joe Pratt

THIS IS WHAT IS HERE RIGHT NOW:

ADR audio catalog, looks like earlt-mid 70's, 7 pages, 4.00

Audio warehouse catalog, Vol. 1 Issue 2, looks like early-mid
70's, 8 pages, 4.00

Allied's supplement #133 to 1953 cat.#131, 48 pgs.
of the good stuff, tiny fold in one corner, but nice! 25.00

Allied's "festival of values" supplement # 182, 1958
100% complete, good shape 48 pgs, 18.00

Allied's winter sale catalog # 263, 1966, 89 pages in excellent shape,
includes all the Knight kits and order form, 25.00

The "Audio Exchange's audio fair 1955 edition, comes with extra
fold-out equipment flyers,nice condition! 8 pages plus 3 flyers, 9.00

"The care and feeding of power tetrodes" original, mint condition,
Eitel McCollough's rare (these days) guide to running the big stuff!
printed in the 50's, well illustrated, 25 pages, 25.00

Federated purchaser's 1956 catalog supplement for "High fidelity
sound equipment",a fold-out single page type, nice condition,
have 2 identical in same condition, 8.00 ea.

Federated purchaser 1960 catalog , 303 pages in nice shape, but
page 1 has some writing, has small hole in the last 6 pages,
but still real nice.. 23.00

"Heathkits for 1955" catalog, nice shape except a couple small
stains on cover,100% complete! 47 pages, 25.00

Heathkit 1956 fall flyer, near mint cond, 7 pages and order form, 12.00

"Heathkits for 1957" catalog, excellent save for a little stain
on cover, 100% there, 55 pages, 25.00

"Heathkits for 1958", This is THE one! All the TX's are in here!
near mint cond, 57 pages, 25.00

Heathkit 1959 catalog, near mint, shows the W-5M kit for 59.75 ! 100%
complete,....28.00

Heathkit 1960 catalog, 100% there in NICE shape, 66 pages, 25.00

Heath catalog,July, 1961, very nice cond. w/order form, 39 pages, 20.00

Heath catalog, Fall/winter 1961/62, Small tear on cover,
and cover loose, but 99% there,just missing order form, 99 pages, 20.00

Heath catalog, #810-50, 106 pages, very nice, 25.00

"Give a Heathkit" for Christmas, catalog supplement 80/31, Oct. 1962,
100% there, but cover is loose and worn, but OK looking,47 pages,15.00

H.W. Sams co. 1984 Photofact anual index, 208 pages, very nice, 12.00

H.W. Sams co. 1985 Photofact anual index, 216 pages, very nice, 12.00

Hudson Hi-fidelity catalog, 1958, 62 pages, all the goodies!
great shape, 19.00

Key Electronics, Inc. 1963 audio discount cat# A-17, 20
pages, very nice shape and very interesting, 15.00

MusiCraft special flyer, icludes schematic for the 60 watt
6550 audio amp! Looks like 50's or early 60's, comes with
free extra, different copy, 10.00

The NEW YORK TIMES, Sunday, March 15, 1959 Hi-Fi- stereo
special section 10! RARE RARE RARE in fairly good shape,
but yellowed, of course. 15 full size newspaper
pages, has been folded since 1959, REAL COOL STUFF 15.00

Radio Shack "newspaper type" catalog, # 117, Jan/Feb 1962,
"Annual mid-winter sale",near mint except for one small, tiny
tear, 40 pgs., 20.00

Sound reproduction inc, E. Orange, N.J. catalog # 50, 1977,
16 pages, 5.00

Terminal Radio Corp's 1959 high-fidelity 'Audio Digest"
catalog, straight from "Radio Row"
on Cortlandt street in NYC, 90 pages CRAMMED
full of dreamy items, rare and in nice
shape, 25.00

Zalytron catalog # 161, lotsa audio goodies! Nice shape,
a couple of small tears, tube info inside, too! 91 pages, looks like
early to mid fifty's, 15.00

Thanks to all, I'll post more as I find 'em!
Joe Pratt

870. Phone off hook indicator cct ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: xhduff@ica.net
Message-ID: <36a8a47b.0@lightning.ica.net>
Source record: 74438

Anyone have a schematic for a simple
line powered telephone off-hook indicator
that they could email to me ?

Please remove the 'x' in my address to reply.

871. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a7cc85.21434611@news.online.no>
Source record: 74439
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Thu, 21 Jan 1999 22:31:30 +0000, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>Some Months ago, last year I think, there was an add-on for an RA17
>published in RaDCOM. This was a valve design and should be modifiable
>to almost anything.
>
>Robin
>____
yes, I noted it, but I wouldn't suggest modifying an old receiver in
such a high degree when it is not neccessary, it is just too many
suggested modifications where the operator does not try to match the
modification to what is already available

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

872. Drake R4A Crystals Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: mark beutler <mbeutler@tds.net>
Message-ID: <36A8B4A8.E0CD1022@tds.net>
Source record: 74440
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap

I am soon aquiring a Drake R4A receiver and would like to get crystals
for the 11-90 meter shortwave broadcast bands. These would be (in
MegaHertz):
36.7
32.5
30.0
28.5
26.6
26.1
24.6
22.7
20.5
18.2
17.0
15.8
15.0
14.3

These are the actual crystal freqs, not the receive freqs. Anyone
having crystals known to work in the Drake (ie: series resonant, the
right size to fit the Drake, etc.) in the above freqs that you wish to
sell please let me know.
--
-
Regards,
mark beutler
-

873. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <78ah3f$iom@fox.ksu.ksu.edu>
Source record: 74441

johnoz@indy.net (John Occolowitz) writes:
>>Just wondering if I could easily make a hand cranked generator to power
>>my HT... just for survival reasons. Is there any reason I could not use
>>....

If you open the "bicycle generator" so many have mentioned and lift the
ground lead, you have an AC generator which can be fed to a small
transformer to produce other voltages. Or fed to a pair of diodes to
get full-wave rectification, which you can use to charge your HT battery.

>A hand cranked generator was standard issue in WW2, don't know how
>many survived. From memory they were mounted on a tripod and there was
>a seat attached to one of the legs so that the user was fairly
>comfortable while cranking. Can't remember what the output was even
>though I owned one for field day use.

I have one of those (sans the tripod, unfortunately).
You can probably still buy one of your own from FAIR RADIO.
Be prepared to use tube-oriented voltages (plate and filament).

You didn't mention the "Gibson Girl" transmitter which was used by
servicepeople downed in boats. Shaped somewhat like a female's anatomy
(wider at top and bottom and narrow at the waist), it was held between
the knees and cranked. The cranking also sent a pre-formated CW SOS.

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

874. Re: WTB HV Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <78ahdh$jlr@fox.ksu.ksu.edu>
Source record: 74442

>> I'm looking for a transformer with 230V primary and 4800V CT @500MA
>> secondary OR something close.
> I THINK,(but I could be wrong) That Microwave oven X-frmrs are right
>around that voltage range,(it could be more,I'm not too sure),and around
>that current..

Having recently taken a microwave oven apart just for the transformer,
mine is about 2200 volts at only about 300 ma. And one wire of the HV
output is grounded.

So get TWO of them and use as a 4400 volt CT xfmr at (about) 300 ma.

The two magnets on the tube are as much fun to play with as is
the transformer!

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

875. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <8j7clYAXGDq2EwE6@jmwa.demon.co.uk>
Source record: 74443
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<YgUp2.234$VB.212680@news4.mia>, Bert Douglas <bertdNOSPAM@dibbs.net>
wrote:
>
>Roy Lewallen wrote in message <369E1635.D43F8827@teleport.com>...
><snip>
>
>>Alternatively, make the line about 1/2 wavelength long and leave the
>>far end open. The line will end up a little shorter than 1/2
>>wavelength due to fringing at the open end. Of course, you can't tap
>>up on this one like you can the 1/4 wavelength line.
>
>Isn't a very small capacitor required to couple to a 1/2 wave resonator?

A practicable way: you need a **high** feed impedance.
> I
>was reading this in "Microwave Engineering" by David Pozar. Capacitor was
>0.001 picofarad. That is very difficult. It is kind of big for a gap
>capacitor, and kind of small for a surface mount capacitor.

When I were a lad, we used to twist a bit of thin enamelled wire around
a thicker one. So did Philips before they invented the ancestor of the
beehive trimmer.

>
>I have been experimenting with placing the coupling capacitor somewhere in
>the middle of a 1/2 wave resonator. It seems that the impedance is lower
>towards the middle,

Yes, it's zero at the exact 1/4 wave point, and, for example, 50 or 75
ohms at points slightly to either side of that point.

>allowing the use of a realizable capacitor (or varactor)
>to couple to the 1/2 wave resonator.
>
>
>

--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

876. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <wT8fZdAILDq2EwmH@jmwa.demon.co.uk>
Source record: 74444
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<E1Up2.221$VB.204954@news4.mia>, Bert Douglas <bertdNOSPAM@dibbs.net>
wrote:
>There is no such thing as an open 1/4 wave stub. If you try to make one, it
>will ignore your wishes, and it will be a 1/2 wave stub at 1/2 the frequency
>you were intending.

Would you care to reconsider that statement? On two counts. Otherwise,
for example, I don't know how open stubs work as band-stop filters for
removing 'n+x' channel interference on TV sets.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

877. Re: hand cranked generator???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36c4cf0e.403597972@news.atl.bellsouth.net>
Source record: 74445

On Thu, 21 Jan 1999 12:12:35 -0800 (PST), technolad@webtv.net wrote:
> What about that Bayliss generator?

Output is 2 VDC.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

878. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <36a8aa33.4779782@netnews.worldnet.att.net>
Source record: 74446
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Fri, 22 Jan 1999 16:11:06 GMT, "Christopher Cox" <cobox@netexp.net>
wrote:

>First off, I am a REAL novice at this, so please set your flame-throwers to
>'lightly singe'.....:-)
>
>> Thanks. What about using two back to back varactors? This would halve
>the
>> capacitance. One of my problems seems to be that none of my varactors
>will
>> produce a capacitance as low as is needed.
>
>From what I understand, front to front. This would actually help reduce
>your phase problem as well as the capacitance would be seen equally through
>out the sin wave cycle.

Front-to-front or back-to-back are identical in regards to
their ability to handle sine waves. The only difference is the
polarity of the bias voltage that controls the effective capacitance
value.

Jim

879. Re: WTB UNC 4-40 screws

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Les Wolstenholme <avondale@zetnet.co.uk>
Message-ID: <01be4641$68fbbee0$9128f7c2@zetnet.co.uk>
Source record: 74447
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Mike Willis <"M.J.Willis "@rl.ac.uk> wrote in article
<36A836C1.757B8F2C@rl.ac.uk>...
> Simon Cox wrote:
>
> > Can someone help with a source, in the UK, of UNC 4-40
> > screws 1/2" long for a piece of Racal equipment. RS etc. etc.
> > don't sell such unless you count D connector screws. The
> > screws required are 6 BA or 2.5mm look alikes. I need 30.
>
> There are a few sources, but why not just order them direct from the
> USA?
> There is a web site www.screws.com but it is not active.
> Dan's Small Parts (really!) would be a good starting place.

Try the ones used by computer manufacturers to hold their machines
together,
they look about right from the description given.

Regards,

Les - G0RDF - Chesterfield

880. vhf transistor question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Dan Stanger <dxs@diac.com>
Message-ID: <pY4q2.13$lv.358@newsfeed.slurp.net>
Source record: 74448

i am trying to find out some information about a motorola rf power
transistor. this was a custom part that motorola manufactured and put
some custom part number on. motorola cant identify it.
it is marked
m9583
185
8644

and it is in a studed ceramic package (case # 244) with 4 leads suitable for
stripline mounting. i am interested in any ideas anyone has on how i can
determine their characteristics. or any info anyone may have on this.
thanks,
dan stanger
please respond to dxs@diac.com

--
dxs@diac.com

--
dxs@diac.com

881. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36a8d231.10958846@news.prestel.co.uk>
Source record: 74449
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Thu, 21 Jan 1999 22:31:30 +0000, Robin Birch <robin@falstaf.demon.co.uk>
wrote:

>Some Months ago, last year I think, there was an add-on for an RA17
>published in RaDCOM. This was a valve design and should be modifiable
>to almost anything.

An Australian design for an SSB adaptor. Quite unnecessary.
It'll hack SSB without any extras if you know how to drive
it properly.

--
- 73 de Jim, g(m)4rga | To call it toadying would be to invite a
olympus%jimdee.prestel.co.uk | group libel action from toads.
dynastic%cwcom.net | - Matthew Parris, on a particularly
marula%zdnetmail.com | unctious question to Blair from
g4rga@gb7tjf.#45.gbr.eu | John Hatton, MP.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

882. Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Tom MC <tom.corser@usa.net>
Message-ID: <ORRl6pkR#GA.232@upnetnews05>
Source record: 74450
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

Does anyone know where I can BUY some bottles?

Thanks

Tom MC

883. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36A8EC62.E6ADA0C7@certco.com>
Source record: 74451

Michael Black wrote:

> On Wed, 20 Jan 1999, Harry, WA3PTG wrote:
>
> > Where is a good cheap place to buy 2N5179 & 2n5109??
> One place would be
> Linkname: Dan's Small Parts and Kits
> URL: http://www.fix.net/dans.html
> I ordered from them some years ago and the service was fine.

Yeah, I've ordered from Dan a few times, and recommend him highly. I may buy from him soon again myself.

--ncc

884. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Marshall Jose <Marshall.Jose@jhuapl.edu>
Message-ID: <36A8EC96.6ADF@jhuapl.edu>
Source record: 74452
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
>
> Marshall Jose wrote in message <36A36F67.547@jhuapl.edu>...
> <snip>
>
>>Microstrip stubs are just transmission line stubs and will behave
>>similarly. If you "look into" a 1/4-wave stub, it appears to be a low
>>impedance, similar to how a series-LC network looks with the other end
>>connected to ground. .
>
> Don't you have that backwards? Others have said in this same thread that a
> 1/4 wave shorted stub is high impedance at resonance.

Sorry! I neglected to specify whether the stub was shorted or open. In
my post, I meant open.

Open stubs are always easier to make (no complicated vias to ground)
and, in my experience, are more predictable and show a slightly higher
apparent Q.
Other benefits include DC isolation from ground, in the event your stub
is live (say at the input or output to an MMIC). While a blocking
capacitor could be used with a shorted stub, it's yet another component
to add, and besides, the Q will suffer.

--
Marshall Jose, WA3VPZ
Johns Hopkins Univ. Applied Physics Laboratory
Marshall.Jose@jhuapl.edu

885. Re: Drake R4A Crystals Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <36A8F4C7.70B9@wt.net>
Source record: 74453
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap

mark beutler wrote:
>
> I am soon aquiring a Drake R4A receiver and would like to get crystals
> for the 11-90 meter shortwave broadcast bands. These would be (in
> MegaHertz):
> 36.7
> 32.5
> 30.0
> 28.5
> 26.6
> 26.1
> 24.6
> 22.7
> 20.5
> 18.2
> 17.0
> 15.8
> 15.0
> 14.3
>
> These are the actual crystal freqs, not the receive freqs. Anyone
> having crystals known to work in the Drake (ie: series resonant, the
> right size to fit the Drake, etc.) in the above freqs that you wish to
> sell please let me know.
> --
> -
> Regards,
> mark beutler
> -
One thing you might look into is that each xtal will work 2 or 3 bands each. Depends how you set the preselect. Say if you had a 20.1 xtal that is used to go to 9 mhz. xtal -11.1 = 9.0 mhz. You can also go xtal -11.1 + xtal = a new higher band. So 20.1-11.1=9+20.1=29.1 mhz. In many cases you can get a third band appx 185 khz below the xtal freq. But you need a hot xtal osc. So if you had a 10 mhz xtal you could maybe get a band appx 9.885 or so. And it will tune backwards. Most all drake type xtals will work in other models. I have both a r4 and a 2c and swap xtals between them. I have a boatload but unfortunatly not for sale. Drake has em cheap though if you buy the right model xtals. Price varies per model even though they will work in all. MK

886. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <OM6q2.436$VB.604034@news4.mia>
Source record: 74454
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote in message <8j7clYAXGDq2EwE6@jmwa.demon.co.uk>...

>When I were a lad, we used to twist a bit of thin enamelled wire around
>a thicker one. So did Philips before they invented the ancestor of the
>beehive trimmer.

I believe that this would have a lot of inductance, so much that it would
not work at 2.5GHZ.

887. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <HX6q2.438$VB.609695@news4.mia>
Source record: 74455
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote in message ...
>**Please** note that I prefer **not** to receive an e-mail copy of
>newsgroup posts.
>
><E1Up2.221$VB.204954@news4.mia>, Bert Douglas <bertdNOSPAM@dibbs.net>
>wrote:
>>There is no such thing as an open 1/4 wave stub. If you try to make one,
it
>>will ignore your wishes, and it will be a 1/2 wave stub at 1/2 the
frequency
>>you were intending.
>
>Would you care to reconsider that statement? On two counts. Otherwise,
>for example, I don't know how open stubs work as band-stop filters for
>removing 'n+x' channel interference on TV sets.

Thanks. I see your point. I was thinking of (but not writing of) stubs coupled with very small capacitors. A 1/4 wave shorted stub is resonant. A 1/2 wave open stub is resonant.

888. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <D_6q2.440$VB.611338@news4.mia>
Source record: 74456
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I found a magazine article that seems to be on point.

"TECHNICAL FEATURES - Modeling Varactor Tunable Microstrip Resonators for Wireless Applications - Microstrip tunable resonators are growing in popularity for inexpensive, compact wireless designs. This article rigorously examines the tuning characteristics of varactor tuned resonators to find the circuit type with the best tuning range" - Applied Microwave and Wireless Volume 10, Issue 7 pp 32 , 1998
---

889. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <v6AclJA+sPq2EwGh@falstaf.demon.co.uk>
Source record: 74457
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <36a8d231.10958846@news.prestel.co.uk>, Jim Dunnett
<olympus@0spam.prestel.co.uk> writes
>On Thu, 21 Jan 1999 22:31:30 +0000, Robin Birch <robin@falstaf.demon.co.uk>
>wrote:
>
>>Some Months ago, last year I think, there was an add-on for an RA17
>>published in RaDCOM. This was a valve design and should be modifiable
>>to almost anything.
>
>An Australian design for an SSB adaptor. Quite unnecessary.
>It'll hack SSB without any extras if you know how to drive
>it properly.
>
I know that, I wouldn't dare mod my RA17 either. What I meant was that
the design for the external SSB demodulator in RADCOM should be
modifiable to anything you want. If memory serves me it needed to be
hung on a few parts of the RA17 and these hooks would need altering to
suit whatever the person who originally asked wanted to do. The only
SSB mod I would use for an RA17 is the proper Racal SSB add on.

Cheers

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

890. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a8fdd9.0@news.netwalk.com>
Source record: 74458
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote in message ...
>No, it comes from how you define 'resonance': maximum voltage across the
>C, across teh L or maximum current. In a low-Q circuit, they occur at
>slightly different frequencies. If the Q is much above 10, the
>differences are very small, being inversely proportional to Q-squared.
>--

I always thought resonance was when Xc = Xl.

891. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36A88739.2779@pop.valley.net>
Source record: 74459
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Miles wrote:
>
> Bert Douglas wrote:
> >
> > Thanks for all the help with previous questions. I am pulling my hair out
> > again.
> >
> > Ok. I have an oscillator. It works. I have some varactors. Now what is
> > the normal way that varactors are used to control the frequency of an
> > oscillator?
> >
> > My oscillator is a common base, negative resistance, microstrip 2.4 GHZ.
>
> Snag a copy of this:
>
> http://www.amazon.com/exec/obidos/isbn=0070524157
>
> -- jm KE5FX

Hello--
This book (Rhea's "Oscillator Design and Computer Simulation") in its
first edition came with a crippled version of an oscillator-design
program (STAR 2.0) which ran under DOS. The program's main limitation
was its built-in device family (11 models). However, you could "fool"
the software by editing a device's data file, keeping the device name
the same but using your chosen parameters.

ARRL Radio Designer offers a better user interface and more flexibility;
as an oscillator book, the first edition rated an "OK" but not the
five stars given in the Amazon review. Perhaps the second edition is
indeed much better.

73,
Brad AA1IP

892. Re: LF Converter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36a8febd.0@news.netwalk.com>
Source record: 74460

John Strunck III <1jhs9867@unixstew.tstc.edu> wrote in message
<36a69ff8.0@news>...
>Hello,
>
>Looking for Drake 2LF converter for 2B rec. Also, could a homebrew LF
>converter be built.
>
>Thanks,
>
>John Strunck III
>kc5ngx
>
>
>

Palomar used to sell a LF converter that converted 0 (essentially) to 3 MHz to the 80 meter band. I do not know if they still sell it. Look in the magazines for pictures of little orange/red boxes.

Jim
N8EE

893. FS!-RCA WO-91B Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <78b07mdqe1@remarQ.com>
Source record: 74461
Cross-posted to: alt.ham-radio.marketplace,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Old soldier from a bygone era! Good working condition but could probably use calibration. Cosmetics 8.5-9.0.
$100.00 plus S&H

Steve

894. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Steve Roberts <osteven@akrobiz.com>
Message-ID: <01be465f$a1eaa720$3586aacf@osteven.akrobiz.com>
Source record: 74462
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert, I've had good luck at using 1N914s and other fast diodes as varacters at 900 Mhz, give it a shot! A nice small capacitence, although probably not that small at 2.4 gigs.

Steve Roberts N8VKD

895. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <78b37o$9e4$1@spock.tinet.ie>
Source record: 74463

Tom MC wrote in message ...
>Does anyone know where I can BUY some bottles?
>
>Thanks
>
>Tom MC
>

How about a couple of 3-500's. :-)

Ed.

896. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36A90F11.6638@pop.removethistomailme.net>
Source record: 74464
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
>
> John Miles wrote in message <36A83139.1987@pop.removethistomailme.net>...
> >Snag a copy of this:
> >
> > http://www.amazon.com/exec/obidos/isbn=0070524157
>
> I already did. And I feel I wasted my money. This book contains little
> useful information on either theory or practice.
>
> What it does contain are:
>
> Simplistic overviews
> Designs without explanation
> Screen shots of CAD programs
>
> One wonders if it is an advertisement for =SuperStar=.

Hmm, that is pretty different from my experience. I've built and used a couple of Rhea's designs with no problems. Your original question was "what is the normal way that varactors are used to control the frequency of an oscillator," and to that, I can only suggest that they are used in pretty much the same way you'd use a capacitor to control the frequency of an oscillator. :-| The other suggestion you've gotten re: making the relatively low-Q varactors as small a part of your overall resonating capacitance as possible, and using back-to-back (front-to-front?) diodes to avoid conduction during any part of the cycle, is a good one. Other than that, what else is there to know beyond f=1/2pi*sqrt(LC)? You just need to wire up some circuits and examine their stability, amplitude, and phase noise characteristics on a spectrum analyzer to get an idea of what's going on.

You might find the oscillator design discussions in

http://www.amazon.com/exec/obidos/isbn=0471520195

to be a little more enlightening, although Rohde might not be the best author for someone just starting out. A better alternative might be Wes Hayward's

http://www.amazon.com/exec/obidos/isbn=0872594920

...although most of his info is targeted towards HF experimenters, not microwave.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam
---

897. Area Hamfest: PHX Metro

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36A92274.C55074BB@asu.uswest.net>
Source record: 74465
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Isn't there a pretty big hamfest the last weekend in January here in Phoenix? I seem to recall one held at DeVry at 27th Ave/Dunlap, near HRO, the last few years. Please advise if one is upcoming, or others in the area soon. I have a big shopping list, hi hi.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

898. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <36A93D20.FE4AE188@cadvision.com>
Source record: 74466
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew

Sorry Old Boy, but this is a Ham Radio newsgroup for information on building electronic projects at home. Your are not the first -- and you won't be the last to make this error.

Tom MC wrote:

> Does anyone know where I can BUY some bottles?
>
> Thanks
>
> Tom MC

899. Re: QST issues on CD's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <36A93DEE.BA447130@cadvision.com>
Source record: 74467

Download a screen-capture program from somewhere like www.softseek.com and
you can save the captures as graphics files.
Irv VE6BP

"J.-M. Noeding" wrote:

> just bought some CD's from ARRL. Found it somewhat complicated to change
> from reading January to February 1950 by having to type both 2 and
> February issue to change the content..... I am running with windows98
> and microsoft office 97(?).
> Is is any way to print the circuit diagrams to gif files, other than
> printing and then scanning later?
>
> 73
> Jan-Martin
> LA8AK
>
> ---
> DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
> Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

900. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Morris Odell <morriso@vifp.monash.edu.au>
Message-ID: <36A7C9F4.335CE1E8@vifp.monash.edu.au>
Source record: 74508

Robin Birch wrote:

> Some Months ago, last year I think, there was an add-on for an RA17
> published in RaDCOM. This was a valve design and should be modifiable
> to almost anything.
>

I also published one in the Australian magazine "Amateur Radio" last year,
that could be adapted to most other tube radios. It provided synch
detection of AM and product detection of SSB.

73 de Morris VK3DOC

901. 10kHz to 7kHz conversion for OFF-FREQ Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a7c6e0.19989799@news.online.no>
Source record: 74509

Hi

for Kalundborg 243kHz off-air standard I need a 7kHz signal to try it my way. Droitwich is quite weak here and even the Danish Kalundborg is weak. I am well aware of bit-rate multipliers, but I want to have a symmetrical signal as possible for minimum jitter.
One suggestion is to use a divide by a CD4017 divide by 10 IC, and connect outputs 1-3-5-7-9 to one switch (BC547) - 5kHz and outputs 1-2-6-7 to another series switch - 2kHz output. Connect the switches (BC547/BC238/2N3904) in series and use a simple tuned L/C-circuit in the collector output circuit. I would use 10k(22k) resistors between CD4017 and bases.
Any comments?

73
Jan-Martin
LA8AK

PS. For possible discussion I have scanned the circuit diagram to gif file, also the block diagrams for SM6ESG's circuit for Kalundborg standard and my suggested design are available as gif file

---
DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

902. Re: Speedup Xtal aging ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: nitwit@nitwits.comNOSPAM
Message-ID: <36a7cbf8.2427090@news.mnsinc.com>
Source record: 74510

Recently, inagaddadavida@webtv.net (Jim) wrote:

> HOWEVER..... i am not a technition or ham
> radio guy so if you blow up the place then i will be very sorry, but it
> wont be my fault.

"TECHNITION"... ??

Maybe we should all get some needles, and take up TECH-NITTING!

903. Re: KB5MER (Spam Alert!!!!)KB5MER Caution!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: bry@mnsinc.comNOSPAM
Message-ID: <36a7ccfc.2686591@news.mnsinc.com>
Source record: 74511

This may come as a shock, guys, but the FCC does not regulate sales
(or lack thereof) on the Usenet Newsgroups!

Now you can all go back to Channel 19!

Recently, "dennis W. Ostrowski" <dwostrowski@lucent.com> wrote:

>KB5MER wrote:
>>
>> I had lunch with some of the guys from/
>> with the FCC what do YOU want me to
>> tell them. JR KB5MER
>
> Tell them to send me an e-mail address that I can send copies of your
>SPAM to!
>
> I'd like them to see what you are trying to sell on the CB newsgroup.
>
> Maybe they can set up a phoney 'buy' and you won't have a license any
>more!
>
>Dennis
>
>#12

904. Icom CI-V Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Michael Blake <k9jri@worldnet.att.net>
Message-ID: <36A7DCDE.C22583D2@worldnet.att.net>
Source record: 74512

Has anyone built a controller that will connect to the Icom CI-V bus, respond to Icom commands like an Icom radio and convert frequency commands to parallel data signals using something like a Basic Stamp or similar controller?

I am wanting to control a 10 meter rig using Amsat's Station Control program to control both the IC-821 (all functions) and a Ranger 2950 (frequency only) for the RS birds.

Mike - K9JRI

905. A tube question for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: bry@mnsinc.comNOSPAM
Message-ID: <36a7dedb.385268@news.mnsinc.com>
Source record: 74513
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.tubes

Hi guys!

An EIMAC 8874 Question:

Does anyone have the pin-outs for this 11-pin base tube?

I also need to know what the heater voltage and current requirement is!

Can anyone with an old EIMAC catalog or spec sheet help me???

Thanks - Bry, AF4K

906. Re: Nicad charger

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <788raqfte1@news4.svr.pol.co.uk>
Source record: 74514

```
try the following, easiest charger cct. I know..
------------------
| |
+ -------------| 78 05 Vreg |--------------------
| |
|
--------|--------- ===
Vin |
| R | Rx = 5V / I charge rate
No of cells * 1.5v | | x
|
|
=== eg Charge rate = 100mA
-------------------------------|
5V / .100 = 50 ohm

| eg Charge rate = 1.5A
- ---------------- nicad pack/battery ------------------| 5V / 1.5
= 3.33 ohm

sorry for nasty diagram.. damn proportional typefaces.. hope this helps
73 Mike W mike@corn2.freeserve.co.uk

ok@ionet.net wrote in message <36a65b00.12261722@news.ionet.net>...
>any body have a good circuit for a nicad charger, one that would
>charge a 1.5 and 9.0 volt battery . This charger would look at volts
>and shut down when finished.
>thanks
```

907. 572B/T-160L TUBES F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: The Calhoun Printers <calprint@gnat.net>
Message-ID: <36A7C481.1D8D97BA@gnat.net>
Source record: 74515

I have 3 good (used) 572B/T-160L by Raytheon for sale. Will ship
priority mail for $20.00 ea. CONUS.
73,
Vince N4BWD

908. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-22 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <E1Up2.221$VB.204954@news4.mia>
Source record: 74516
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote in message ...
>But the point about stubs is that you *can* treat them as if they were
>LC circuits. A 1/4-wave stub shorted at one end looks like a parallel-
>tuned circuit at the open end. An open-ended 1/4-wave stub looks like a
>series-tuned circuit at the other end.

A shorted stub is resonant at 1/4 wave.
An open stub is resonant at 1/2 wave.
There is no such thing as an open 1/4 wave stub. If you try to make one, it will ignore your wishes, and it will be a 1/2 wave stub at 1/2 the frequency you were intending.

As for the series/parallel issue, I remain confused.

909. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <36A92ED7.1EF2BADD@berlin.snafu.de>
Source record: 74375
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:

> > http://www.amazon.com/exec/obidos/isbn=0070524157
>
> I already did. And I feel I wasted my money. This book contains
> little useful information on either theory or practice.
> Simplistic overviews
> Designs without explanation
> Screen shots of CAD programs

I like the book. Not five stars like in the comment on
amazon.com, but, say, 4 stars and worth the money.
My copy has an unusually strong tendency to be borrowed
to other people.

You could translate the simulation files easily line
by line to SuperCompact / RadioDesigner / Aplac /HP Esoft or whatever.
Rhea does quite a good job to show how to get a simulation
model for a lot of oscillator types. And this is what the
book is about, if you read the title carefully.

> One wonders if it is an advertisement for =SuperStar=.

Yes, it is. So what. Rohde's books are advertisements for
SuperCompact / Serenade / Microwave Harmonica / Synergy Microwave
and Rohde & Schwarz signal generators.
That does't make them less interesting.

Rohde: "Microwave & wireless synthesizers" has a section on VCOs, too.

Cut a few commercial VCOs open and look what's inside. That
quickly helped me to get a feeling for what they are supposed
to look like.

Gerhard

--
on the air: DK4XP
in the air: D-8551

910. Re: Transistors in your junkbox

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a91a69.8833791@news.online.no>
Source record: 74376

On Mon, 18 Jan 1999 14:05:16 -0500, nicholas charles caruso
<caruson@certco.com> wrote:

>
>A lot of people speak highly of the 2N5179 and 2N5109 parts. Any good, preferably
>cheap RF transistors that people here have had good experience with?
>
>
>
epoxy transistors are usually cheap compared to metal can types. Look at
Drake SPR-4, 2-C, R-4C etc, they don't use much of the special types you
refer to, wonder why amateurs select anything else than the types which
suffice in 95% of the applications? 2N3393, 2N3394 and MPS3702 are just
cheap and work satisfactorily in most circuit you may wish to try. But
2N3704 seems to have some bandwidthproblems in HF oscillators.

NPN bipolars: BFR96, BF199 and BC547=2N3904
I would not pay more than $0.07 for the VHF types, and $0.35 for the UHF
types. Used over 25 MPS918 and few hundreds MPS3394/MPS2926 25 years ago
because they were the cheapest you could get, saturation and max current
drain is usually not important, it will only increase the price.
PNP bipolar: BF324 (300MHz) and BC557 or 2N3906

BD139 (up to 30MHz TX) 2.5W RF,
JFETs: J310 and BF245, BF246, P8000
SwFETs: 2N7006 and VN10KM

73 Jan-Martin LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

911. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a91d8f.9639793@news.online.no>
Source record: 74377
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Fri, 22 Jan 1999 22:27:10 +0000, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>In article <36a8d231.10958846@news.prestel.co.uk>, Jim Dunnett
><olympus@0spam.prestel.co.uk> writes
>>On Thu, 21 Jan 1999 22:31:30 +0000, Robin Birch <robin@falstaf.demon.co.uk>
>>wrote:
>>
>>>Some Months ago, last year I think, there was an add-on for an RA17
>>>published in RaDCOM. This was a valve design and should be modifiable
>>>to almost anything.
>>
>>An Australian design for an SSB adaptor. Quite unnecessary.
>>It'll hack SSB without any extras if you know how to drive
>>it properly.
>>
>I know that, I wouldn't dare mod my RA17 either. What I meant was that
>the design for the external SSB demodulator in RADCOM should be
>modifiable to anything you want. If memory serves me it needed to be
>hung on a few parts of the RA17 and these hooks would need altering to
>suit whatever the person who originally asked wanted to do. The only
>SSB mod I would use for an RA17 is the proper Racal SSB add on.
>
That's a rather strange idea, it is no reason why you couldn't attach a
homebrew unit plugged into a socket in the receiver without causing any
damage!

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

912. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <36A933C1.3F7F1BCD@berlin.snafu.de>
Source record: 74378
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
>
> I found a magazine article that seems to be on point.
>
> ------------------
> "TECHNICAL FEATURES - Modeling Varactor Tunable Microstrip Resonators for
> Wireless Applications - Microstrip tunable resonators are growing in
> popularity for inexpensive, compact wireless designs. This article
> rigorously examines the tuning characteristics of varactor tuned resonators
> to find the circuit type with the best tuning range" - Applied Microwave and
> Wireless Volume 10, Issue 7 pp 32 , 1998
> ------------------

This article is aimed towards filters, not VCOs, and most
circuits are much too complicated for an VCO.
Just take fig. 2a and imagine how many dc blocks and chokes
you need just to feed the tuning voltage to the diodes.
There will be LOTS of parasitic resonances resulting in
frequency jumps, backwards tuning and other pleasures.

One stripline and one diode/pair is usually enough for a VCO.
You may need another diode to adjust the feedback if you
want a super wide tuning range.

Gerhard.

--
on the air: DK4XP
in the air: D-8551

913. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: localhost@127.0.0.1
Message-ID: <36ad2653.48829231@204.127.36.21>
Source record: 74379
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Fri, 22 Jan 1999 22:16:14 GMT, "Bert Douglas"
<bertdNOSPAM@dibbs.net> wrote:

>
>John Woodgate wrote in message <8j7clYAXGDq2EwE6@jmwa.demon.co.uk>...
>
>>When I were a lad, we used to twist a bit of thin enamelled wire around
>>a thicker one. So did Philips before they invented the ancestor of the
>>beehive trimmer.
>
>
>I believe that this would have a lot of inductance, so much that it would
>not work at 2.5GHZ.
>
A lot of inductance?? Inductance does not change with frequency!

914. Re: Drake R4A Crystals Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36A955AC.A0F87804@home.com>
Source record: 74380
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap

Check out Drake's web page - I just ordered some for an old 2B and many were still in stock.

mark beutler wrote:

> I am soon aquiring a Drake R4A receiver and would like to get crystals
> for the 11-90 meter shortwave broadcast bands. These would be (in
> MegaHertz):
> 36.7
> 32.5
> 30.0
> 28.5
> 26.6
> 26.1
> 24.6
> 22.7
> 20.5
> 18.2
> 17.0
> 15.8
> 15.0
> 14.3
>
> These are the actual crystal freqs, not the receive freqs. Anyone
> having crystals known to work in the Drake (ie: series resonant, the
> right size to fit the Drake, etc.) in the above freqs that you wish to
> sell please let me know.
> --
> -
> Regards,
> mark beutler
> -

915. QST issues on CD's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36a92f05.14110620@news.online.no>
Source record: 74381

just bought some CD's from ARRL. Found it somewhat complicated to change from reading January to February 1950 by having to type both 2 and February issue to change the content..... I am running with windows98 and microsoft office 97(?).
Is is any way to print the circuit diagrams to gif files, other than printing and then scanning later?

73
Jan-Martin
LA8AK

DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

916. 6M Amplifier using 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: djzman@execpc.com
Message-ID: <78bhav$5rv$1@nnrp1.dejanews.com>
Source record: 74382
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Does anyone know of a good plan (or even just a schematic) for a 6M amplifier using a 3-500Z tube. A a reference to a nice construction article would be good, but I'll take any leads. I know there are plans around for other tubes, but I have access to the 3-500Z in particular and would like to use it.

Thanks in advance for any replies.

73,
Dan, KB8STT

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

917. Re: QST issues on CD's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: dpnewkirk@home.com
Message-ID: <36a9398e.11577266@news>
Source record: 74383

On Sat, 23 Jan 1999 02:08:38 GMT, la8ak@online.no (J.-M. Noeding)
wrote:

>Is is any way to print the circuit diagrams to gif files, other than
>printing and then scanning later?

Sure. QST View files are just .tif graphics files, logically named,
arranged quite handily in logically named subdirectories. Open the
file for the page that contains the schematic you want to save as a
tif in a graphics program like Paint Shop Pro (http://www.jasc.com/),
process and crop it as you like, and save the resulting image as a
gif--no scanning required.

73,

David Newkirk, W9VES
dpnewkirk@home.com

918. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: parmiter@earthlink.net
Message-ID: <78bkil$8bb$1@nnrp1.dejanews.com>
Source record: 74384
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

In article <ORRl6pkR#GA.232@upnetnews05>,
"Tom MC" <tom.corser@usa.net> wrote:
> Does anyone know where I can BUY some bottles?
>
> Thanks
>
> Tom MC
>
> I don't know where you live Tom, but if you have a brewing supply store in your town, they should be able to help you out.

Good Brewing! Paul

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

919. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <78bffp$cd8$1@news1.rmi.net>
Source record: 74385
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

In rec.radio.amateur.homebrew Tom MC <tom.corser@usa.net> wrote:
: Does anyone know where I can BUY some bottles?

807's? :-)

73
Jonesy W3DHJ

--
--
Marvin L. Jones jonz<AT>rmi.net | jonz<AT>ieee.org
Gunnison, Colorado
343 days to go until the Year 2000
708 days to go until the 3rd Millennium of the C.E.

920. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Stan <sprevost@ro.com>
Message-ID: <78bt4r$eb5$2@news.ro.com>
Source record: 74386
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

Tom, you can get them from Country Wines and Beer and numerous other places I can't remember but have seen on the 'net. Usually run about 35-40 cts US each, for new brown longnecks.

Better than scrounging, cleaning, scraping labels, hassling with different heigth bottles when capping, etc.

Stan

Tom MC wrote in message ...
>Does anyone know where I can BUY some bottles?
>
>Thanks
>
>Tom MC
>
>

921. WTB Heathkit GR-91

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: "Mark..." <mevans@netonecom.net>
Message-ID: <36A9A173.DF40B302@netonecom.net>
Source record: 74387

I always wanted to build this shortwave receiver from Heathkit, but by
the time I had money, Heathkit was out of business.
Looking for a receiver in need of a good home. Would like to build one
, but would settle for one already built. If anybody
has any leads as to where I may procure one of these receivers, please
E-mail me. I would appreciate any assistance you
could provide. Thank you.

Mark..
KC8FGW

922. Re: Cerco MP3 Italiani

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36A99003.2579@megsinet.net>
Source record: 74388

Use1 wrote:
> Dove posso trovare Mp3 italiani?

Perchï¿½ fate questo problema in un posto che riguardo a fare le radio?

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

923. Re: Formula to calc antenna length

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: mforsyth@bigpond.com
Message-ID: <slrn7ahs66.vsd.mforsyth@really.bogus.com>
Source record: 74389

From Joe KF4YYA in rec.radio.amateur.antenna this very day :-

Formula for antenna wavelength is L = (c * lambda * V) / f

Where L = Physical length in feet
lambda = Electrical length in wavelengths (ie 1/4, 1/2, 5/8)
c = Speed of light (983,559,096 ft/sec, rounded to 984)
V = Velocity factor (usu. .66=coax check specs of cable)
f = Frequency in MHz.

Mark F...

On Fri, 22 Jan 1999 05:08:55 -0800, AC6V <ac6v@ix.netcom.com> wrote:
>goodmich wrote:
>>
>> What is the formula to calculate antenna length from the frequency? Or
>> what is the formula to tell me the waves length from the frequency
>> numbers?
>> I can't seem to find it anywhere I was hoping you guys could help
>>
>> thanks
>-----
>Take a look at The Antenna Elmer at URL:
>http://www.qth.com/antenna/antenna.htm
>
>Lots of formulas and homebrew antenna info.
>
>Lots more at URL:
>http://www.ac6v.com/pageant.html
>--
>73 from Rod in San Diego
>------------------------------
>AC6V INDEX TO DX AND HAM RADIO
>FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
>Over 275,000 visits on the counter
>http://www.ac6v.com/pageas.html -- Alphabetical Index
>http://www.ac6v.com/ -- Home Page

924. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: guess_who@wxs.nl
Message-ID: <36aaaf21.13460808@dds.nl>
Source record: 74390
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

On Sat, 23 Jan 1999 10:52:49 +0100, radio_man@usa.net (radio_man)
wrote:

>http://www.xs4all.nl/~barendh

REDUCE YOUR PRICES!!!! YOU'RE TOO EXPENSIVE!

925. Re: 6M Amplifier using 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990123100317.05367.00001346@ng145.aol.com>
Source record: 74391

1976 & 1977 Amateur Hand Book

<<Subject: 6M Amplifier using 3-500Z
From: djzman@execpc.com
Date: Fri, Jan 22, 1999 10:57 PM
Message-id: <78bhav$5rv$1@nnrp1.dejanews.com>

Does anyone know of a good plan (or even just a schematic) for a 6M amplifier using a 3-500Z tube. A a reference to a nice construction article would be good, but I'll take any leads. I know there are plans around for other tubes, but I have access to the 3-500Z in particular and would like to use it.

Thanks in advance for any replies.

73,
Dan, KB8STT
>>

926. FS:HV oil filled caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <78cona$9kd$2@remarQ.com>
Source record: 74392

```
>HV oil filled caps from Amplifier HV filter deck.
>
>SPRAGUE VitaminQ 2x1.5mfd@8000vdc (I think 3mfd) #25P12. Have 4@$25.00ea
>Including shipping.
>
>WESTINGHOUSE 2000vdc@3mfd $25.00 shipped
>SPRAGUE 3000vdc@4mfd $25.00 shipped
>SPRAGUE 2000vdc@4mfd $25.00 shipped
>AEROVOX 2000vdc@4mfd $25.00 shipped
>INDUSTRIAL CONDENSER CORP. 3000vdc@2mfd $25.00 shipped
>SANGAMO 2000vdc@4mfd #25.00 shipped
>CORNELL DUETLIER 1500vdc@10mfd $25.00 shipped
>
>All guaranteed good. Shipping 48 states is included. COD add $6.50 per
>order. Save, take all for $100.00 plus shipping. Less than $10.00 ea.
>ac6ts@n2.net
>
--

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW
```

927. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <fvmq2.757$VB.986815@news4.mia>
Source record: 74393
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Tommy Lee wrote in message <36ad2653.48829231@204.127.36.21>...
>On Fri, 22 Jan 1999 22:16:14 GMT, "Bert Douglas"
><bertdNOSPAM@dibbs.net> wrote:
>
>>
>>John Woodgate wrote in message <8j7clYAXGDq2EwE6@jmwa.demon.co.uk>...
>>
>>>When I were a lad, we used to twist a bit of thin enamelled wire around
>>>a thicker one. So did Philips before they invented the ancestor of the
>>>beehive trimmer.
>>
>>
>>I believe that this would have a lot of inductance, so much that it would
>>not work at 2.5GHZ.
>>
>A lot of inductance?? Inductance does not change with frequency!

Ok. I should have said, inductive reactance.

928. New URL to find high quality guaranteed tubes...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36A9F5D9.B4BEC92A@herald.infi.net>
Source record: 74394
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,alt.guitar,rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,misc.industry.electronics.marketplace,rec.audio.pro

```
ATSI check us out at http://www.electron-tubes-audio.com
```

929. VoiuceKeyExpress 1.3.3 updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Stu Olson <solson@usa.net>
Message-ID: <78d0ak$7ok$1@birch.prod.itd.earthlink.net>
Source record: 74395

VoiceKeyExpress has been upgraded to version 1.3.3.

This version adds message buffer configuration "save and restore". When you exit VKE, the current message buffer information/options will be saved. These settings are automatically restored when you start VKE again. (Note that is feature is enabled in registered copies.)

73.......Stu N7QKP

--
Stu Olson N7QJP
http://home.earthlink.net/~n7qjp

930. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <94ksTXArEYq2Ew1t@jmwa.demon.co.uk>
Source record: 74396
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of newsgroup posts.

<36a8fdd9.0@news.netwalk.com>, Jim <jbolinger@lintek.com> wrote:
>
>John Woodgate wrote in message ...
>>No, it comes from how you define 'resonance': maximum voltage across the
>>C, across teh L or maximum current. In a low-Q circuit, they occur at
>>slightly different frequencies. If the Q is much above 10, the
>>differences are very small, being inversely proportional to Q-squared.
>>--
>
>I always thought resonance was when Xc = Xl.
>
>
Well, that's equivalent to 'maximum current'. But what is often significant in the operation of a circuit is maximum voltage across either the L or the C. The difference is normally only significant if Q is 10 or less, but at Q = 10 the difference is 1 %, and even modest equipment will measure frequency with a much greater discrimination than that.

You don't see Q-meters in labs these days, but the effect is significant in interpreting their results.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port configuration.

931. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <kJ36vbAkeZq2Ewl$@jmwa.demon.co.uk>
Source record: 74397
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of newsgroup posts.

<OM6q2.436$VB.604034@news4.mia>, Bert Douglas <bertdNOSPAM@dibbs.net> wrote:
>
>John Woodgate wrote in message <8j7clYAXGDq2EwE6@jmwa.demon.co.uk>...
>
>>When I were a lad, we used to twist a bit of thin enamelled wire around
>>a thicker one. So did Philips before they invented the ancestor of the
>>beehive trimmer.
>
>
>I believe that this would have a lot of inductance, so much that it would
>not work at 2.5GHZ.
Well, not necessarily for 1 fF, which would require perhaps 1 turn, if that, maybe just two parallel wires. But if that were a problem, I would use Teflon coated wire for the inner and bare wire for the outer, then solder the turns of the bare wire together, or use a scrap of foil.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port configuration.

932. Re: microstrip question - twisted wires for a capacitor Vs inductance...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <b5F1DfAvgZq2Ewgr@jmwa.demon.co.uk>
Source record: 74398
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design
Body handling: HTML body converted to readable text

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<78bp3c$nkd@dfw-ixnews12.ix.netcom.com>, Jim
wrote:
> Using a pair of twisted wires as a VERY few pF capacitor has been done
>for many years. Doing it at Microwave, however, creates a problem.
>
> Consider the assembly. There is some wire length, which is inductive,
>and capacitance between the two wires.
>
> Yep.... A series resonant circuit.
>
>
>
> Down on the HF bands, it doesn't matter. The 3 or 4 nH of inductance
>leaves the self-resonant point up in the hundreds of Megahertz.
>
> Of course, if you are up at several GHz, well..... The combination
>is ABOVE self-resonance and now it behaves as a primarily inductive
>component.
>
This is all based on the assumption that it isn't possible to get the
inductance low enough. I feel sure that ingenuity is not so easily
defeated.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

933. WTB Jennings UCSL1500

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36AA19AD.C7A5E0F6@buffnet.net>
Source record: 74399
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

-- I need a vac variable Jennings UCSL1500

Also need a pair of Millen turns counters.

Will trade an Ameritron QSK unit from an AL-1500

73,

Jim N2go

934. Trade Ameritron QSK board

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36AA1A90.42A83D9D@buffnet.net>
Source record: 74400
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

--I have an Ameritron Al-1500 qsk board that I would like to trade.

I need a Jennings UCSL-1500 vacuum variable .
I also need two Millen turns counter dials.

73,

Jim N2go

935. WTB 3cx1200A7

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36AA21C8.DCEBC334@buffnet.net>
Source record: 74401
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I am looking for an Eimac 3cx1200A7 tube, socket , chimney

--
73,

Jim N2go

936. AM aircraft

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Don Salo <dsalo@nmu.edu>
Message-ID: <78db7g$5hh$1@walter.acs.nmu.edu>
Source record: 74402

A friend, who is a pilot and a Ham asked me if there is an inexpensive radio presumably amateur that he could modify to transmit on AM aircraft frequencies. Does aircraft use FM? Anyone aware of such a radio? I think his idea is to get away from the $600 for an aircraft band handheld.

tnx, Don
KB8PEL

937. Modem for HF audio interface/ help wanted!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be46aa$37a99d80$65d0a0cd@kovar.inav.net>
Source record: 74403

I was wandering if anyone has ever looked in to interfacing the audio path
of a modem to a HF transceiver?

If the auto answer feature could be used and the off hook signal to control
hanging up this could be a fun project.
I was just looking for a fun club project that addresses some of the
neglected
outdated products of are computers.

Any experienced elmers out there that can tell me the realistic
possibilities
of this project?

Thanks,

--
Jack Kovar
k0var
Iowa

938. WTB OSBORNE transformer model 7900

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36AA33DF.73F3513D@buffnet.net>
Source record: 74404
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I am looking for An Osborne type 7900 filament transformer.
7.5V@21A-- 115V primary
73,

Jim N2go

939. Re: WTB UNC 4-40 screws

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36aa2853.16176258@news.prestel.co.uk>
Source record: 74405
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On 22 Jan 1999 19:53:02 GMT, "Les Wolstenholme" <avondale@zetnet.co.uk>
wrote:

>
>
>Mike Willis <"M.J.Willis "@rl.ac.uk> wrote in article
><36A836C1.757B8F2C@rl.ac.uk>...
>> Simon Cox wrote:
>>
>> > Can someone help with a source, in the UK, of UNC 4-40
>> > screws 1/2" long for a piece of Racal equipment. RS etc. etc.
>> > don't sell such unless you count D connector screws. The
>> > screws required are 6 BA or 2.5mm look alikes. I need 30.
>>
>> There are a few sources, but why not just order them direct from the
>> USA?

I can offer genuine chromed rack-bolts with dished plastic
backing washers. I have hundreds! And nuts.

Not what you want, I know. but...

--
- 73 de Jim, g(m)4rga | To call it toadying would be to invite a
olympus%jimdee.prestel.co.uk | group libel action from toads.
dynastic%cwcom.net | - Matthew Parris, on a particularly
marula%zdnetmail.com | unctious question to Blair from
g4rga@gb7tjf.#45.gbr.eu | John Hatton, MP.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

940. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36aa270a.15847043@news.prestel.co.uk>
Source record: 74406
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Fri, 22 Jan 1999 22:27:10 +0000, Robin Birch <robin@falstaf.demon.co.uk>
wrote:

>In article <36a8d231.10958846@news.prestel.co.uk>, Jim Dunnett
><olympus@0spam.prestel.co.uk> writes
>>On Thu, 21 Jan 1999 22:31:30 +0000, Robin Birch <robin@falstaf.demon.co.uk>
>>wrote:
>>
>>>Some Months ago, last year I think, there was an add-on for an RA17
>>>published in RaDCOM. This was a valve design and should be modifiable
>>>to almost anything.
>>
>>An Australian design for an SSB adaptor. Quite unnecessary.
>>It'll hack SSB without any extras if you know how to drive
>>it properly.
>>
>I know that, I wouldn't dare mod my RA17 either. What I meant was that
>the design for the external SSB demodulator in RADCOM should be
>modifiable to anything you want. If memory serves me it needed to be
>hung on a few parts of the RA17 and these hooks would need altering to
>suit whatever the person who originally asked wanted to do. The only
>SSB mod I would use for an RA17 is the proper Racal SSB add on.

I've hear of this adaptor, but never used one. What advantage
did it have (has it) over just using the RF/IF gain and BFO
to resolve SSB?

--
- 73 de Jim, g(m)4rga | To call it toadying would be to invite a
olympus%jimdee.prestel.co.uk | group libel action from toads.
dynastic%cwcom.net | - Matthew Parris, on a particularly
marula%zdnetmail.com | unctious question to Blair from
g4rga@gb7tjf.#45.gbr.eu | John Hatton, MP.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

941. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36aa2765.15938658@news.prestel.co.uk>
Source record: 74407
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 23 Jan 1999 01:09:17 GMT, la8ak@online.no (J.-M. Noeding) wrote:

>>I know that, I wouldn't dare mod my RA17 either. What I meant was that
>>the design for the external SSB demodulator in RADCOM should be
>>modifiable to anything you want. If memory serves me it needed to be
>>hung on a few parts of the RA17 and these hooks would need altering to
>>suit whatever the person who originally asked wanted to do. The only
>>SSB mod I would use for an RA17 is the proper Racal SSB add on.
>>
>That's a rather strange idea, it is no reason why you couldn't attach a
>homebrew unit plugged into a socket in the receiver without causing any
>damage!

Some people are reluctant to get into the circuitry of an
RA17 with a soldering iron.

Judging by the amount of original connectors I've supplied to
owners in the past two months, they want to keep them as close
as possible to the original specification.

(And if you mess the alignment up, well...you might as well
use the set for spares....!)

--
- 73 de Jim, g(m)4rga | To call it toadying would be to invite a
olympus%jimdee.prestel.co.uk | group libel action from toads.
dynastic%cwcom.net | - Matthew Parris, on a particularly
marula%zdnetmail.com | unctious question to Blair from
g4rga@gb7tjf.#45.gbr.eu | John Hatton, MP.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

942. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <pCtJN1BPIiq2EwUL@jmwa.demon.co.uk>
Source record: 74408
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of newsgroup posts.

<36ad2653.48829231@204.127.36.21>, Tommy Lee <localhost@127.0.0.1> wrote:
>Inductance does not change with frequency!

Wanna bet? If you could make an air-cored coil with zero self-capacitance, you might stand a chance. Anything else - nah!
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port configuration.

943. Re: microstrip question - twisted wires for a capacitor Vs inductance...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36AA52D2.DCE@pop.valley.net>
Source record: 74409
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jim wrote:
>
> Using a pair of twisted wires as a VERY few pF capacitor has been done
> for many years. Doing it at Microwave, however, creates a problem.
>
> Consider the assembly. There is some wire length, which is inductive,
> and capacitance between the two wires.
>
> Yep.... A series resonant circuit.

Hello--
you might want to try using a piece of bifilar magnet wire (two
strands of insulated magnet wire bonded together). Solder ends
to points on microstrip and then trim the stub's length.

73,
Brad AA1IP

944. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <pYsq2.1248$oi.1170182@news3.mia>
Source record: 74410
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote in message ...
>>>When I were a lad, we used to twist a bit of thin enamelled wire around
>>>a thicker one. So did Philips before they invented the ancestor of the
>>>beehive trimmer.
>>
>>
>>I believe that this would have a lot of inductance, so much that it would
>>not work at 2.5GHZ.
>Well, not necessarily for 1 fF, which would require perhaps 1 turn, if
>that, maybe just two parallel wires. But if that were a problem, I would
>use Teflon coated wire for the inner and bare wire for the outer, then
>solder the turns of the bare wire together, or use a scrap of foil.

Well I have thought of cutting out a small piece of PCB (3x3 mm) and turning it vertical and soldering it in like a surface mount chip capacitor over a gap in the microstrip. But instead I have used a tapered line impedance transformer to match my existing varactor, and to critically couple a 1/4 wave microstrip resonator. The small variation in capacitance will "pull" the resonator. Strictly speaking the varactor capacitance is not part of a tuned LC circuit, but just the coupling. The tuning range is narrow, only about 3 percent, but that is enough.

945. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <d0tq2.1251$oi.1171983@news3.mia>
Source record: 74411
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Miles wrote in message <36A90F11.6638@pop.removethistomailme.net>...
>Bert Douglas wrote:
>>
>> John Miles wrote in message <36A83139.1987@pop.removethistomailme.net>...
>> >Snag a copy of this:
>> >
>> > http://www.amazon.com/exec/obidos/isbn=0070524157
>>
>> I already did. And I feel I wasted my money. This book contains little
>> useful information on either theory or practice.

<snip>

>Hmm, that is pretty different from my experience. I've built and used a
>couple of Rhea's designs with no problems.

<snip>

Ok. I went back and studied his book some more and I am getting more out of
it this time.
Thanks for the additional references.

946. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <FjhGzBA5Emq2EwTo@falstaf.demon.co.uk>
Source record: 74412
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <36aa2765.15938658@news.prestel.co.uk>, Jim Dunnett
<olympus@0spam.prestel.co.uk> writes
>Some people are reluctant to get into the circuitry of an
>RA17 with a soldering iron.
>
Don't see why, they are a bit cluttered underneath but relatively easy
to workout what to attack.
>Judging by the amount of original connectors I've supplied to
>owners in the past two months, they want to keep them as close
>as possible to the original specification.
>
In my case very true, for no other reason than the one I've got (Mk II)
was unmodified and works quite well, if it ain't broke don't fix it sort
of thing.

>(And if you mess the alignment up, well...you might as well
> use the set for spares....!)
>
True, although I've realigned several of these and never had much
difficulty. Although I will admit that I have never touched the
critically coupled filter as I don't have the experience to dig myself
out of the ensuing mess. I have a potentially suitable wobbulator but I
havn't had the courage to set it up and try.

But then I've always started from the position of having a set that was
reasonably well aligned to start with. I don't think I would like to
start with a set that had had its settings scrambled. Although I'd have
a go if someone presented me with one.

Cheers

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

947. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <HzHGXEAgHmq2EwzE@falstaf.demon.co.uk>
Source record: 74413
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <36aa270a.15847043@news.prestel.co.uk>, Jim Dunnett
<olympus@0spam.prestel.co.uk> writes
>I've hear of this adaptor, but never used one. What advantage
>did it have (has it) over just using the RF/IF gain and BFO
>to resolve SSB?
>
I think, not having tried one although if someone would lend me one I'd
love to have a go, that it would remove the need for critical balance of
the RF gain so that you could use the AGC circuits as though it was a
normal SSB rig. Though I must admit that you can do very well as you
suggest with manual gain and careful tuning. After all people did it
with AR88s for years.

Cheers

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

948. Re: AM aircraft

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36AA8268.C6092776@erols.com>
Source record: 74414

Aircraft frequencies use AM but even if you could find a ham rig it probably wouldn't be certified (or it would cost $600) so you couldn't use it legally anyway.

Don Salo wrote:

> A friend, who is a pilot and a Ham asked me if there is an inexpensive radio
> presumably amateur that he could modify to transmit on AM aircraft
> frequencies. Does aircraft use FM? Anyone aware of such a radio? I think
> his idea is to get away from the $600 for an aircraft band handheld.
>
> tnx, Don
> KB8PEL

949. Re: Modem for HF audio interface/ help wanted!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36AA837A.BAD54E52@erols.com>
Source record: 74415

Land-line modems wont work well on HF because they can't handle the noise (among other things) and they wouldn't be legal because the bandwidth is too great.

kovar wrote:

> I was wandering if anyone has ever looked in to interfacing the audio path
> of a modem to a HF transceiver?
>
> If the auto answer feature could be used and the off hook signal to control
> hanging up this could be a fun project.
> I was just looking for a fun club project that addresses some of the
> neglected
> outdated products of are computers.
>
> Any experienced elmers out there that can tell me the realistic
> possibilities
> of this project?
>
> Thanks,
>
> --
> Jack Kovar
> k0var
> Iowa

950. RFI in my Microphone!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: Bob Sikes <rwsikes@mediaone.net>
Message-ID: <36AA87F6.C3EDA0C2@mediaone.net>
Source record: 74416

I have a ICom 740, which works well with the electret Icom desk microphone that came with it. But I long for a headset microphone. Unfortunately, the Icom requires a preamplifier. I purchased a headset and tried building my on preamp, but wasn't able to get adequate gain (I guess) with a one stage FET amp. Suddenly I thought of using a mike mixer as the preamp! I hooked it up and all worked fine into the dummy load, and with minimal output. But as soon as I cranked up the amp to about 20 watts, I got noise when I talked. At 100W, oscillation.

My guess is that I'm getting RFI in the preamp. I tried grounding and wrapping in chokes, but nothing helped. I would add that I'm on the second story and while I do have a ground, it's probably not great. At 100 W every cheap computer speaker in the house crackles.

Is there anything that I might try to fix this?

Bob Sikes
KB1DHC

951. Re: AM aircraft

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: davem@zeppo.cs.ubc.ca
Message-ID: <78ecn3$jlu@zeppo.cs.ubc.ca>
Source record: 74417

"Don Salo" <dsalo@nmu.edu> writes:
>A friend, who is a pilot and a Ham asked me if there is an inexpensive radio
>presumably amateur that he could modify to transmit on AM aircraft
>frequencies. Does aircraft use FM? Anyone aware of such a radio? I think
>his idea is to get away from the $600 for an aircraft band handheld.

A 2m-band amateur radio transmits FM, while AM is required in the
aircraft band, so it simply won't work. Even if it did work, it would
be illegal.

He should look for a used aircraft band handheld. I found a used Icom
IC-A20 for $350 CDN, which is under $250 US. Any of the large heavy
aircraft handhelds should be pretty cheap, because the much smaller
cuter IC-A22 with more memories and alpha display is only $430 *new* the
last time I looked. And you can get a *new* IC-A4 for $300. So the
days of the $600 aircraft handheld are over.

Dave

952. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-23 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF62tpu.2wp@netcom.com>
Source record: 74418
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <36A90F11.6638@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>
> http://www.amazon.com/exec/obidos/isbn=0471520195
> http://www.amazon.com/exec/obidos/isbn=0872594920

AARRRRRRRRGGGGGGGGH. Will you just put the authors and titles here
instead of putting some USELESS URL.

1. Usenet is NOT the Internet, and no small number of people read
the newsgroups (or the r.a.a.h mailing list mirror) without keeping
up a direct connection. And any future use of these postings off
an archive or printed copy will be extra work if not futile.

2. Amazon is a pox upon humanity. They're bound to be keeping track
of everyone's web requests on some lists, over the use of which the rest
of us will have no control. They have obnoxious employment practices.
Their stock price vs. value is off in some alternate universe. And if
they are successful, the zero sum game of book retailing means that an
existing industry is going to die.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

953. Re: WTB UNC 4-40 screws

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Andy Lake <andy.lake@bt.com>
Message-ID: <36AA741B.2FF6@bt.com>
Source record: 74271
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Jim Dunnett wrote:
> I can offer genuine chromed rack-bolts with dished plastic
> backing washers.

Hah! I've got the captive nuts (galvanized) to match 'em!

>I have hundreds!

Same here!

> And nuts.

Same to you. :-)

73
Andy

(Thinks - I really should be working now.......!)

954. Re: FA: Antique RCA Radio SW/AM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: kargokult@aol.comnospam
Message-ID: <19990123232543.13553.00001919@ng138.aol.com>
Source record: 74272

hmmmm, why would you post an FA
listing to rec.radio.amateur.homebrew ?
tnx, hue
Hue Miller
(remove 'nospam' from email address when replying, thanks)

955. radio part with 8 clean collins type ceramic trimmer caps on ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <78ed76$6vg$1@nnrp1.dejanews.com>
Source record: 74273

radio part, selector assembly, with 8 clean ceramic trimmer caps like those used in collins s-line stuff on ebay.. heres the link! http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=58240865 thanks robert

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

956. motorola pageboy on UHF, make great monitor rcvr! unit is on ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <78edc9$70d$1@nnrp1.dejanews.com>
Source record: 74274

moto pageboy on 450's, make great monitor rcvr if you know how to mod or use
for private paging service. unit is on ebay..heres the link!
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=57788462 thanks robert

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

957. 2m in 10m out rx converter on ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <78edi5$79f$1@nnrp1.dejanews.com>
Source record: 74275

2m in 10m out rx converter on ebay. allows you to use your 10m all mode to recv 2m allmode transmissions. great for people who work the "birds". heres the link! http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=57783503 thanks robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

958. FS: round meter movements

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: worley@33hill.com
Message-ID: <36AAD32C.2A17@33hill.com>
Source record: 74276

I have at least 20 or 30 round meter movements From military v.o.m.s. Rugged steel constr. with blue or black bezel, with AC V, DC V, and ohms scales. Two sizes available: 4-1/2' o.d. with 3-1/2' face, $4.00 each and 3-1/2' o.d. with 2-3/4' face, $3 each plus UPS. Several styles available, all are 50 uA movements made by Bruno, QVS, or Phaostron. The scale can be removed and reversed (or painted over) for a custom power meter, ammeter, etc. NOTE: Please REPLACE the "33" with "snow" to spell "snowhill" in my email or call 334-347-5281 day/eve/wknd.

959. ELPAC +5 +-12 V Power Supply NEW bid $10 ? worth $100

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: tmenet@my-dejanews.com
Message-ID: <78egbm$8t7$1@nnrp1.dejanews.com>
Source record: 74277
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

ELPAC +5 +-12 V Power Supply NEW bid $10 ? worth $100

Brand new from over-stock.

(currently selling in Newark #46F5044 for $100.59)

This auction is for real with no reserve bidding which means that if the winning bid is $10.00 then I must sell it at that price 3 units are available.

to see current price go to:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=59838632

or go to:

www.ebay.com and search for item # 59838632

it is very easy to start bidding check it out.

This handy little power supply is perfect for all sorts of project. Makes a great general purpose bench supply too. Comes with grounded AC plug and a 5 pin DIN or Molex connector. Get 'em while they last .NO RESERVE..Good Luck.... Specifications Model # WM220-1 + 5 Volts at 2.0 Amps -12 Volts at 0.5 Amps + 12 Volts at 0.5 Amps 22 W 2.6 X 3.8 X 6.4 UL Listed

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

960. mod fo kenwood tr-9000 ext rec..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <78ep4e$uk9$1@news.minn.net>
Source record: 74278
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

does anyone have a mod for 2mtr allmode kenwood tr-9000
any help aprecated.

thanks n0mnb
n0mnb@minn.net

961. Re: AM aircraft

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Edward Lawrence <wa5swd@worldnet.att.net>
Message-ID: <01be477a$94ff63e0$6e00410c@n5eal>
Source record: 74279

Don,
The other replies are correct. Your friend would be in hot water with
both the FAA and FCC.
BUT he should check with RST in Grass Valley, CA. Jim Weir, makes some
fine kits. Was called Radio Systems Technology, but I think the name has
changed slightly. Jim has a new Call Sign. It is WX6RST.

E-mail is: jim@rst-engr.com

Hope this helps.

Ed WA5SWD

Don Salo <dsalo@nmu.edu> wrote in article
<78db7g$5hh$1@walter.acs.nmu.edu>...
> A friend, who is a pilot and a Ham asked me if there is an inexpensive
radio
> presumably amateur that he could modify to transmit on AM aircraft
> frequencies. Does aircraft use FM? Anyone aware of such a radio? I
think
> his idea is to get away from the $600 for an aircraft band handheld.
>
> tnx, Don
> KB8PEL
>
>
>

962. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Mike Rich <miker@yks0.attnet.or.jp>
Message-ID: <78ep40$e1a$1@news.yokosuka.attmil.ne.jp>
Source record: 74280
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

Try these people ...

http://www.williamsbrewing.com/

963. 4 sale GE master pro tube final gmrs repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: kable guy minn <n0mnb@minn.net>
Message-ID: <78epiduke1@news.minn.net>
Source record: 74281
Cross-posted to: alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.scanner,rec.radio.swap

for sale grms 462.625 tone 117.4 80 watt repeater. live in minnesota.
have extra (new final tube) in box (8072) working good . may also
have commerical antenna and coax.. with duplexer all complete.
500$ or trade for laptop , 1200 fm atv transceiver, dfjr.....etc
Bill 612.754.8765

n0mnb@minn.net

964. Mighty Midget

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: eco@mcmail.no.spam.com
Message-ID: <36aaf03c.0@news1.mcmail.com>
Source record: 74282

Anybody got a copy or photocopy of the April 1966 edition
of QST? I want a copy of the article: 'A Mate for the Mighty
Midget' by Lew McCoy W1ICP.

Colin, G8FRA

965. Re: Mighty Midget

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36ab4377.82481147@news.erols.com>
Source record: 74283

On Sun, 24 Jan 1999 10:06:11 GMT, eco@mcmail.no.spam.com (Eco) wrote:

>Anybody got a copy or photocopy of the April 1966 edition
>of QST? I want a copy of the article: 'A Mate for the Mighty
>Midget' by Lew McCoy W1ICP.
>
>Colin, G8FRA

Colin: Jose, EB5AGV, has a special web page devoted to the Mighty Midget Receiver:

http://www.geocities.com/SiliconValley/6992/mmrx.htm

Check it out! The page includes Lew's original article.

Please keep us posted on progress. We are trying to keep track of all the MM projects underway around the world. So far, we know of projects in Spain, Italy, U.S.A. and (now) the U.K.

BTW: How about some updates on these projects?

73 Bill N2CQR

966. Multiband Cubical Quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: John Tait <bravo@iol.ie>
Message-ID: <78f59j$13s$1@news2.news.iol.ie>
Source record: 74284

If anyone is interested.....<http://ireland.iol.ie/~bravo/#top>

967. Re: AM aircraft

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Don Salo <dsalo@nmu.edu>
Message-ID: <78fbeh$f07$1@walter.acs.nmu.edu>
Source record: 74285

I will make sure to let my friend know that the list as a whole disapproves of his idea, and that the radio he needs doesn't cost that much any more. Thanks for your help.

Don
KB8PEL

968. Re: microstrip question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <36AB3494.E27CFE2F@home.com>
Source record: 74286
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
>
> John Woodgate wrote in message ...
> >>>When I were a lad, we used to twist a bit of thin enamelled wire around
> >>>a thicker one. So did Philips before they invented the ancestor of the
> >>>beehive trimmer.
> >>
> >>
> >>I believe that this would have a lot of inductance, so much that it would
> >>not work at 2.5GHZ.
> >Well, not necessarily for 1 fF, which would require perhaps 1 turn, if
> >that, maybe just two parallel wires. But if that were a problem, I would
> >use Teflon coated wire for the inner and bare wire for the outer, then
> >solder the turns of the bare wire together, or use a scrap of foil.
>
> Well I have thought of cutting out a small piece of PCB (3x3 mm) and turning
> it vertical and soldering it in like a surface mount chip capacitor over a
> gap in the microstrip. But instead I have used a tapered line impedance
> transformer to match my existing varactor, and to critically couple a 1/4
> wave microstrip resonator. The small variation in capacitance will "pull"
> the resonator. Strictly speaking the varactor capacitance is not part of a
> tuned LC circuit, but just the coupling. The tuning range is narrow, only
> about 3 percent, but that is enough.

Using pieces of dielectric for adjusting coupling between resonators and
tuning them is accepted practice in the industry. However, lay them flat,
slide them along the resonators, and when you find the positions that
work, glue them down.

Use low loss material with a high dielectric constant if you can get it.
Tiny pieces of alumina substrate with er~10 work great.

Alternatively you can use thin low dielectric constant material if you have
plating on one side. This makes a single layer capacitor that you can
cut to suit and slide over the resonators and then glue down when you
find the proper coupling.

Another technique suitable for breadboarding, is to lay down some
transparent (3M) tape over the resonators as a dielectric layer
and then use a small piece of metal foil tape on top of that to
couple the resonators.

The "gimmick" capacitor made from twisted wire is really a series open
circuit stub, as has been noted, and is not well behaved over frequency.

Don

969. 50 to 75 ohm power attenuators??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <78fgdk$3vm$1@winter.news.rcn.net>
Source record: 74287

First off, are these commercially produced?

I recently acquired a Boonton 42B microwatt meter that
has a few 75-ohm power sensors and one
50-ohm power sensor. I would like to use this meter to
measure RF power levels up to the 10-watt range thru
500 MHz--the basic unit is rated for 10 millwatts max.

Since the heads are very expensive and easily damaged, I
want to use the 75-ohm sensors for routine work.
figure I need three 10-dB attenuators to cover the ranges
I need. The last attenuator will need to have 50-ohm input
and 75-ohm output impedance, the problem is I can't find
any designs for 10-dB attenuators with these characteristics
(unit should be good for a least 500-mW as well). Can anyone
reference a text which shows how to design pi attenuators
having unequal input and output impedances? Can anyone
reccomend a source for decent quality resistors (monolithic)
for this project? The attenuators should be as accurate as
possible, I can probably verify to a few 10ths of a dB using
my signal generators and RF Millivolter.

Any input kindly appreciated.

Peter Bertini, K1ZJH
Communications Quarterly Magazine

970. Re: Area Hamfest: PHX Metro

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Wade Holguin <kb7our@inficad.com>
Message-ID: <78flh1fjc1@news.inficad.com>
Source record: 74288
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Major hamfests I'm aware of:

Scottsdale Community College every Mar
Flagstaff every Jul (this one is the biggest/best)
Mesa Community College every Dec

I've been to 1 at DeVry, but found it kinda puny compared to these.

Regards,

Wade

971. WTB ucsl 1500

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36AB4CB9.15B0514D@buffnet.net>
Source record: 74289
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Wanted Jennings Vacuum variable model ucsl 1500 3kv vacuum variable

also need a pair of millen turns counters.

Will trade Ameritron qsk unit from an AL1500 (8877 amp)
Fastest qsk unit around. It can be mounted in any amp. Documentation
included.-
73,

Jim N2go

972. Re: WTB: Kenwood TS-130 or Similar HF RIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: w4phl@aol.com
Message-ID: <19990124121516.08646.00001950@ng119.aol.com>
Source record: 74290

This might be overkill forwhat you're looking for - but I have a TS-520S with digital readout that is part of an estate sale. Am helping the widow of WA4SWL get some cash. The case needs sprucing up but the rig works great! I have tried it on all bands and it delivers a good 150 watts. The 520 did not have a filter for cw if that's important? Asking $295 plus cost of shipping. If interested e-mail me and I'll pass along the home phone for chatting.
73, de W4PHL Allen

973. Wanted: RL1 radio controler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be47bf$8cc06fe0$62eee6ce@kovar.inav.net>
Source record: 74291

```
-- Please state condition and radios listed it will interface?
AND PRICE or trade possible items.

Thanks,
-- 319-378-9852 hm

Jack Kovar
k0var
Iowa
```

974. Re: 50 to 75 ohm power attenuators??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ab569d.155339149@news.online.no>
Source record: 74292

On Sun, 24 Jan 1999 11:06:18 -0500, "CommQuart" <commquart@erols.com>
wrote:

>First off, are these commercially produced?
>
>I recently acquired a Boonton 42B microwatt meter that
>has a few 75-ohm power sensors and one
>50-ohm power sensor. I would like to use this meter to
>measure RF power levels up to the 10-watt range thru
>500 MHz--the basic unit is rated for 10 millwatts max.
>
>
suggest you use minimum-loss pad between 75 ohm the probes and the 50ohm
power attenuators, this adds some attenuation, but it is easy to make
wideband using two chip resistors.

73
Jan-Martin
LA8AK

***PLEASE NOTE: Due to some problems with the server and/or NETSCAPE
I have to delete all messages larger than 25KB UNREAD.
At the moment I have serious trouble to receive emails.
Some problems also exist using FREE-AGENT to retrieve headers

975. FS: Unbuilt Heathkit and unused study courses

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: ka4993gg@aol.com
Message-ID: <19990124131828.20426.00002484@ng-fx1.aol.com>
Source record: 74293

```
Please see my ad at rec.radio.swap
```

976. Re: RFI in my Microphone!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <78foi2$p9r$3@hirame.wwa.com>
Source record: 74294

Try buying the ICOM preamp version by Heil.

In article <36AA87F6.C3EDA0C2@mediaone.net>,
Bob Sikes <rwsikes@mediaone.net> wrote:
>I have a ICom 740, which works well with the electret Icom desk
>microphone that came with it. But I long for a headset microphone.
>Unfortunately, the Icom requires a preamplifier. I purchased a headset
>and tried building my on preamp, but wasn't able to get adequate gain (I
>guess) with a one stage FET amp. Suddenly I thought of using a mike
>mixer as the preamp! I hooked it up and all worked fine into the dummy
>load, and with minimal output. But as soon as I cranked up the amp to
>about 20 watts, I got noise when I talked. At 100W, oscillation.
>
>My guess is that I'm getting RFI in the preamp. I tried grounding and
>wrapping in chokes, but nothing helped. I would add that I'm on the
>second story and while I do have a ground, it's probably not great. At
>100 W every cheap computer speaker in the house crackles.
>
>Is there anything that I might try to fix this?
>
>Bob Sikes
>KB1DHC
>
>

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

977. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: localhost@127.0.0.1
Message-ID: <36ad6abf.19109166@204.127.36.21>
Source record: 74295
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 23 Jan 1999 21:54:23 GMT, mzenier@netcom.com (Mark Zenier)
wrote:

>
>2. Amazon is a pox upon humanity. They're bound to be keeping track
>of everyone's web requests on some lists, over the use of which the rest
>of us will have no control. They have obnoxious employment practices.
>Their stock price vs. value is off in some alternate universe. And if
>they are successful, the zero sum game of book retailing means that an
>existing industry is going to die.

You're just jealous because you didn't buy the stock last year at it's
low.

52-week Range
9 1/4 - 199 1/8
Splits: 2-Jun-98 [2:1], 5-Jan-99 [3:1]

978. tuning deck for collins r390a, parts unit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <78g1mk$9dc$1@nnrp1.dejanews.com>
Source record: 74296

parts deck for collins r390a, missing most gears and all tubes. $25 plus shpng
via USPS from miami fl.
thanks
robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

979. Re: YAESU 757 How many channels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: George Eppler <epplergm@worldnet.att.net>
Message-ID: <78fv6d$mb1@bgtnsc02.worldnet.att.net>
Source record: 74297

Stuart,
If you find such a memory expansion i would sure like to know. Thanks, Mike
KL7ILA
epplergm@att.net

Stuart wrote in message <77dsftrc1@news1.cableinet.co.uk>...
>Hello all and thanks for anwering all my other questions i have sent out
but
>i have a query, can you buy a memory expansion for the FT757 mark 1 as i am
>sure i have seen them with 100 channels before and the one have only has 8
>channels if so does anyone know where they are avalable from please.
>
>Many Thanks
>
>Stuart 2E1FXW
>
>
>
>

980. FM mod for FT-707

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <78g09c$ps1$1@news8.svr.pol.co.uk>
Source record: 74298

I am looking for an FM mod for the FT-707.

If you know of a mod please email me.

John

981. Re: RFI in my Microphone!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: exray@caribe.net
Message-ID: <78g6ja$d0g$1@nnrp1.dejanews.com>
Source record: 74299

My Icom 745 didn't care much for my ampped D104...I think the coiled cord was resonant...I loosely fed a straight piece of wire down the center of the coiled cord, and attached it to the mic base and to the shielded plug. Problem cured.

Good luck.

WX4A-Bill

In article <36AA87F6.C3EDA0C2@mediaone.net>,
Bob Sikes <rwsikes@mediaone.net> wrote:
> I have a ICom 740, which works well with the electret Icom desk
> microphone that came with it. But I long for a headset microphone.
> Unfortunately, the Icom requires a preamplifier. I purchased a headset
> and tried building my on preamp, but wasn't able to get adequate gain (I
> guess) with a one stage FET amp. Suddenly I thought of using a mike
> mixer as the preamp! I hooked it up and all worked fine into the dummy
> load, and with minimal output. But as soon as I cranked up the amp to
> about 20 watts, I got noise when I talked. At 100W, oscillation.
>
> My guess is that I'm getting RFI in the preamp. I tried grounding and
> wrapping in chokes, but nothing helped. I would add that I'm on the
> second story and while I do have a ground, it's probably not great. At
> 100 W every cheap computer speaker in the house crackles.
>
> Is there anything that I might try to fix this?
>
> Bob Sikes
> KB1DHC
>
>

-exray
WX4A
Vieques Island, PR

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

982. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36ab83a3.6888148@news.prestel.co.uk>
Source record: 74300
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 23 Jan 1999 23:54:33 +0000, Robin Birch <robin@falstaf.demon.co.uk>
wrote:

>But then I've always started from the position of having a set that was
>reasonably well aligned to start with. I don't think I would like to
>start with a set that had had its settings scrambled. Although I'd have
>a go if someone presented me with one.

And they stay in alignment for years.

--
- 73 de Jim, g(m)4rga | To call it toadying would be to invite a
olympus%jimdee.prestel.co.uk | group libel action from toads.
dynastic%cwcom.net | - Matthew Parris, on a particularly
marula%zdnetmail.com | unctious question to Blair from
g4rga@gb7tjf.#45.gbr.eu | John Hatton, MP.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

983. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36ab83f5.6970328@news.prestel.co.uk>
Source record: 74301
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 23 Jan 1999 23:57:20 +0000, Robin Birch <robin@falstaf.demon.co.uk>
wrote:

>In article <36aa270a.15847043@news.prestel.co.uk>, Jim Dunnett
><olympus@0spam.prestel.co.uk> writes
>>I've hear of this adaptor, but never used one. What advantage
>>did it have (has it) over just using the RF/IF gain and BFO
>>to resolve SSB?
>>
>I think, not having tried one although if someone would lend me one I'd
>love to have a go, that it would remove the need for critical balance of
>the RF gain so that you could use the AGC circuits as though it was a
>normal SSB rig. Though I must admit that you can do very well as you
>suggest with manual gain and careful tuning. After all people did it
>with AR88s for years.

...and R1475s and R1155s...and...

--
- 73 de Jim, g(m)4rga | To call it toadying would be to invite a
olympus%jimdee.prestel.co.uk | group libel action from toads.
dynastic%cwcom.net | - Matthew Parris, on a particularly
marula%zdnetmail.com | unctious question to Blair from
g4rga@gb7tjf.#45.gbr.eu | John Hatton, MP.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

984. Re: FM mod for FT-707

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Martin John Hallsworth <Martin@g1gyc.demon.co.uk>
Message-ID: <917213929.2155.0.nnrp-03.9e98acde@news.demon.co.uk>
Source record: 74302

Hello John,
I had an FT 707 that I had SMC at Southampton add FM to
I think the design was by a G8 ???.
Worked well when transverting.
The RX side took signal at the 8.9Mhz if filter the roofing filter in the
707 RF unit
I think and passed it to a MC3357 (could use a 3359 chip or similar now)
On TX I think the audio was tapped and fed to a Xtal oscillator with Varicap
diode
across it. This signal was then passed to the TX Mixer stages (like the SSB
audio)
Sorry I can not be pin point accurate I no longer have the rig (sold it on
some 7
years back) ask SMC if they can help.

cheers martin

>John Mortlock wrote in message <78g09c$ps1$1@news8.svr.pol.co.uk>...
>I am looking for an FM mod for the FT-707.
>
>If you know of a mod please email me.
>
>John
>
>
>

985. Cellphone oscillator/IF frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: davem@zeppo.cs.ubc.ca
Message-ID: <78g65s$1fm@zeppo.cs.ubc.ca>
Source record: 74303

I recently dismantled a couple of old cellphones, out of curiosity and looking for parts to scrounge. They are Audiovox and MEI handheld models. One thing that puzzles me about them is the apparent first IF frequency.

Since cellphones are full duplex with a 45 MHz offset between Tx and Rx frequencies, I expected that they would synthesize the TX frequency with a PLL and also use this as the first local oscillator in the receiver. This would give a first IF frequency of 45 MHz while requiring only a single VCO. Then I'd expect to see a crystal of 45.455 or 44.545 MHz for the second oscillator, giving a second IF of 455 kHz.

But that doesn't seem to be what these phones do. In one, the first IF filter is clearly labelled 83.160 and the crystal for the second local oscillator is 82.705. So the second IF is 455 kHz as I guessed, but where does 83.160 come from? In the other phone, the frequency of the first IF filter isn't marked, but the second oscillator crystal is again 82.705, so it seems to use the same set of frequencies.

I can't find any sign of a second VCO to operate at 83.160 MHz away from the receive frequency (which would be either 128.16 or 38.16 MHz from the transmit frequency). Can anyone explain what is actually used as the first local oscillator frequency, and how a difference of 83.160 is produced?

Dave

By the way, both phones have nice little TCXOs in them. One is 15.36 MHz and one is 12.0 MHz, which would be divided by 512 and 400 respectively to get the 30 kHz reference frequency needed for the AMPS channel spacing. Too bad that 10 MHz isn't a multiple of 30 kHz - no chance of finding a nice 10 MHz TCXO for upgrading frequency counters with. On the other hand, NAMPS uses 10 kHz channel spacing, so NAMPS phones are a better bet for oscillator scrounging.

Why do expensive amateur handhelds still use plain crystals for the master oscillator, while cheaper cellphones all seem to use temperature controlled oscillator modules? They can't be that expensive given what cellphones cost these days.

Dave

986. Re: FM mod for FT-707

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <78g66v$qt3$2@news7.svr.pol.co.uk>
Source record: 74304

Martin John Hallsworth wrote in message
<917213929.2155.0.nnrp-03.9e98acde@news.demon.co.uk>...
>Hello John,
>I had an FT 707 that I had SMC at Southampton add FM to
>I think the design was by a G8 ???.
>Worked well when transverting.
>The RX side took signal at the 8.9Mhz if filter the roofing filter in the
>707 RF unit
>I think and passed it to a MC3357 (could use a 3359 chip or similar now)
>On TX I think the audio was tapped and fed to a Xtal oscillator with
Varicap
>diode
>across it. This signal was then passed to the TX Mixer stages (like the SSB
>audio)

Martin, Thanks for the info on the FM mod.
I have been offered a 707 cheaply.
It does 80 through 10 with the new bands,
no 160 though have you or anyone else,
heard of a 160 mod for the FT-707 ??

987. HF solid state 300w amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Alex Reid <alex@tral.demon.co.uk>
Message-ID: <917216823.25500.0.nnrp-07.c2deb868@news.demon.co.uk>
Source record: 74305
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

I have built an amp to the motorola design,application note AN758
using two MFR429 transistors.been working ok until one went base/emitter
short!....suspect i was over driving...can anyone suggest a source of these
transistors, and has anyone come up with an
input design to attenuate the drive and keep the beast stable.
many tks....alex reid
alex@tral.demon.co.uk

988. ARRL Radio Designer - Bug ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <_vNq2.2299$Si1.1719439@news2.mia>
Source record: 74306
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hi again,

I seem to have discovered a bug in ARRL Radio Designer, but I am not 100% sure. Perhaps I am not running it properly. I am hoping someone can give me some confirmation.

The model for transmission lines does not seem to give correct results, especially when one end of the line is connected to node zero (ground). Here are two circuits that should give very similar results, but they do not.

```
BLK
TRL 0 1 0 0 Z=20 E=20 F=2.44 A=0.8
CAP 1 2 C=5PF
TEST1: 1POR 2 0
END
```

```
BLK
IND 0 1 L=0.5NH
CAP 1 2 C=5PF
TEST2: 1POR 2 0
END
```

The 20 ohm 20 degree shorted transmission line is supposed to be an approximation of a 0.5 nH inductor.

In Puff these two circuits produce nearly identical Smith Chart plots. The plot is a semicircle with radius close to 1 (right at the outside edge).

But in ARRL Radio Designer the plot spirals toward the center with higher frequency. I am sweeping frequency from 0.1 to 6GHZ. For kicks try setting the attenuation to zero in the above example. You will get a screen full of numerical hash.

Thanks for the help,
Bert

989. Vandenberg AFB Launch Schedule

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Brian Webb <102670.1206@CompuServe.COM>
Message-ID: <09cba2329221819NIH2WAAF@csi.com>
Source record: 74307
Cross-posted to: rec.radio.amateur.homebrew,sci.space.news,sci.space.shuttle

.
ASTRONOMY/SPACE ALERT FOR SOUTHERN CALIFORNIA
Brian Webb, KD6NRP
Ventura County, California
E-mail: 102670.1206@compuserve.com
Web Page: http ://ourworld.compuserve.com/homepages/rawhide_home_page

1999 January 24 (Sunday) 11:00 PST

Delta II Still Sitting On Pad

The launch of a Delta II missile carrying the ARGOS, Orsted, and SUNSAT satel-
lites from Vandenberg AFB has now been postponed several times due to upper
level winds.

Another launch attempt may be made on Tuesday, January 26th at 02:35:33 PST
(10:35:33 UTC). The launch window will run from 02:35 to 02:45 PST.

Weather permitting, the event should be visible over a wide area, perhaps as far
away as Las Vegas and north central Arizona.

For current launch status, call the Boeing Delta Launch Information Hot Line at
714-896-4770 and the 30th Space Wing Public Affairs Office at 805-734-8232 ext.
63595. The Public Affairs Office will be manned on launch day from 01:30 to
03:30 PST.

Vandenberg AFB Launch Schedule
As of Friday JAN 22 00:30 PST

Launch
Time/Window Launch
Date (PST/PDT) Vehicle Comments

JAN 26? 02:35-02:45 Delta II Payload is ARGOS, Orsted, and SUNSAT
satellites

FEB 10 00:01-06:01 Minuteman III ICBM test launch (non-orbital)

FEB 26 18:52-19:03 Pegasus XL Payload is WIRE satellite. Missile will
be launched from aircraft staged from
Vandenberg AFB

MAR 01 Unknown Delta II Payload is Iridium satellites

MAR 09 00:01-06:01 Peacekeeper ICBM test launch (non-orbital)

MAR 31 20:59-21:08 Pegasus XL Payload is TERRIERS satellite. Missile
will be launched from aircraft staged
from Vandenberg AFB

APR 07 Unknown Titan IV Classified payload

APR 15 Unknown Delta II Payload is Landsat 7 satellite

MAY 01 Unknown Pegasus XL Payload is TSX-5 satellite. Missile will
be launched from aircraft staged from
Vandenberg AFB

MAY 12 01:01-07:01 Minuteman III ICBM test launch (non-orbital)

JUN 14 17:30-23:30 Minuteman II Missile defense test. Vehicle will send
simulated warheads downrange. A second
missile will attempt to intercept the
simulated warheads.

JUN 23 01:01-07:01 Minuteman III ICBM test launch (non-orbital)

JUL 01 23:00-24:00 Taurus Payload is KOMPSAT satellite

JUL 08 Unknown Pegasus XL Payload is ORBVIEW-3 satellite. Missile
will be launched from aircraft staged from
Vandenberg AFB

If a launch window is given, an attempt will be made to launch at the start of the window. If a problem is encountered, the launch could be delayed and occur at any time in the window, or be rescheduled for another day.

The above table was compiled from unclassified information obtained from Vandenberg AFB.

Shortly after sunset on December 5th, NASA's SWAS satellite
was launched from an L-1011 flying off of the Central Coast.
The following news release from the Harvard-Smithsonian
Center for Astrophysics describes the first scientific
results from this mission.

FIRST RESULTS FROM SWAS INCLUDE SOME SURPRISES

Water, Water Everywhere: New NASA Satellite Finds Stellar Nurseries to be Hot and Humid

AUSTIN, TX -- With nearly flawless execution in both its launch and early operations, the Submillimeter Wave Astronomy Satellite, or SWAS, has already produced some exciting results, including the discovery that large amounts of water seem to saturate the interstellar medium, while, by contrast, molecular oxygen cannot be found.

Launched from a Pegasus XL vehicle on December 5, 1998, SWAS is the first space borne observatory to operate at submillimeter wavelenghts, a narrow band of emission lying between infrared and radio on the electromagnetic spectrum.

In only two weeks of observations, SWAS seems on target for achieving its main goal: to study the molecular clouds in space, those giant star-forming regions like the one from which our Sun and Solar System were born.

The news that excites astronomers most is that SWAS has found water almost everywhere -- and molecular oxygen apparently no where.

"We have seen water in the interstellar medium before, but only in hot regions," says principal investigator Gary Melnick of the Harvard-Smithsonian Center for Astrophysics. "SWAS, on the other hand, has found water in much cooler regions, and that's important because most of the interstellar medium is cold and that may mean that water is in a lot more places than we knew."

Equally exciting and revealing, SWAS has so far seen no molecular oxygen in the interstellar clouds it has observed. In just two weeks of science observations, SWAS has set the most stringent limits to date on the amount of molecular oxygen in star-forming clouds. The apparent absence of oxygen may actually help astronomers pinpoint the age of those molecular clouds.

"Molecular clouds are like chemical laboratories," says Melnick. "Our theories tell us oxygen won't appear until the cloud reaches a certain age. SWAS, in its future observations, will help us test those theories and determine more about these star factories."

Melnick and his colleagues are also looking forward to using SWAS to create large-scale maps of different molecules in space. Unlike water and oxygen, astronomers already know that carbon molecules, including carnon monoxide, are abundant in the galaxy. SWAS will be able to make maps of warm molecules across vast swaths of the sky -- something that is nearly impossible from ground-based facilities.

With its ability to conduct pointed, high-spectral-resolution observations of molecular clouds that are either sites of ongoing or future star formation, SWAS may also be able to answer some basic questions: 1) Where is the oxygen hiding?; 2) How do collapsing clouds cool so they can form as stars and planets?; and, 3) What is the internal structure of the clouds?

In addition to the Harvard-Smithsonian Center for Astrophysics, the SWAS project also includes contributors from the University of Massachusetts at Amherst, Cornell University, Johns Hopkins University, NASA Ames, and the University of Cologne in Germany.

---------- END ----------

990. Re: 50 to 75 ohm power attenuators??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990124183412.09605.00000873@ng49.aol.com>
Source record: 74308

> I can probably verify to a few 10ths of a dB using
>my signal generators and RF Millivolter.
>
>Any input kindly appreciated.
>
>Peter Bertini, K1ZJH
>Communications Quarterly Magazine
>
>

Hi Peter. Try a minimum loss pad 50/75 ohms. Values given in the Radio Engineers Handbook. Any version I think, but in version 4 I know.

W4ZCB

991. Re: mod fo kenwood tr-9000 ext rec..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: Jack@sgi.net
Message-ID: <36ABDC6B.6280@sgi.net>
Source record: 74309
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

kable guy minn wrote:
>
> does anyone have a mod for 2mtr allmode kenwood tr-9000
> any help aprecated.
>
> thanks n0mnb
> n0mnb@minn.net

Your looking for a mod, i'm looking for a repair service that can replace the main computer chip for the TR-9000. Kenwood no longer supports this model.

992. Re: ARRL Radio Designer - Bug ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36ABBD4E.FB6862F7@mwci.net>
Source record: 74310
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:

> Hi again,
>
> I seem to have discovered a bug in ARRL Radio Designer, but I am not 100%
> sure. Perhaps I am not running it properly. I am hoping someone can give
> me some confirmation.
>
> The model for transmission lines does not seem to give correct results,
> especially when one end of the line is connected to node zero (ground).
> Here are two circuits that should give very similar results, but they do
> not.
>
> BLK
> TRL 0 1 0 0 Z=20 E=20 F=2.44 A=0.8
> CAP 1 2 C=5PF
> TEST1: 1POR 2 0
> END
>
> BLK
> IND 0 1 L=0.5NH
> CAP 1 2 C=5PF
> TEST2: 1POR 2 0
> END
>
> The 20 ohm 20 degree shorted transmission line is supposed to be an
> approximation of a 0.5 nH inductor.
>
> In Puff these two circuits produce nearly identical Smith Chart plots. The
> plot is a semicircle with radius close to 1 (right at the outside edge).
>
> But in ARRL Radio Designer the plot spirals toward the center with higher
> frequency. I am sweeping frequency from 0.1 to 6GHZ. For kicks try setting
> the attenuation to zero in the above example. You will get a screen full of
> numerical hash.
>
> Thanks for the help,
> Bert

Put a TRF ahead of the TRL. Use a 1:1 turns ratio and float the bottom end
ofTRF secondary and the bottom end of the input of TRL. This problem has been
noticed before. This should fix the problem:

```
BLK
TRF 1 2 0 3 N=1
TRL 2 4 3 0 Z=20 E=20 F=2.44 A=0.88
CAP 4 5 C=5PF
TEST1:1POR 5 0
END
```

Correction. Should be TRF 0 2 0 3 N=1

Bill W0IYH

993. Re: ARRL Radio Designer - Bug ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36ABBB97.6A836C46@mwci.net>
Source record: 74311
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:

> Hi again,
>
> I seem to have discovered a bug in ARRL Radio Designer, but I am not 100%
> sure. Perhaps I am not running it properly. I am hoping someone can give
> me some confirmation.
>
> The model for transmission lines does not seem to give correct results,
> especially when one end of the line is connected to node zero (ground).
> Here are two circuits that should give very similar results, but they do
> not.
>
> BLK
> TRL 0 1 0 0 Z=20 E=20 F=2.44 A=0.8
> CAP 1 2 C=5PF
> TEST1: 1POR 2 0
> END
>
> BLK
> IND 0 1 L=0.5NH
> CAP 1 2 C=5PF
> TEST2: 1POR 2 0
> END
>
> The 20 ohm 20 degree shorted transmission line is supposed to be an
> approximation of a 0.5 nH inductor.

Put a TRF ahead of the TRL. Use a 1:1 turns ratio and float the bottom end of TRF secondary and the bottom end of the input of TRL. This problem has been noticed before. This should fix the problem:

```
BLK
TRF 1 2 0 3 N=1
TRL 2 4 3 0 Z=20 E=20 F=2.44 A=0.88
CAP 4 5 C=5PF
TEST1:1POR 5 0
END
```

Bill W0IYH

994. Re: AM aircraft

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: See sig for reply <ndema@astrax.nospam>
Message-ID: <Pine.LNX.3.95.990124213353.6105A-100000@astrax.snafu.de>
Source record: 74312

On Sat, 23 Jan 1999, Don Salo wrote:

> A friend, who is a pilot and a Ham asked me if there is an inexpensive radio
> presumably amateur that he could modify to transmit on AM aircraft
> frequencies. Does aircraft use FM? Anyone aware of such a radio? I think
> his idea is to get away from the $600 for an aircraft band handheld.

Hams are allowed to modify radios ... but:
Only for use by a radio amateur.
Only inside their allowed frequency ranges.

Therefore, the modification your friend thinks of is simply illegal.
But, hey, ham equipment is not *that* much cheaper ...
And, your assumption is right: Air radio is AM.

Cheers,
Detlef, DH3DM.

+++
no archive: yes

--
Detlef Marxsen at 53 27 N 09 57 E.
Due to bad spam experience, my header is faked. To send email to me
remove the ".no" from dema@astrax.snafu.de.no
Sorry for the inconvenience.
May the bugs and computer-viruses eat the spammers alive!

995. FS: Open wire feeder ceramic insulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-24 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36abe8f3.0@news1.ibm.net>
Source record: 74313
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

make your own heavy duty open wire feed line with these. Spacing from eyelet to eyelet is 3 1/4 inches. Total count is 47. You buy all or none. Make offer.

Lane Zeitler
Ku7i
San Diego

996. Re: SMD resistors for GHZ frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <36ACFA19.788A541A@home.com>
Source record: 74221
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:
>
> Bert Douglas wrote in message ...
> >Are all SMD resistors the same? Do the normal ones you buy in DigiKey work
> >ok in the 2.5 GHZ range?
> >
> >All it says in Digikey is "thick film", with no further data.
>

Most are ok as long as you choose the smallest physical sizes. Given a
choice, a single-sided re-flow termination might be better than a wrap-around
termination.

Don

997. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Jones <Jones@please-no-email.com>
Message-ID: <uxJI4xLS#GA.222@upnetnews03>
Source record: 74222
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> Now
>how would one work a code key while driving down the expressway at 65MPH?
>What does CQ sound like in Morse Code while driving over pot-holes? ;-))
>Leland C. Scott
>KC8LDO

The only HF mobile I work is CW. It is no more difficult working a key while driving than holding a mike. On any given day you will hear several CW mobile stations on the air. So although I know you were trying to make a point, not learning CW because you couldn't use it while mobile falls flat...

998. Re: HF solid state 300w amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Tom Hobby <tomhob@ris.net>
Message-ID: <78j1lh$k5u$1@remarQ.com>
Source record: 74223
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Alex I can't help you; but, discovered that I could only work my solid state kit at two thirds of the rated output without burning out the transistors; even with two muffin fans mounted on top of the heat sink. Which means your rig is probably "safe" at 200 watts for sustained operation. I have a 600 W kit with two 300W boards in it and run it safely at 400W and even more safely at 300W. You can build a "filter" kit that will work on each band, etc. to make it more stable. I have one that was built for me. If you strike out on getting help, let me know and I'll put you in touch with the guy who built my kits.

Tom

999. Re: SMD resistors for GHZ frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <Hk7r2.903$2c.19@firefly>
Source record: 74224

In a previous article, steves@kotamicro.com (Steve Smith) says:

>All resistors are not created equal. SMD resistors come trimmed two ways,
>plunge cut and edge trim. The plunge cut induces more self capacitance; edge
>trim is better for high frequencies. Note that the amount of trim (and hence
>amount of capacitance) will vary with lot. Digikey probably doesn't have a clue
>about this.
>
>Unfortunately, I don't have a supplier handy. If you can't find one, let me
>know and I'll dig one up. It is fairly likely that Precision Resistive Products
>(www.prpinc.com) makes them; I do know that they make a non-spiral trimmed
>(buffed) leaded metal film resistor for high frequency use.
>
>Steve Smith
>Kota Microcircuits
>www.kotamicro.com
>
>Bert Douglas wrote:
>
>> Are all SMD resistors the same? Do the normal ones you buy in DigiKey work
>> ok in the 2.5 GHZ range?
>>
>> All it says in Digikey is "thick film", with no further data.
>
>
>
>

I haven't had any problems with those Digikey and Mouser chip resistors up
to 3.4 or even 5.7 GHz with transverters I've built.

The person to ask about it would be Steve, N2CEI at Down East Microwave.
He probably has the resistors you need, too. He's been very helpful to me.
I don't have his phone number handy, but their website is
www.downeastmicrowave.com.

(Note - I have no connection with them aside from beig a happy customer.)

73, Zack W9SZ

--

1000. Re: Help with metal detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990125184747.01143.00002570@ng-cb1.aol.com>
Source record: 74225

http://www.goldgold.com
Gold & Treasuer Hunter Magazine
Get in the Forum, someone will be able to help you out....
Lemme know if I can help at all.
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

1001. Icom 2000 keyed in CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Tim Hynde <ka8ddz@eaglequest.com>
Message-ID: <78j3am$18p$1@smithers.eaglequest.com>
Source record: 74226
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I've got an Icom 2000 50w FM rig in the car that I'd like to use to work RS-13 in mode A, thats 145.965 up CW. While I can probably get away with not changing the transmit freq it doesn't make it very easy. Any Icom specialits out there with thoughts of changing the TX freq +/- 5 KHz? variable.

I haven't even looked at the schematic yet but was thinking about a varicap diode tapped into the LO and using a pot to swing it up and down. Can someone give me a sanity check on this? Am I headed in the right direction or is there a better way?

Tim

1002. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Tim Hynde <ka8ddz@eaglequest.com>
Message-ID: <78j3qv$191$1@smithers.eaglequest.com>
Source record: 74227
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I think Marks point, which everyone seemed to miss, was that he is on USENET not the INTERNET so when someone posts a URL regarding a book, or something for sale or anything that can have a TEXT description, it might be considerate to post an author and title or phone number or ANYTHING other than just a URL which USENET users who are text based can not go to. OTOH, get an ISP Mark! :)

ddz

Mark Zenier wrote in message ...
>In article <36A90F11.6638@pop.removethistomailme.net>,
>John Miles <jmiles@pop.removethistomailme.net> wrote:
>>
>> http://www.amazon.com/exec/obidos/isbn=0471520195
>> http://www.amazon.com/exec/obidos/isbn=0872594920
>
>
>AARRRRRRRRGGGGGGGGH. Will you just put the authors and titles here
>instead of putting some USELESS URL.

1003. Re: Help >> PCB/PWB Layout Software Suggestion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36AD11CB.8B6F1BC1@hevanet.com>
Source record: 74228

WB4LNM wrote:

> I'd appreciate folks experience with PWB layout software that is in the
> "affordable" range for ham use.
>
> I only need to do simple boards with manual routing and at the most two sided,
> but probably single sided is fine. I have looked at all of these and none
> appear to be RF friendly:
>
> Express PCB
> Eagle
> Easytrax
> Traxmaker
> Cadint
>
> The closest thing I can find so far to my needs is CIRCAD, which appears to be
> a DOS program although it seems to work ok in Win95.
>
> I will, at most have one or two DIP packages, with most of the rest being
> TO-92, SOT surface mount, or RF power transistors (need to have the capability
> to layout microstrip lines). Want to be able to print a 1:1 output on my HP
> laserjet printer for the iron-on transfer method to PWB material. Manual
> routing is mandatory. I don't want autorouting.
>
> Anyone who has any suggestions, I'd sure like to hear it. Please reply here or
> to WB4LNMxx@aol.com (remove the xx before mailing). Thanks and 73
>
> John...

I recommend PADS. It's a full-function commercial package. The demo version,
called padsdemo, has limited the number of parts you can put on one board, but
I've never run into that limit with hobby stuff. It autoroutes, but you don't have

to use it. Has a lot of stuff in the library, which is easily extensible.
It's a DOS program, but runs in a win95 window.
Can output to a laser printer, but I use a sharpie in a flatbed plotter and plot
right on the
copper.
You can find it on many sites as "padsdemo".
miker

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u

Or you can DELETE the & in the "from" address.

1004. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Quick <ccoiadl@bright.net>
Message-ID: <78jebe$q1c$1@cletus.bright.net>
Source record: 74229
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Oh yes he dose!!! Who do you think gives you permission to post to this group? who do you think gives you permission to own a computer or have a job? Its god Clinton!! Didn't you know? Where have you been? It's ALL about Clinton, didn't you know?
>Oh yes, Clinton has nothing to do with this thread.

1005. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Alan Graves <alankg@siscom.net>
Message-ID: <%7br2.53$0x.4380@news.siscom.net>
Source record: 74230
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I hate to burst your bubble, but I am about as conservative as you can get, but I have no use at all for CW. If some people want to continue to use this archaic dinosaur known as code, thats fine. But to force others to learn this outdated crap is ridiculous.

Brian G <brian.graf@worldnet.att.net> wrote in message news:36AD2933.39E7920C@worldnet.att.net...
>Very well said!
>
>Dan Starkenburg wrote:
>
>> > No-Code whiners are liberals. They don't like something so they trash other
>> > people to make themselves feel better. The ARRL is BOD is also full of
>> > liberals. Their restructuring proposal is just a membership drive aimed at
>> > liberals. Liberals always have their hand out waiting for someone to put
>> > something in it for free. That is why they like the ARRL proposal too. They
>> > can get something they don't have to work for.
>>
>> There's a reason why the ARRL has offered a restructuring proposal: Amateur
>> Radio is dying. This fact is evident by looking at the decline of new amateur
>> licenses being granted. Also, the median age of hams is getting significantly
>> older. The ARRL figures that by doing away with the code requirements, it will
>> attract more people to the hobby.
>>
>> Why is Amateur Radio dying? Because people such as yourself are carrying on a
>> "holier than though" attitude towards those who don't yet know the code. Your
>> attitude disgusts them, and they have no desire to become what you already are.
>> So, if people such as yourself would drop the no-code issue, and be a bit more
>> welcoming towards ham prospects, perhaps there would not be a need for the
>> proposal.

>>
>> Morse Code is in no way related to Clinton. Which brings me to my next
point:
>> Memorizing Dits-and-Dashes (which is very easy to do with a program such
as
>> CodeQuick) does not make an Amateur Operator more knowledgeable about the
>> hobby. It just allows the operator to communicate via another
communication
>> method.
>>
>> Finally, your posting describes how No-Codes "trash other people to make
>> themselves feel better". Well, what do you think your entire posting
just did?
>> It's almost as if you are upset that you ever learned the code. Now, you
are
>> just upset that others might not have to go through the "initiation" to
get into
>> the hobby, like you did.
>>
>> I support Morse Code and am currently studying it so I can upgrade my
license.
>> In my opinion, a 5 wpm requirement should at least be kept. Code has
been
>> proven to be superior to other types of communication in times of
necessity, so
>> it would be preferable if the majority of hams knew at least 5 wpm. The
reason
>> I posted this message was because the attitudes of "Code-Enthusiasts" is
really
>> degrading to amateur radio, a hobby in which good-will is supposed to be
so
>> evident.
>>
>> --
>> Dan Starkenburg - kc0eao
>> dan.starkenburg@cwix.com
>

1006. Re: 50 to 75 ohm power attenuators??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <78je8tfkn1@winter.news.rcn.net>
Source record: 74231

Thanks to all for the replies, it is appreciated!

Pete

1007. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <36AD430A.18BE5634@mlecmn.net>
Source record: 74232

Bill Good wrote:

> I built an iambic electronic keyer.
>
> I wish to calibrate the speed pot on it.
> Isn't there a formula like like count the number of dits
> in 10 seconds and multiply by a factor or something?
>

10 dits per second = 24 WPM.

Lyle, K0LR

1008. Re: Cellphone oscillator/IF frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990125231243.9169D-100000@Ocean.CAM.ORG>
Source record: 74233

On 24 Jan 1999, Dave Martindale wrote:

> I recently dismantled a couple of old cellphones, out of curiosity and
> looking for parts to scrounge. They are Audiovox and MEI handheld models.
> One thing that puzzles me about them is the apparent first IF frequency.
>
> Since cellphones are full duplex with a 45 MHz offset between Tx and Rx
> frequencies, I expected that they would synthesize the TX frequency
> with a PLL and also use this as the first local oscillator in the
> receiver. This would give a first IF frequency of 45 MHz while
> requiring only a single VCO. Then I'd expect to see a crystal of
> 45.455 or 44.545 MHz for the second oscillator, giving a second IF of
> 455 kHz.
>
> But that doesn't seem to be what these phones do. In one, the first
> IF filter is clearly labelled 83.160 and the crystal for the second
> local oscillator is 82.705. So the second IF is 455 kHz as I guessed,
> but where does 83.160 come from? In the other phone, the frequency
> of the first IF filter isn't marked, but the second oscillator crystal
> is again 82.705, so it seems to use the same set of frequencies.
>
> I can't find any sign of a second VCO to operate at 83.160 MHz away
> from the receive frequency (which would be either 128.16 or 38.16 MHz
> from the transmit frequency). Can anyone explain what is actually
> used as the first local oscillator frequency, and how a difference of
> 83.160 is produced?
>
> Dave

Both of the cellphones I bought for parts have dual VCO's. I should have kept the model information before I took them apart. In all four cases they are little modeuls and are actually marked "VCO". In both units the VCO's are on the same board along with the receive mixer and what must be the prescalers. On one, the VCO's are different, and one is marked "T-VCO" and the other "R-VCO". From the other cellphone, the VCOs are identical in package but have slightly different numbers; on the boards they are designated in silk-screen ""TX-VCO" and "RX-VCO".

I've assumed that this must be standard, and that the offset from transmit to receive is done in the programming of the synthesizers.

Both the phones had IF's in the 80MHz range. I don't have one of them handy, but the second cellphone (it's IF is on the same board as the VCO's etc) has an 87MHz IF (and the second IF is 455KHz; both the second filters are marked with 455 and the conversion crystal works this equation).

Before I got the first one, I did rather expect a 45MHz IF, which I admit would be a little handier for using the first filter as a roofing filter. Perhaps in the early days the designs were simpler, and used 45MHz IF's and a signal VCO? And then they decided a more complicated design was needed?

But that doesn't explain your missing other VCO. Have you looked over all the boards? Perhaps it's in a different place?

> By the way, both phones have nice little TCXOs in them. One is 15.36
> MHz and one is 12.0 MHz, which would be divided by 512 and 400 respectively
> to get the 30 kHz reference frequency needed for the AMPS channel spacing.
> Too bad that 10 MHz isn't a multiple of 30 kHz - no chance of finding
> a nice 10 MHz TCXO for upgrading frequency counters with. On the
> other hand, NAMPS uses 10 kHz channel spacing, so NAMPS phones are a
> better bet for oscillator scrounging.
>
> Why do expensive amateur handhelds still use plain crystals for the master
> oscillator, while cheaper cellphones all seem to use temperature controlled
> oscillator modules? They can't be that expensive given what cellphones
> cost these days.
>
I've wondered about the TCXOs in cellphones. Obviously they can't cost the manufacturer too much if they are being put in these. Does that mean they aren't particularly good? Because cellphones doe seem to be a cheap source of TCXO's
.
Both of the cellphones I took apart had 15.36MHz TCXOs. One could use it in a frequency counter as long as you included the divier chain.

Michael VE2BVW

1009. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36AD470D.3117@pop.removethistomailme.net>
Source record: 74234
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mark Zenier wrote:
>
> In article <36A90F11.6638@pop.removethistomailme.net>,
> John Miles <jmiles@pop.removethistomailme.net> wrote:
> >
> > http://www.amazon.com/exec/obidos/isbn=0471520195
> > http://www.amazon.com/exec/obidos/isbn=0872594920
>
> AARRRRRRRRGGGGGGGGH. Will you just put the authors and titles here
> instead of putting some USELESS URL.
>
> 1. Usenet is NOT the Internet, and no small number of people read
> the newsgroups (or the r.a.a.h mailing list mirror) without keeping
> up a direct connection. And any future use of these postings off
> an archive or printed copy will be extra work if not futile.

Sorry, Mark, gotta agree to disagree on this one. Anyone who can't look up a simple URL is nothing more than roadkill on the 'information superhighway.' I'd suggest changing your way of accessing Usenet to one which conforms with modern standards. Believe me, the ability to dereference a URL at will is worth the $20 a month it costs (in the US, at least).

Besides, in my understanding at least, ISBN numbers are not going away anytime soon. Even if you can't follow the URL itself, or if you are a conscientious Amazon objector, the "isbn=" part of the link should be easy to check out at any conventional bookstore or library. If it isn't, again, I'm sorry, but that's more your problem than mine. My advice was clearly worth exactly what you paid for it....

>
> 2. Amazon is a pox upon humanity. They're bound to be keeping track
> of everyone's web requests on some lists, over the use of which the rest
> of us will have no control. They have obnoxious employment practices.
> Their stock price vs. value is off in some alternate universe. And if
> they are successful, the zero sum game of book retailing means that an
> existing industry is going to die.

Understood, thanks for the feedback.

>
> Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

-- jm KE5FX

```
-----------------------------------------------------
Note: My E-mail address has been altered to avoid spam
-----------------------------------------------------
```

1010. Re: Help--ARRL Radio Designer- Circles utility

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36AD56F1.F168BB8B@mwci.net>
Source record: 74235

Derf Henderson wrote:

> Hello all,
> Can anyone give some guidance on setting up a 2 port network to use with
> the Circles utility to model a matching network for a load consisting of
> an equivalent parallel resistance of 772 ohms and an equivalent parallel
> capacitance of 3.3 pf ??

I will assume a frequency of 10MHz, since you did not specify.

The 770 ohm, 3.3 pF load is difficult to plot on a 50 ohm Smith chart, so we will normalize the chart at 500 ohms and assume a freq =10MHz.To access the Circles Utility, make up a "dummy" circuit file as follows:

```
BLK
RES 1 2 R=50
TEST1:2POR 1 2
END

FREQ
10MHZ
END
```

Note that the FREQ block contains the desired frequency.

The task is to locate the load on the chart and also locate the 50 ohm point that you want to match to.

The normalized load conductance is G = 500/770 = 0.649
The capacitive reactance is 4823 ohms therefore:
The normalized load susceptance is B =500/4823 = 0.1037
On the chart, draw a G=0.649 circle
Draw a B=+0.1037 circle
Draw an R=50/500 = 0.1 circle. It intersects the horixontal axis at 0.1 + j0 ohms

You now have the load admittance at the junction of the G and B circles and you have the 0.1 +j0 goal. You can now design a wide variety of networks that go from the load to 0.1 ohms.

After you get the network that you want, modify the dummy circuit file with the values that you want, after you calculate the L and C values. You can also use transmission lines. Keep in mind the 500 conversion factor when doing all of this.

I will now e-mail a picture of the Circles chart to you in PDF format. You can read it using Acrobat Reader.

Bill W0IYH

1011. Re: HF solid state 300w amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Philip de Cadenet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <L3y8vFAWmCr2Ewbv@g4zow.freeserve.co.uk>
Source record: 74236
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Alex,
>I have built an amp to the motorola design,application note AN758
>using two MFR429 transistors.been working ok until one went base/emitter
>short!....suspect i was over driving...can anyone suggest a source of these
>transistors, and has anyone come up with an
>input design to attenuate the drive and keep the beast stable.
>many tks....alex reid
Try RF Parts in San Marcos California.

They're on the net.

Phil G4ZOW

1012. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Morris Odell <morriso@vifp.monash.edu.au>
Message-ID: <36ABA38A.1180483@vifp.monash.edu.au>
Source record: 74314

> >>>Some Months ago, last year I think, there was an add-on for an RA17
> >>>published in RaDCOM. This was a valve design and should be modifiable
> >>>to almost anything.
> >>
> >>An Australian design for an SSB adaptor. Quite unnecessary.
> >>It'll hack SSB without any extras if you know how to drive
> >>it properly.
> >>
> >I know that, I wouldn't dare mod my RA17 either. What I meant was that
> >the design for the external SSB demodulator in RADCOM should be
> >modifiable to anything you want. If memory serves me it needed to be
> >hung on a few parts of the RA17 and these hooks would need altering to
> >suit whatever the person who originally asked wanted to do. The only
> >SSB mod I would use for an RA17 is the proper Racal SSB add on.
>
> I've hear of this adaptor, but never used one. What advantage
> did it have (has it) over just using the RF/IF gain and BFO
> to resolve SSB?

The Australian design you are discussing may be the one I published in "Amateur Radio" in March 1998 - I don't know if it was reprinted anywhere or what the one in RadCom was.

A few comments:

1. My design did not involve any mods to the RA17 other than wrapping a bit of wire around a tube pin and bringing it out. Certainly no soldering was involved.

2. It's true that you can listen to SSB on an unmodified RA17 but it does involve juggling the RF gain and AVC to get a (barely) passable result. My design is completely transparent in the sense that you tune the radio as you would any other more modern set leaving the AVC on and other controls alone. It also acts as a synchronous demodulator on AM.

3. If the "native" RA17 was so great on SSB, why did Racal go to the trouble of producing a SSB adaptor at all? I'd love to have one but they are pretty rare down here.

4. The design can be adapted to most other boatanchor receivers.

73 de Morris Odell VK3DOC

1013. ARRL Radio Designer, Bug #2 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <NsPq2.2321$Si1.1786743@news2.mia>
Source record: 74315
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

The graphs of MZ11 and PZ11 are incorrect on ports with negative resistance.

As one example: at negative 150 ohms, it displays positive 1500 ohms. The phase is wrong too. But there appears to be no obvious relation to the correct value. The graphs of S11 and RZ11/IZ11 are correct however.

1014. Re: Ham-Homebrew Digest V99 #16

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: RWallner@aol.COM
Message-ID: <37788745.36abd0f0@aol.com>
Source record: 74316

Please UNSUBSCRIBE rwallner@aol.com
tnx.

1015. Help >> PCB/PWB Layout Software Suggestion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19990124230342.05426.00002445@ng-fu1.aol.com>
Source record: 74317

I'd appreciate folks experience with PWB layout software that is in the "affordable" range for ham use.

I only need to do simple boards with manual routing and at the most two sided, but probably single sided is fine. I have looked at all of these and none appear to be RF friendly:

Express PCB
Eagle
Easytrax
Traxmaker
Cadint

The closest thing I can find so far to my needs is CIRCAD, which appears to be a DOS program although it seems to work ok in Win95.

I will, at most have one or two DIP packages, with most of the rest being TO-92, SOT surface mount, or RF power transistors (need to have the capability to layout microstrip lines). Want to be able to print a 1:1 output on my HP laserjet printer for the iron-on transfer method to PWB material. Manual routing is mandatory. I don't want autorouting.

Anyone who has any suggestions, I'd sure like to hear it. Please reply here or to WB4LNMxx@aol.com (remove the xx before mailing). Thanks and 73

John...

1016. Amateur Radio Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: zclobes@southwind.net
Message-ID: <36abee13.46563753@news.southwind.net>
Source record: 74318

The RCKARA Online Swap-Meet is now fully functional. Stop by to post
your for sale/trade/wanted adds.

<A href="http://www.rckara.org/">http://www.rckara.org/</A>

1017. Re: ARRL Radio Designer - Bug ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <cWSq2.2396$Si1.1892645@news2.mia>
Source record: 74319
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

William E. Sabin wrote in message <36ABBD4E.FB6862F7@mwci.net>...
>Bert Douglas wrote:

<snip>
>> The model for transmission lines does not seem to give correct results,
>> especially when one end of the line is connected to node zero (ground).
>> Here are two circuits that should give very similar results, but they do
>> not.

<snip>
>Put a TRF ahead of the TRL. Use a 1:1 turns ratio and float the bottom end
>ofTRF secondary and the bottom end of the input of TRL. This problem has
been
>noticed before. This should fix the problem:
>
>BLK
>TRF 1 2 0 3 N=1
>TRL 2 4 3 0 Z=20 E=20 F=2.44 A=0.88
>CAP 4 5 C=5PF
>TEST1:1POR 5 0
>END
>
>Correction. Should be TRF 0 2 0 3 N=1
>
>Bill W0IYH

Thanks a lot. I will try it tomorrow. I suppose it is possible to make a
"wrapper" circuit that I can use everywhere instead of TRL.

Is there a list of known"fixes" like this for ARRL Radio Designer?

Bert

1018. ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: CBRambo@W6RCeicilA.net
Message-ID: <78h2l8$a2m$1@usenet43.supernews.com>
Source record: 74320
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

No-Code whiners are liberals. They don't like something so they trash other people to make themselves feel better. The ARRL is BOD is also full of liberals. Their restructuring proposal is just a membership drive aimed at liberals. Liberals always have their hand out waiting for someone to put something in it for free. That is why they like the ARRL proposal too. They can get something they don't have to work for.

1019. Re: 50 to 75 ohm power attenuators??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <XDUq2.624$bJ1.2938@news3.ispnews.com>
Source record: 74321

CommQuart wrote in message <78fgdk$3vm$1@winter.news.rcn.net>...

>First off, are these commercially produced?

All I have ever seen are minimum loss impedance matching attenuators. I have a 75 ohm:50 ohm unit.

>Since the heads are very expensive and easily damaged, I
>want to use the 75-ohm sensors for routine work.
>figure I need three 10-dB attenuators to cover the ranges
>I need. The last attenuator will need to have 50-ohm input
>and 75-ohm output impedance, the problem is I can't find
>any designs for 10-dB attenuators with these characteristics
>(unit should be good for a least 500-mW as well). Can anyone
>reference a text which shows how to design pi attenuators
>having unequal input and output impedances? Can anyone
>recomend a source for decent quality resistors (monolithic)
>for this project? The attenuators should be as accurate as
>possible, I can probably verify to a few 10ths of a dB using
>my signal generators and RF Millivolter.

Several people have mentioned minimum loss attenuators but none have listed the component values for these. What they are talking about is the fact that for any ratio of the impedances to be matched, there is a minimum attentuation that can be achieved with realizable components. The general formula is:

Kmin = 2*Z1/Z2 - 1 + 2*SQRT(Z1/Z2 * (Z1/Z2 -1))

where: K = power into network/power out of network, a ratio - not decibels
Kmin = minimum value of K for a realizable network
Z1 = higher impedance to be matched, ohms
Z2 = lower impedance to be matched, ohms

For the case of Z1 = 75 ohms and Z2 = 50 ohms, K = 3.732 or 5.72 dB. Any amount of attenuation in excess of this can be obtained.

To design an attenuator, you can go with either a "Tee" arrangement or a "Pi" arrangement. I'll cover the T-network first. Since I hate to draw ASCII schematics (and get questions from people who do not use fixed width fonts), allow me to verbally describe the network. The T-network has two series resistances and one shunt resistance. Call the series resistor connected to the higher impedance R1. The shunt resistor is R3, and the series resistor connected to the lower impedance is R2.

R1 = [Z1 * (K+!) - 2 * SQRT(K * Z1 * Z2)] / (K-1)

R2 = [Z2 * (K+!) - 2 * SQRT(K * Z1 * Z2)] / (K-1)

R3 = 2 * SQRT(K * Z1 * Z2) / (K - 1)

If you substitute in the minimum attenuation value, R2 = 0. The other two values are R1 = 43.3 and R3 = 86.6 ohms. For all higher attenutations, R2 will have a positive value. In cases with Z1 = Z2, then R1 = R2 and the conventional equations may be derived.

Likewise a Pi-network could be used. This has two shunt resistors and a series resistor. Calling the shunt resistor connected to the higher impedance load R4, the series resistor R6, and the shunt resistor connected to the lower impedance load R5, the following equations apply:

R4 = [(K - 1) * Z1 * SQRT(Z2)] / [(K + 1) * SQRT(Z2) - 2 * SQRT(K * Z1)]

R5 = [(K - 1) * Z2 * SQRT(Z1)] / [(K + 1) * SQRT(Z1) - 2 * SQRT(K * Z2)]

R6 = (K - 1) * SQRT(Z1 * Z2 / K) /2

Again substituting the minimum value for K, R4 is infinite for Z1 = 75 and Z2 = 50. R5 = 86.6 ohms and R6 = 43.3 ohms respectively. But naturally in the minimum attenuation case the networks are identical. Also if Z1 = Z2, then R4 = R5.

It may not be obvious to everyone until they play with the number some, but there is some beautiful symmetry in these equations.

I pulled these equations from a spreadsheet I wrote to calculate such values. I was interested because I had an old signal generator with a 600 ohm output impedance and I wanted 50 ohms. In this case Kmin = 45.98 or 16.62 dB. I went with a ratio of 100 or 20 dB to make converting the signal generator output voltage easier. You will probably want to do the same using either 6 or 10 dB. I think I found the original derivation in Everitt's "Communications Engineering" from around 1935 or so.

As for resistors, I would use noninductive chip resistors if you want UHF operation. For low HF, metal film resistors should work fine [their inductance is much smaller than you might think].

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

1020. Re: PVC vs ABS: Lossy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: rexa*nospam*@dnai.com
Message-ID: <36ac1ed7.128706185@news.dnai.com>
Source record: 74322

On Thu, 21 Jan 1999 00:46:47 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>WF6R wrote:
>>In article <Pxo8pDA7mYp2Ewrs@ifwtech.demon.co.uk>,
>> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>>
>>> The microwave oven test is the best comparative test of RF losses
>>> available to amateurs. If you put several different samples in a
>>> turntable oven so that they're all exposed uniformly, it's easy to judge
>>> which ones get warmer than the others, allowing of course for the mass
>>> and shape.
>>
>>My only problem with Ian's microwave oven test is that it is only
>>and indicator of a material's absorption at 2450MHz, the frequency of
>>the oven (at least US models).
>
>So if a material tests out good at 2450MHz, it should
>be even better at lower frequencies.
>
>If a material gets warm at 2450MHz, it may still be usable at lower
>frequencies in a light-duty situation. But even the best RF insulating
>materials can still fail if they're put in an impossible situation, eg:
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.demon.co.uk/g3sek

I think Steve was thinking more of higher frequencies like 10 or 24 GHz.
I believe it could get worse in that direction.

- Rex Allers

Please remove *nospam* from my address to reply via email.

1021. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Rick Kaumeier <rkaumeier@SNIPearthlinkSNIP.net>
Message-ID: <36AC2164.5D15@SNIPearthlinkSNIP.net>
Source record: 74323
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

HamMan wrote:

> No-Code whiners are liberals..... <and so forth and so on and shooby dooby doo...>

<Looks at hook, sniffs bait. Bleagh.>

Sorry, not gonna bite on this one.

Rick, Kï¿½VJ

1022. Re: FM mod for FT-707

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <78ha0n$ee5$1@news7.svr.pol.co.uk>
Source record: 74324

IIRC "shortwave magazine" carried a few articles on FM and 160m mods.
the 160m mod was certainly not for the faint hearted. it used the blank
position on the bandswitch between 10m band D and 80m.
for FM tx the mod was put on the RIT varicap, having previously been
suitably limited and filtered, the rx side was, i think, a MC3359 ?, taken
from somewhere near the IF filter.
good luck..
Mike G8NXD, using FT707 for transverter driving../ no pa, and external ALC
mods /
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

John Mortlock wrote in message <78g66v$qt3$2@news7.svr.pol.co.uk>...

>
>Martin, Thanks for the info on the FM mod.
>I have been offered a 707 cheaply.
>It does 80 through 10 with the new bands,
>no 160 though have you or anyone else,
>heard of a 160 mod for the FT-707 ??
>
>
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1023. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Unclaimed Mysteries <cls@ro.com>
Message-ID: <36ABE453.37A5FC15@ro.com>
Source record: 74325
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Rick Kaumeier wrote:
>
> HamMan wrote:
>
> > No-Code whiners are liberals..... <and so forth and so on and shooby dooby doo...>
>
> <Looks at hook, sniffs bait. Bleagh.>
>
> Sorry, not gonna bite on this one.

I'll take this one.

Thank you for writing. It's all true. CW is representative of the old captialist/conservative system, popular among angry white males, that emphasizes acquisition of licenses to operate a station much as he oppresses women and minorities on his non-ham life. We of the United Conspiracies believe it is time for a new age in communications, not governed by so-called standards such as Ohm's Law and other scientific principles named after dead white European males.

We propose a class-based system where the have-nots can modify standards to compensate for the generations of oppression at the hands of the techno-fascists. We realize this will distress the privileged elite, but the inevitable march of history cannot be stopped. Eliminating code requirements are only the beginning. Soon there will be a speech code enforced. Many on this group are making statements that create an atmosphere of hostility toward those in government who are trying to implement the New Radio Order. The American People will not tolerate this (polls show), and we will put a stop to it.

Wishing you a good seat at the re-education center, I remain

--
It Came from Unclaimed Mysteries
C. L. "Mmmm...Delicious flame bait" Smith, Maximum Director
K4DOH
http://www.nasw.org/users/clsmith/

1024. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: mwmorgan@nwpt.net
Message-ID: <36ac4791.15249042@news.npwt.net>
Source record: 74326
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Mon, 25 Jan 1999 03:26:11 +0000, Unclaimed Mysteries <cls@ro.com>
wrote:

>
>
>Rick Kaumeier wrote:
>>
> > HamMan wrote:
>>
>> > No-Code whiners are liberals..... <and so forth and so on and
shooby dooby doo...>
>>
>> <Looks at hook, sniffs bait. Bleagh.>
>>
>> Sorry, not gonna bite on this one.
>
>I'll take this one.

It is amazing the number of people that seem to think that.
Personal I supported Clitnton being impeached. I think he should be
removed by the Senate (alas I don't think they will do do it but i
think they should) Indeed I am quite conservitive and a belivier in
the strict application of the constitution, and very conservitive
politcaly, as well VERY VERY NoCode

1025. "A QRP tramsmitter from the computer"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: masrjmh@brunel.ac.uk
Message-ID: <78hj08$t12$1@mimas.brunel.ac.uk>
Source record: 74327

Under the title mentioned in the subject, WA8MCQ had published an article in the QRP Quarterly for October 1995, and a copy of this article has also appeared on the WWW. Unfortunately, the WWW version is without the figures. Also, an article in the November 1990 issue of 73 magazine was mentioned there (on the "Fireball transmitter"). Unfortunately, I have neither of those two magazines, and I'd be glad if somebody could send me a copy of these articles. Maybe send me an e-mail first.

vy 73 de M0CEF = DL2LFH,
Jan-Martin

1026. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: ham_man@my-dejanews.com
Message-ID: <78hs9u$i7b$1@nnrp1.dejanews.com>
Source record: 74328
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hey Rambo.....Ham_man is taken already.....

In article <78h2l8$a2m$1@usenet43.supernews.com>,
CBRambo@W6RCeicilA.net (HamMan) wrote:
> No-Code whiners are liberals. They don't like something so they trash other
> people to make themselves feel better. The ARRL is BOD is also full of
> liberals. Their restructuring proposal is just a membership drive aimed at
> liberals. Liberals always have their hand out waiting for someone to put
> something in it for free. That is why they like the ARRL proposal too. They
> can get something they don't have to work for.
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1027. Re: ARRL Radio Designer - Bug ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36AC5BCF.70FD1A38@mwci.net>
Source record: 74329
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:

> Is there a list of known"fixes" like this for ARRL Radio Designer?
>

There is a two-part article in QEX that deals with the Circles Utility in Radio Designer that you may be interested in. It can be downloaded from ARRL website, or I can e-mail it to you.

Bill W0IYH

1028. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Dan Starkenburg <dan.starkenburg@cwix.com>
Message-ID: <36ACA2A4.8ECBCA36@cwix.com>
Source record: 74330
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> No-Code whiners are liberals. They don't like something so they trash other
> people to make themselves feel better. The ARRL is BOD is also full of
> liberals. Their restructuring proposal is just a membership drive aimed at
> liberals. Liberals always have their hand out waiting for someone to put
> something in it for free. That is why they like the ARRL proposal too. They
> can get something they don't have to work for.

There's a reason why the ARRL has offered a restructuring proposal: Amateur Radio is dying. This fact is evident by looking at the decline of new amateur licenses being granted. Also, the median age of hams is getting significantly older. The ARRL figures that by doing away with the code requirements, it will attract more people to the hobby.

Why is Amateur Radio dying? Because people such as yourself are carrying on a "holier than though" attitude towards those who don't yet know the code. Your attitude disgusts them, and they have no desire to become what you already are. So, if people such as yourself would drop the no-code issue, and be a bit more welcoming towards ham prospects, perhaps there would not be a need for the proposal.

Morse Code is in no way related to Clinton. Which brings me to my next point: Memorizing Dits-and-Dashes (which is very easy to do with a program such as CodeQuick) does not make an Amateur Operator more knowledgeable about the hobby. It just allows the operator to communicate via another communication method.

Finally, your posting describes how No-Codes "trash other people to make themselves feel better". Well, what do you think your entire posting just did? It's almost as if you are upset that you ever learned the code. Now, you are just upset that others might not have to go through the "initiation" to get into the hobby, like you did.

I support Morse Code and am currently studying it so I can upgrade my license. In my opinion, a 5 wpm requirement should at least be kept. Code has been proven to be superior to other types of communication in times of necessity, so it would be preferable if the majority of hams knew at least 5 wpm. The reason I posted this message was because the attitudes of "Code-Enthusiasts" is really degrading to amateur radio, a hobby in which good-will is supposed to be so evident.

--
Dan Starkenburg - kc0eao
dan.starkenburg@cwix.com

1029. High Dynamic Range Front End

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: bkizerian@my-dejanews.com
Message-ID: <78i7ov$re8$1@nnrp1.dejanews.com>
Source record: 74331

Have been re-reading Jacob Makhinson's article "A High Dynamic MF/HF Receiver Front End" from the Feb. 93 QST. I understand that someone has upgraded his design using a more readily available quad J-FET replacement for the Si8901/SD8901. Can anyone direct me to this reference? My plan is to build a "bullet proof" single-band receiver. Any information you have on low phase noise VFO's would also be appreciated. Please contact me directly at kizerian@ced.utah.edu

Thanks

Bruce Kizerian kk7zz

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1030. Re: Cellphone oscillator/IF frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36ac893a.0@news.netwalk.com>
Source record: 74332

Dave Martindale wrote in message <78g65s$1fm@zeppo.cs.ubc.ca>...

[snip..snip]
>Why do expensive amateur handhelds still use plain crystals for the master
>oscillator, while cheaper cellphones all seem to use temperature controlled
>oscillator modules? They can't be that expensive given what cellphones
>cost these days.
>

Can't say about the oscillator frequencies without seeing the units, but as far as the cost of cell phones....

If you went out and actually tried to buy a phone on the open market you would see just how expensive they are!

Why they are marketed at 99 cents (or even free in some cases) is that the cell phone company quickly makes the difference up in the monthly usage charges. Basically they give you the phone knowing that you will give them your wallet every month.

Can you say 'loss leader'?

Now if we all sent $5 to the ARRL every time we used the local repeater, then maybe we could all get dual band HTs for 99 cents!

Since I no longer work for a cell phone company, I can say this:

If you are considering getting one, ask for a refurbished Motorola MicroTAC. They are the most dependable. (That is for 'normal' 800 MHz---don't know about digital or PCS) Figure how much you can afford each month, and look for a contract that is that amount (for so many minutes per month), then _watch_your_usage_time_!!

Jim
N8EE

1031. Re: 50 to 75 ohm power attenuators?? - make a 10 dB matching Att first....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Jim <I.hate.SPAM@nospam.com>
Message-ID: <78i2u2$ffb@sjx-ixn9.ix.netcom.com>
Source record: 74333

I'd be inclined to make a 10 dB matching attenuator and then do all the
rest of the attenuation with standard 50 ohm attenuators. This would keep
the scales on the meter on the 10 dB marks, you just add 10 dB to the
reading to get the actual value.

75 Ohm -------------------- 91 ohm --------------------- 50
ohm load
P'meter | |
| |
| |
200 ohm 75 ohm
| |
| |
Gnd Gnd

10 dB 75 to 50 ohm attenuator.

---

75 Ohm -------------------- 43 ohm --------------------- 50
ohm load
P'meter |
|
|
91 ohm
|
|
Gnd

5.72 dB minimum loss 75 to 50 ohm attenuator.
This is as low as you can get for attenuation
while
matching 75 to 50 ohms.

As you can see, it will make the power meter
reading
so that you'd have to add 5.72 dB to whatever the
meter
reads to get the actual value.

Jim N6BIU

jpennell .kill.spam at i h-a-t-e spam .ix.netcom.com

Remove the middle nonsense to reply... EMAIL Spam is no fun.

1032. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: rbmccammon@mmm.com
Message-ID: <36AC9320.39BF783@mmm.com>
Source record: 74334
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mark Zenier wrote:
>
> In article <36A90F11.6638@pop.removethistomailme.net>,
> John Miles <jmiles@pop.removethistomailme.net> wrote:
> >
> > http://www.amazon.com/exec/obidos/isbn=0471520195
> > http://www.amazon.com/exec/obidos/isbn=0872594920
>
> AARRRRRRRRGGGGGGGGH. Will you just put the authors and titles here
> instead of putting some USELESS URL.

Mark, I respectfully disagree. I find these URL's very useful.
Of course, it would be OK to put down the author and title also.

Opinions expressed herein are my own and may not represent those of my employer.

1033. Military QRP Club

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: cogan@ladwp.com
Message-ID: <78i4jeonj1@nnrp1.dejanews.com>
Source record: 74335

Thinking of starting a radio net / club / contest ??? that uses surplus>military radio gear. Older gear would be (AM mode) welcome...BUT the newer stuff of the 60's thur current would be prefered like the>>> "AN/PRC-GRC-URC types"109,106,25,77,47,74,104,132,1009 etc with CW/SSB or FM modes. The idea would be to get out of the shack and into the>field and operate this gear kinda like it was intended, but for>fun/contest or??? Anyway you get the picture. Since most of this gear is portable/manpack design, battery operated and low RF power output maybe QRP frequencys already known to amateurs could be used?? Anyway just thinking outloud to see what the world wide web thinks... If this sounds like something to do on a weekend, once a month, once in awhile or never... drop me an E-mail and let's get going and have some fun on the bands with surplus radio gear. (THE GREEN STUFF QRP CLUB) Thanks, CAMERON / WA6VVC E-mail AT > cogan@ladwp.com <
PS: Past this on to help get the word out.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1034. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Wildcat <wildcat@tp.net>
Message-ID: <dS0r2.132$ro5.211@news15.ispnews.com>
Source record: 74336
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Here here.....good post

--

Some people look at what is and ask why.....
Other people look at what isn't and ask why not.....

.
Dan Starkenburg wrote in message <36ACA2A4.8ECBCA36@cwix.com>...
>> No-Code whiners are liberals. They don't like something so they trash other
>> people to make themselves feel better. The ARRL is BOD is also full of
>> liberals. Their restructuring proposal is just a membership drive aimed at
>> liberals. Liberals always have their hand out waiting for someone to put
>> something in it for free. That is why they like the ARRL proposal too. They
>> can get something they don't have to work for.
>
>There's a reason why the ARRL has offered a restructuring proposal: Amateur
>Radio is dying. This fact is evident by looking at the decline of new amateur
>licenses being granted. Also, the median age of hams is getting significantly
>older. The ARRL figures that by doing away with the code requirements, it will
>attract more people to the hobby.
>
>Why is Amateur Radio dying? Because people such as yourself are carrying on a
>"holier than though" attitude towards those who don't yet know the code. Your
>attitude disgusts them, and they have no desire to become what you already are.
>So, if people such as yourself would drop the no-code issue, and be a bit more
>welcoming towards ham prospects, perhaps there would not be a need for the
>proposal.
>
>Morse Code is in no way related to Clinton. Which brings me to my next point:
>Memorizing Dits-and-Dashes (which is very easy to do with a program such as

>CodeQuick) does not make an Amateur Operator more knowledgeable about the
>hobby. It just allows the operator to communicate via another
communication
>method.
>
>Finally, your posting describes how No-Codes "trash other people to make
>themselves feel better". Well, what do you think your entire posting just
did?
>It's almost as if you are upset that you ever learned the code. Now, you
are
>just upset that others might not have to go through the "initiation" to get
into
>the hobby, like you did.
>
>I support Morse Code and am currently studying it so I can upgrade my
license.
>In my opinion, a 5 wpm requirement should at least be kept. Code has been
>proven to be superior to other types of communication in times of
necessity, so
>it would be preferable if the majority of hams knew at least 5 wpm. The
reason
>I posted this message was because the attitudes of "Code-Enthusiasts" is
really
>degrading to amateur radio, a hobby in which good-will is supposed to be so
>evident.
>
>--
>Dan Starkenburg - kc0eao
>dan.starkenburg@cwix.com
>
>

1035. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: WW - KB9TMP <No_Spam_@_My_Address.OK>
Message-ID: <36AC9DC2.6EDEE39A@_My_Address.OK>
Source record: 74337
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dan Starkenburg wrote:
>
> > No-Code whiners are liberals. They don't like something so they trash other
> > people to make themselves feel better. The ARRL is BOD is also full of
> > liberals. Their restructuring proposal is just a membership drive aimed at
> > liberals. Liberals always have their hand out waiting for someone to put
> > something in it for free. That is why they like the ARRL proposal too. They
> > can get something they don't have to work for.
>
> There's a reason why the ARRL has offered a restructuring proposal: Amateur
> Radio is dying. This fact is evident by looking at the decline of new amateur
> licenses being granted. Also, the median age of hams is getting significantly
> older. The ARRL figures that by doing away with the code requirements, it will
> attract more people to the hobby.
>
> Why is Amateur Radio dying? Because people such as yourself are carrying on a
> "holier than though" attitude towards those who don't yet know the code. Your
> attitude disgusts them, and they have no desire to become what you already are.
> So, if people such as yourself would drop the no-code issue, and be a bit more
> welcoming towards ham prospects, perhaps there would not be a need for the
> proposal.
>
> Morse Code is in no way related to Clinton. Which brings me to my next point:
> Memorizing Dits-and-Dashes (which is very easy to do with a program such as
> CodeQuick) does not make an Amateur Operator more knowledgeable about the
> hobby. It just allows the operator to communicate via another communication
> method.
>
> Finally, your posting describes how No-Codes "trash other people to make
> themselves feel better". Well, what do you think your entire posting just did?
> It's almost as if you are upset that you ever learned the code. Now, you are
> just upset that others might not have to go through the "initiation" to get into
> the hobby, like you did.
>
> I support Morse Code and am currently studying it so I can upgrade my license.
> In my opinion, a 5 wpm requirement should at least be kept. Code has been
> proven to be superior to other types of communication in times of necessity, so
> it would be preferable if the majority of hams knew at least 5 wpm. The reason
> I posted this message was because the attitudes of "Code-Enthusiasts" is really
> degrading to amateur radio, a hobby in which good-will is supposed to be so
> evident.
>

> --
> Dan Starkenburg - kc0eao
> dan.starkenburg@cwix.com

--
Very well spoken! Just because I'm a no-code tech means I have a lower
class license not that I'm a lower class person!

"73" from the cornfields of Indiana!

<')))>< WW - KB9TMP <')))><
email me at kb9tmp@usa.net
home page http://www.qsl.net/kb9tmp/
http://www.angelfire.com/in/orleanschristian/

1036. SMD resistors for GHZ frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <Q71r2.2168$oi.2159134@news3.mia>
Source record: 74338
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Are all SMD resistors the same? Do the normal ones you buy in DigiKey work ok in the 2.5 GHZ range?

All it says in Digikey is "thick film", with no further data.

1037. Re: spectum analyzer build

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36ac94aa.0@news.netwalk.com>
Source record: 74339

MX wrote in message <78h22e$1km$1@SOLAIR2.EUnet.yu>...
>Hi!
>Want to exchange experience or schemes with people who build spectrum
>analyzer (oscilloscope + TV tuner+sweep gen.). Regards
>
>Flash
> elflash@nonospam.eunet.yu (please remove nonospam from address)
>
>
>

I have some of these units, but have not finished the project yet.

One of the things I am considering is to use the TV tuner non-swept and sweep at the IF. I beleive most of them have an output around 45 MHz. The swept oscillator would then have to go from 55.7 to 60.7 MHz, for example, and would mix the 45 MHz to 10.7, where crystal filters would be used.

The advantage of this is that the TV tuner could then be phased locked. The disadvantage is that an extremely wide band sweep would not be possible.

This is basically what used to be called a 'panoramic receiver' instead of a spectrum analyzer.

Jim
N8EE

1038. need - scott edwards electronics - Picture stick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: richard friedrich <dakota@ccwf.cc.utexas.edu>
Message-ID: <36ACA361.3FEBA275@ccwf.cc.utexas.edu>
Source record: 74340
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

S.E.E. discontinued their picture stick 2 years ago - I now want to buy one. Any one have one one?

it is a scanning led display

a little pic computer chip flashes a series of 16 diodes that are mounted on a stick.

by physically waving the stick around, one can see a 2 dimensional picture or text display.

any alternative ideas from any of you smart guys out there?

(I fly radio controlled helicopters - I though it would be fun to fly at night - and see a moving picture on the "swept out" rotor !!)

this is similar to stamp application #14
ftp://ftp.nutsvolts.com/pub/nutsvolts/library/stampaps/st_ap14.pdf

thanks

richard

wd5-hrp

1039. Re: Using a high powered stereo audio amp as a HF amp - Yes/No??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990125152422704 32@zetnet.co.uk>
Source record: 74341

> > I have a Heathkit AA-1800 Stereo power amp 250watts per channel
> > that I built a long time ago, and it's just sitting around. Works like
> > a charm and has very low noise (low THD) and it kicks hard.
> > I heard someone talking the other day on 40 meters about using
> > a stereo amp as a HF amateur radio amp. Is this possible?
> > Anyone know if it can be "converted"?
> > This sucker is 60lbs and the 2 main caps are HUGE and it's
> > got huge heat sinks on each side.
> > thanks, sda

> 160m occurs as a logical possibility ... possibly not worth the
> re-engineering effort above that.

> Now as a modulator for a 75m AM rig ... hmmm. :-)

==========
Or as a rig for the new 136 KHz amateur allocation in Europe .....and USA ?

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

1040. Re: Homebrewed rotary - variable inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990125153716704 32@zetnet.co.uk>
Source record: 74342

> Now here's a guy willing to try something, and I think we should give him
> some support.
> One problem is that the physical space inside the hole limits the size of
> the wiper, and thus the amount of power that can be handled. I seem to
> remember a design using a wiper on the outside. The wire does not have to
> be in intimate contact with the iron, so a form or spacer can be used to
> form the surface shape. Don't get carried away, as the more wire, the more
> loss and slightly lower Q. The other consideration is the power handling
> capacity of the core itself, and there someone else is going to have to chip
> in with some guidance. My active construction with ferrite and powdered
> iron ended before the current crop of materials appeared. Good luck.
> Crazy George
=========
Perhaps it would be possible to construct a variometer type of
arrangement with power cores or moving a bundle of ferrite bars (ex
MW radios?) in/out 2 inductors

Ferrite bars ex MW radios however might cover only a limited freq range .

Good Luck

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

1041. Re: Homebrewed rotary inductors?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990125160919704 32@zetnet.co.uk>
Source record: 74343

> As an example of what has been done: For some years I used an L match made
> from a variable ribbon inductor that was originally part of a Collins
> autotuner. The original construction of the inductor featured an approx. 1.5
> inch diameter fixed core of something (I assume ferrite) inside the active
> part of the cylindrical coil. I ran typical 200 Watt output and never
> bothered taking the ferrite's temperature. Maybe it caused losses for both
> me and the original application. Your opinion please: would you have
> worried about that core?

> For those not familiar with the equipment, the coil changed inductance by
> winding or unwinding turns off of a brass cylinder and onto a ceramic cylinder
> having helical grooves so the silver ribbon conductor formed a solenoid. The
> mechanism was motor driven of course, so inductance could be automatically
> varied. And although we are interested in homebrew, I would not dream of
> home-building THAT inductor. (chuckle)
> --Don
==========
Don, I have 2 of those (motor driven) units , from Collins
auto-tuners out of an aircraft installation.
Both drums have a diameter of approx 3.5 inches.
According to Peter, G3RZP they are meant for a '100 Watts' job.
It would be an elegant solution to a PI tank .....but perhaps
not for RF power ratings much in excess of 100 Watts

The Collins tuners were not that long ago available from a surplus
equipment/components supplier :
Birkett - Lincoln ,England and also contained a motorised
1000pF-3000 V variable Jennings vacuum cap , a Jennings vacuum relay
,a motorised low power roller coaster inductor and a bunch of high
quality hermetically sealed relays. Birketts' advertises in RSGB's
Radcom. Their prices are somewhat more modest than those at Surplus
Sales of Nebraska.

Frank , GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

1042. Re: SMD resistors for GHZ frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <rM1r2.2180$oi.2180424@news3.mia>
Source record: 74344
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote in message ...
>Are all SMD resistors the same? Do the normal ones you buy in DigiKey work
>ok in the 2.5 GHZ range?
>
>All it says in Digikey is "thick film", with no further data.

And I just went to the Panasonic Industrial Components site at:
http://www.panasonic.com/pic/
and downloaded PDF data sheets, and there is no further information about
high frequency behavior or parasitics.

1043. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <78iak0mvo1@208.207.71.149>
Source record: 74345
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

ham_man@my-dejanews.com wrote:
>
> Hey Rambo.....Ham_man is taken already.....
>

Yeah, Rumbo---you better put in for a new callsign and stop
that pirating.....

1044. Re: need - scott edwards electronics - Picture stick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Tim Hynde <ka8ddz@eaglequest.com>
Message-ID: <78iba2kl1@smithers.eaglequest.com>
Source record: 74346
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hmmm I'd like one of those myself, I built a sine wave "wand" in High School using a 555 timer and 4017's cascaded to drive about 20 led's when you waved it you could see a sine wave. Not nearly as impressive as a Picture Stick however!

richard friedrich wrote in message <36ACA361.3FEBA275@ccwf.cc.utexas.edu>...
>S.E.E. discontinued their picture stick 2 years ago - I now want to buy
>one. Any one have one one?
>
>it is a scanning led display
>
>a little pic computer chip flashes a series of 16 diodes that are
>mounted on a stick.
>
>by physically waving the stick around, one can see a 2 dimensional
>picture or text display.
>
>any alternative ideas from any of you smart guys out there?
>
>
>(I fly radio controlled helicopters - I though it would be fun to fly
>at night - and see a moving picture on the "swept out" rotor !!)
>
>
>this is similar to stamp application #14
>ftp://ftp.nutsvolts.com/pub/nutsvolts/library/stampaps/st_ap14.pdf
>
>
>
>
>thanks
>
>
>
>richard
>
>wd5-hrp
>

1045. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Lee Scott <DownWithJunkMail@Spam.Net>
Message-ID: <01be4891$3bae77a0$b09b45d1@leescott>
Source record: 74347
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> > Why is Amateur Radio dying?
>> Because people such as yourself are carrying on a
> > "holier than though" attitude towards those who don't yet know the
code.

Yes, because of Yahoos like "HamMan" both on and off the air.

> > Your attitude disgusts them,

and me too.

>>and they have no desire to become what you already are.
> > So, if people such as yourself would drop the no-code issue, and be a
bit more
> > welcoming towards ham prospects, perhaps there would not be a need for
the
> > proposal.

The hand writing is on the wall, and I suspect (IMHO) that at the next WRC the requirement for any kind of code test will finally be dropped for any radio operator including ARO's!!

I got into Ham Radio because of the NO-CODE Tech class license. Learning the code takes a lot of time that I just don't have right now. I work a full time job as an Electrical Engineer and I take classes at night (I'm 42 so I'm no kid) to finish up a degree in Math/Computer Science. Now for the record, I am getting a degree in computer science just for the hell of it, nobody twisted my arm to do it. I like computers as a hobby so I decided to get the degree. What I don't need is someone twisting my arm to take a Morse Code test for a mode I currently have zero interest in using. I don't have a problem with taking any tech exams, but singling out CW for special treatment (operator filter, gateway, hazing rite etc.), get a life! When and if I ever want to use CW I know that I will study and learn the code and will do a proper job of it. So if the FCC wants to take away my no-code Tech licensee (the PRO-CODERS dream come true), that's fine, I'll spend my money on a new computer instead of a new radio and get onto the Internet. Then I'll sit back while the membership of the ARS dwindle, the FCC sells off the Ham Bands to the highest bidder and smile.

There are more that you may suspect (Tech NO-CODES) who are more qualified to operate a radio than some of the smug PRO-CODE Extras I see posting in this NG. Just because we don't have that elite licensee class does not imply we are a bunch of lazy good-for-nothing dumb hicks.

Oh yes, Clinton has nothing to do with this thread.

Leland C. Scott
KC8LDO
ARRL member
NCI member

1046. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: mikedn@conan.ids.net
Message-ID: <1a3r2.84$cV.2501@news12.ispnews.com>
Source record: 74348
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <01be4891$3bae77a0$b09b45d1@leescott>,
Lee Scott <DownWithJunkMail@Spam.Net> wrote:

>I got into Ham Radio because of the NO-CODE Tech class license. Learning
>the code takes a lot of time that I just don't have right now. I work a
>full time job as an Electrical Engineer and I take classes at night (I'm 42
>so I'm no kid) to finish up a degree in Math/Computer Science. Now for the
>record, I am getting a degree in computer science just for the hell of it,
>nobody twisted my arm to do it. I like computers as a hobby so I decided to
>get the degree. What I don't need is someone twisting my arm to take a
>Morse Code test for a mode I currently have zero interest in using.

Gee, you're a busy guy. You're so busy, one has to wonder how much time
you have to actually OPERATE. After all, you're SOOOOO busy that you can't
learn morse code, you must be SOOOOOO busy that you can't get on the air
and operate 2 meter FM on a repeater, right?

>I don't have a problem with taking any tech exams

Well, gooooool-leeee. Wonder why not? Maybe 'cuz you already KNOW all that
material, so don't have to expend an erg of energy to actually get a ham
license in that manner?

MD

--
-- Never argue with an idiot -- they'll just bring you down to their level,
-- and then beat you back with experience.
--
-- If you don't like my opinions, that's just too damn bad.

1047. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Jones <Jones@please-no-email.com>
Message-ID: <ezO#peJS#GA.247@upnetnews05>
Source record: 74349
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

>Why is Amateur Radio dying? Because people such as yourself are carrying
on a
>"holier than though" attitude towards those who don't yet know the code.
Your
>attitude disgusts them, and they have no desire to become what you already
are.
>So, if people such as yourself would drop the no-code issue, and be a bit
more
>welcoming towards ham prospects, perhaps there would not be a need for the
>proposal.
>Dan Starkenburg - kc0eao

While there does seem to be more rude people on the air today than in the past, it is not the main reason for the numbers problem. There are simply many more intresting things to do using other media that require no entrance exam. When the code test is finally gone, and the written test is reduced to simple regulations, you may be surprised to find how few will rush forward to become hams...

1048. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <l+veUKAGmLr2EwOZ@falstaf.demon.co.uk>
Source record: 74350
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <36ab83a3.6888148@news.prestel.co.uk>, Jim Dunnett
<olympus@0spam.prestel.co.uk> writes
>On Sat, 23 Jan 1999 23:54:33 +0000, Robin Birch <robin@falstaf.demon.co.uk>
>wrote:
>
>>But then I've always started from the position of having a set that was
>>reasonably well aligned to start with. I don't think I would like to
>>start with a set that had had its settings scrambled. Although I'd have
>>a go if someone presented me with one.
>
>And they stay in alignment for years.
>
Very true, one of the most stable (over long periods of time) circuits
that I have ever seen (in I must admit a relatively limited life :-))

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

1049. Re: Want: MAX232 Schematic for Icom Computer interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: mjgilbert@wcom.net
Message-ID: <36acaf58.14180460@news.compuserve.com>
Source record: 74351
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.swap

It's in an issue of the ARRL handbook, I think 1996 but I know it's
been since 1995 so you could check there.

On Thu, 21 Jan 1999 16:44:19 GMT, kenf@enter.net (Ken Florence) wrote:

>HI, I'm looking for a schematic for an Icom Radio/PC interface
>(CT-17). I have in my possession a couple of Max 232A chips which
>should work. I am looking for schematics that use these chips (or the
>232). I know there have been a couple in QST, but my issues seem to
>have been misplaced (april 97 is one). If anyone can scan me a copy of
>any I would certainly appreciate it. Or if you can point me to a web
>page, that would be great also. I have a copy of a schematic for one
>that uses 22uF caps, but the MAX literature says the 232 only needs 1
>uF and the 232a only needs .5uF. So I don't know if that one would
>work or not. Any help or info is appreciated. Thanks in advance.
>
>De Ken... WA3KF

1050. Re: SMD resistors for GHZ frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <xi3r2.898$2c.33@firefly>
Source record: 74352

In a previous article, bertdNOSPAM@dibbs.net ("Bert Douglas") says:

>
>Bert Douglas wrote in message ...
>>Are all SMD resistors the same? Do the normal ones you buy in DigiKey work
>>ok in the 2.5 GHZ range?
>>
>>All it says in Digikey is "thick film", with no further data.
>
>
>And I just went to the Panasonic Industrial Components site at:
>http://www.panasonic.com/pic/
>and downloaded PDF data sheets, and there is no further information about
>high frequency behavior or parasitics.
>
>
>

They should work fine at 2.5 GHz. I have used those same resistors in
transverters for 2.3, 3.5 and 5.7 GHz.

73, Zack W9SZ

--

1051. FS Cubic Astro PTO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Doug Snowden <dsnowden@ncdc.noaa.gov>
Message-ID: <36ACBADE.49B69D12@ncdc.noaa.gov>
Source record: 74353

I have an extra Cubic Astro 103 PTO. Not checked, but it only has two
FET transistors
in it. Nice smooth drive. If you want it for a project, it would make a

nice 5 mhz PTO. $40 shipped from NC.

73's Doug N4IJ
dsnowden@ncdc.noaa.gov

1052. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Gil Bishop <gbishop@home.com>
Message-ID: <36acdf85.0@news1.ibm.net>
Source record: 74354
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

And neither does this thread have ANYTHING to do with antennas

Lee Scott wrote in message <01be4891$3bae77a0$b09b45d1@leescott>...
<CLIP>
>Oh yes, Clinton has nothing to do with this thread.
>
>Leland C. Scott
>KC8LDO
>ARRL member
>NCI member
>

1053. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: rwalter7@aol.com
Message-ID: <19990125163836.22193.00003669@ng-fi1.aol.com>
Source record: 74355

They should drop the math requirments for becoming an engineer....

>
>I got into Ham Radio because of the NO-CODE Tech class license. Learning
>the code takes a lot of time that I just don't have right now. I work a
>full time job as an Electrical Engineer and I take classes at night (I'm 42
>so I'm no kid) to finish up a degree in Math/Computer Science. Now for the
>record, I am getting a degree in computer science just for the hell of it,
>nobody twisted my arm to do it. I like computers as a hobby so I decided to
>get the degree. What I don't need is someone twisting my arm to take a
>Morse Code test for a mode I currently have zero interest in using. I don't
>have a problem with taking any tech exams, but singling out CW for special
>treatment (operator filter, gateway, hazing rite etc.), get a life! When
>and if I ever want to use CW I know that I will study and learn the code
>and will do a proper job of it. So if the FCC wants to take away my no-code
>Tech licensee (the PRO-CODERS dream come true), that's fine, I'll spend my
>money on a new computer instead of a new radio and get onto the Internet.
>Then I'll sit back while the membership of the ARS dwindle, the FCC sells
>off the Ham Bands to the highest bidder and smile.
>
>There are more that you may suspect (Tech NO-CODES) who are more qualified
>to operate a radio than some of the smug PRO-CODE Extras I see posting in
>this NG. Just because we don't have that elite licensee class does not
>imply we are a bunch of lazy good-for-nothing dumb hicks.
>
>Oh yes, Clinton has nothing to do with this thread.
>
>Leland C. Scott
>KC8LDO
>ARRL member
>NCI member

Bob
email: rwalter7@aol.com

1054. Help with 6M J-Pole antenna made from 300 ohm TV twin-lead

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Daniel Lavoie <LavoieDNOSPAM@iSTAR.CA>
Message-ID: <zq6r2.46$lt2.237038@NewsRead.Toronto.iSTAR.net>
Source record: 74356
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Anyone has a schematic or know where I could find some information to build
a 6M J-Pole antenna made from 300 ohm TV twin-lead?

Thanks
Daniel
VE3DCL

--

<< Take out NOSPAM to reply by e-mail >>

1055. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36acebab.2524482@news.online.no>
Source record: 74357
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Mon, 25 Jan 1999 18:35:50 +0000, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>In article <36ab83a3.6888148@news.prestel.co.uk>, Jim Dunnett
><olympus@0spam.prestel.co.uk> writes
>>On Sat, 23 Jan 1999 23:54:33 +0000, Robin Birch <robin@falstaf.demon.co.uk>
>>wrote:
>>
>>>But then I've always started from the position of having a set that was
>>>reasonably well aligned to start with. I don't think I would like to
>>>start with a set that had had its settings scrambled. Although I'd have
>>>a go if someone presented me with one.
>>
>>And they stay in alignment for years.
>>
>Very true, one of the most stable (over long periods of time) circuits
>that I have ever seen (in I must admit a relatively limited life :-))
>

YES: If you have very little practical experience in servicing rigs
NO: Many of us don't aren't so much afraid of a practical challenge,
may of us can even calculate the influence on the circuits of planned
modifications. A friend of mine had to rewind some damaged 76kHz IF
transformers and RF coils for his German warship size receiver Lw.E.a,
the worst problem is that the trimming capacitors are only 5-20pF - some
on longwave (!), basic knowledge in radio and you have to calculate
tuned circuits is a must, but many of us have never found it to be too
much challenge.

73
Jan-Martin
LA8AK

NETSCAPE3.04 has now crashed, unable to receive emails

1056. Re: SMD resistors for GHZ frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Steve Smith <steves@kotamicro.com>
Message-ID: <36ACF16E.957DA606@kotamicro.com>
Source record: 74358
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

All resistors are not created equal. SMD resistors come trimmed two ways, plunge cut and edge trim. The plunge cut induces more self capacitance; edge trim is better for high frequencies. Note that the amount of trim (and hence amount of capacitance) will vary with lot. Digikey probably doesn't have a clue about this.

Unfortunately, I don't have a supplier handy. If you can't find one, let me know and I'll dig one up. It is fairly likely that Precision Resistive Products (www.prpinc.com) makes them; I do know that they make a non-spiral trimmed (buffed) leaded metal film resistor for high frequency use.

Steve Smith
Kota Microcircuits
www.kotamicro.com

Bert Douglas wrote:

> Are all SMD resistors the same? Do the normal ones you buy in DigiKey work
> ok in the 2.5 GHZ range?
>
> All it says in Digikey is "thick film", with no further data.

1057. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Jeff Goodspeed <cmsx42@email.mot.com>
Message-ID: <36ACE188.2568A64F@email.mot.com>
Source record: 74359
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Greetings Hobbyists:

Did you ever play that game when you were a kid where you take the significant words out of a story and let the people in the room pick new nouns and verbs etc. without them really knowing what the story is? It turns out all goofy and funny. That was the twisted frame of mind I was in when I read this post, and decided to have fun with it.

If you just substitute a few words for Dan's flame, it casts an entirely different light.

P.S...This is not an attack on Dan, but his writing style is easy to work with.
P.S.S...I really no longer give a rats #!*%& what happens with the code issue. Why should ham radio be any more noble that the society at large?

Dan Starkenburg wrote:

> > No-Code whiners are liberals. They don't like something so they trash other
> > people to make themselves feel better. The ARRL is BOD is also full of
> > liberals. Their restructuring proposal is just a membership drive aimed at
> > liberals. Liberals always have their hand out waiting for someone to put
> > something in it for free. That is why they like the ARRL proposal too. They
> > can get something they don't have to work for.
>
> There's a reason why the ARRL has offered a restructuring proposal: Amateur
> Radio is dying. This fact is evident by looking at the decline of new amateur
> licenses being granted. Also, the median age of hams is getting significantly
> older. The ARRL figures that by doing away with the code requirements, it will
> attract more people to the hobby.
>
> Why is Amateur Radio dying? Because people such as yourself are carrying on a
> "holier than though" attitude towards those who don't yet know the code. Your
> attitude disgusts them, and they have no desire to become what you already are.
> So, if people such as yourself would drop the no-code issue, and be a bit more
> welcoming towards ham prospects, perhaps there would not be a need for the
> proposal.
>
> Morse Code is in no way related to Clinton. Which brings me to my next point:
> Memorizing Dits-and-Dashes (which is very easy to do with a program such as
> CodeQuick) does not make an Amateur Operator more knowledgeable about the
> hobby. It just allows the operator to communicate via another communication

> method.
>
> Finally, your posting describes how No-Codes "trash other people to make
> themselves feel better". Well, what do you think your entire posting just did?
> It's almost as if you are upset that you ever learned the code. Now, you are
> just upset that others might not have to go through the "initiation" to get into
> the hobby, like you did.
>
> I support Morse Code and am currently studying it so I can upgrade my license.
> In my opinion, a 5 wpm requirement should at least be kept. Code has been
> proven to be superior to other types of communication in times of necessity, so
> it would be preferable if the majority of hams knew at least 5 wpm. The reason
> I posted this message was because the attitudes of "Code-Enthusiasts" is really
> degrading to amateur radio, a hobby in which good-will is supposed to be so
> evident.
>
> --
> Dan Starkenburg - kc0eao
> dan.starkenburg@cwix.com

There's a reason why NAMBLA has offered a restructuring proposal: Pedophilia is dying.
This fact is evident by looking at the decline of new marriage licenses being granted. Also,
the median age of boys is getting significantly older. The North American Man Boy Love
Association figures that by doing away with the age requirements, it will attract more
creepy old men to the hobby.

Why is man boy love dying? Because people such as yourself are carrying on a "holier than though" attitude towards those who don't yet know the ecstasy. Your attitude disgusts them, and they have no desire to become what you already are. So, if people such as yourself would drop the young age issue, and be a bit more welcoming towards our prospects, perhaps there would not be a need for the proposal.

Man boy Love is in no way related to Clinton. Which brings me to my next point: Memorizing Sex Crime Laws (which is very easy to do with a program such as BoyQuickie) does not make a Boy Lover more knowledgeable about the hobby. It just allows the pervert to molest via another molestation method.

Finally, your posting describes how NAMBLA members "trash other people to make themselves feel better". Well, what do you think your entire posting just did? It's almost as if you are upset that you ever learned to live straight. Now, you are
just upset that others might not have to go through a ï¿½complete moral collapse" to get into
the hobby, like you did.

I support Man Boy Love and am currently studying it so I can get my marriage license.
In my opinion, a homosexual requirement should at least be kept. May Boy Love has been
proven to be superior to other types of sex in times of necessity, so
it would be preferable if the majority of perverts knew at least one child. The reason
I posted this message was because the attitudes of "heterosexuality" is really degrading to NAMBLA, a hobby in which good-sex is supposed to be so
evident.

1058. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <78isqh$p4t@nnrp2.farm.idt.net>
Source record: 74360
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Mike Deignan wrote in message <1a3r2.84$
> After all, you're SOOOOO busy that you can't
>learn morse code,

That's right, and I have currently no interest in doing so at this time. If you have a problem with that, well I guess it's YOUR problem, not mine.

> you must be SOOOOOO busy that you can't get on the air
>and operate 2 meter FM on a repeater, right?

Wrong, I'm on the radio while driving to and from school from home/work. Now how would one work a code key while driving down the expressway at 65MPH? What does CQ sound like in Morse Code while driving over pot-holes? ;-))

>
>
>>I don't have a problem with taking any tech exams
>
>Well, gooooool-leeee. Wonder why not? Maybe 'cuz you already KNOW all >that material, so don't have to expend an erg of energy to actually get a ham
>license in that manner.

You sound pissed off to me. I probably worked harder than you did. Four years of engineering school and another 18 years working in the power electronics field. What did you do? Sit down and high-lite all the correct answers in the study guide, then spend a weekend or two committing them to memory (I really know somebody who did this), then rushed out to take the exam before you forgot most of it? Anyway, I don't care how you got your license. If you have a problem with how I got mine, well it's YOUR problem to deal with, not mine.

>
>MD
>
>--
>-- Never argue with an idiot --

I don't intend to when I spot one.

>-- If you don't like my opinions, that's just too damn bad.

Well, at least we agree on one thing!!

73's

Leland C. Scott
KC8LDO
ARRL member
NCI member

1059. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36ACF8C3.852B9FB6@starc.org>
Source record: 74361
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Well gee... I guess that makes you wrong on two counts! (hehe.. just
teasing :)

--Tom
KB1CGA

mark wrote:

> On Mon, 25 Jan 1999 03:26:11 +0000, Unclaimed Mysteries <cls@ro.com>
> wrote:
>
> >
> >
> >Rick Kaumeier wrote:
> >>
> > > HamMan wrote:
> >>
> >> > No-Code whiners are liberals..... <and so forth and so on and
> shooby dooby doo...>
> >>
> >> <Looks at hook, sniffs bait. Bleagh.>
> >>
> >> Sorry, not gonna bite on this one.
> >
> >I'll take this one.
>
> It is amazing the number of people that seem to think that.
> Personal I supported Clitnton being impeached. I think he should be
> removed by the Senate (alas I don't think they will do do it but i
> think they should) Indeed I am quite conservitive and a belivier in
> the strict application of the constitution, and very conservitive
> politcaly, as well VERY VERY NoCode

1060. Re: SMD resistors for GHZ frequency?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: John Larkin <jjlarkin@highlandtechnology.com>
Message-ID: <36ACF5A4.C4E6C3FB@highlandtechnology.com>
Source record: 74362
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:

> Are all SMD resistors the same? Do the normal ones you buy in DigiKey work
> ok in the 2.5 GHZ range?
>
> All it says in Digikey is "thick film", with no further data.

Bert,

ordinary cheapie 1206 and smaller smt resistors are fine at 2.5 GHz, as long as the range is reasonable... say 10 ohms to a K or two (parasitics get bad beyond these rough limits). The smaller sizes (0805, 0603) behave closer to ideal resistances at higher frequencies. For really high frequencies, planar resistors (ends metallized on one side only) are better, but 2.5 GHz isn't too demanding.

A 50-ohm 0805 'digikey' resistor at the end of a matched microstrip trace is a decent terminator for a 30 picosecond (12 GHz) signal.

Make sure the PCB traces are proper matched impedances!

John

--
****

John Larkin, President phone 415 753-5814 fax 753-3301
Highland Technology, Inc
320 Judah Street jjlarkin@worldnet.att.net
San Francisco, CA 94122 http://www.highlandtechnology.com

1061. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <78it61$p95@nnrp2.farm.idt.net>
Source record: 74363
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Jeff,

You seem to have a gift. Take a whack at my post and see what you can come up with. I can take a joke, unlike some other people in this news group.

Leland C. Scott
KC8LDO

1062. Re: Help >> PCB/PWB Layout Software Suggestion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Mark J Sandford - KF4YYE <sandford@tridsys.com>
Message-ID: <36ACF948.EA2AB1E6@tridsys.com>
Source record: 74364

How do you define RF friendly???

WB4LNM wrote:

> I'd appreciate folks experience with PWB layout software that is in the
> "affordable" range for ham use.
>
> I only need to do simple boards with manual routing and at the most two sided,
> but probably single sided is fine. I have looked at all of these and none
> appear to be RF friendly:
>
> Express PCB
> Eagle
> Easytrax
> Traxmaker
> Cadint
>
> The closest thing I can find so far to my needs is CIRCAD, which appears to be
> a DOS program although it seems to work ok in Win95.
>
> I will, at most have one or two DIP packages, with most of the rest being
> TO-92, SOT surface mount, or RF power transistors (need to have the capability
> to layout microstrip lines). Want to be able to print a 1:1 output on my HP
> laserjet printer for the iron-on transfer method to PWB material. Manual
> routing is mandatory. I don't want autorouting.
>
> Anyone who has any suggestions, I'd sure like to hear it. Please reply here or
> to WB4LNMxx@aol.com (remove the xx before mailing). Thanks and 73
>
> John...
>

1063. Help with metal detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: ve7uw@rac.ca
Message-ID: <78itckard1@news.junction.net>
Source record: 74365

Hi I am trying to make a metal detector. I know this is nothing to do with ham radio but as a ham I have been asked in the past to repair some. I have lost or threw away any diagrams I ever had. I wonder if any of you can steer

me in the right direction.
I will appreciate any help or ideas thrown my. 73 de VE7UW

Leo (Bing) Whiteway
Kelowna, BC, Canada

Antenna farms benefit from propagation.

Net-Tamer V 1.11.2 running in OS2 Warp 3 VDM

1064. Re: Cellphone oscillator/IF frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: davem@zeppo.cs.ubc.ca
Message-ID: <78ituf$q22@zeppo.cs.ubc.ca>
Source record: 74366

"Jim" <jbolinger@lintek.com> writes:

>Why they are marketed at 99 cents (or even free in some cases) is that the
>cell phone company quickly makes the difference up in the monthly usage
>charges. Basically they give you the phone knowing that you will give them
>your wallet every month.

>Can you say 'loss leader'?

I can see how that works for people signing contracts. Many analog
phones can be had for free with a contract.

But I recently got a Motorola DPC 650e as part of a "pay as you go"
offering from the local B carrier. Total cost was $130 CDN, which
included $60 worth of airtime. Of course, the airtime doesn't cost the
carrier $60, but if the wholesale cost of the phone was more than $130
CDN (about $85 US), they lost money.

There is no monthly airtime fee, no monthly system access fee, no setup
fee other than what's included in the cost of the phone. There is no
contract - I might never buy more airtime. And the phone is not locked
in any way - in fact when I bought it the carrier ID wasn't even
programmed. So once I use up the airtime included with purchase, I
could immediately switch to another carrier (or use two in parallel -
it's dual-NAM), never spending another cent with the carrier I bought
it from.

And if I do continue with the carrier I bought it from, airtime is $0.40
per minute but there is no monthly minimum, other than the need to make
one call every 90 days to keep the account active.

Anyway, this phone can't cost much more than $85 US for the local
carrier to buy in bulk, and even less for Motorola to manufacture. Yet
in most respects other than power output, it's considerably more
sophisticated than any single-band amateur HT. The TCXO is only part
of that.

Dave

1065. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36ACFCC7.1E5C95C0@starc.org>
Source record: 74367
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Hmmm...

Lee Scott wrote:

> get the degree. What I don't need is someone twisting my arm to take a
> Morse Code test for a mode I currently have zero interest in using. I don't
> have a problem with taking any tech exams, but singling out CW for special
> treatment (operator filter, gateway, hazing rite etc.), get a life! When
> and if I ever want to use CW I know that I will study and learn the code
> and will do a proper job of it. So if the FCC wants to take away my no-code

Nobody's arm should be twisted... and I doubt seriously that "Code" will be a requirement for all amateur license classes ever. Code is fun once you learn it... when you have the time.. when you have the desire...

I think a few "rabid" individuals are trying to speak for so called "code enthusiasts"... well... ahem... they are not speaking for all of us.. I enjoy code, ssb, fm, etc... I will defend to my best ability your right to enjoy amateur radio as you see fit... I just wish that everybody would get off their soapboxes and get back to spirit of amateur radio.

--Tom
KB1CGA

1066. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36ACFE50.4EC68103@starc.org>
Source record: 74368
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Uh... so Mike, what is your point? I don't seem to see one here???

He's busy... He has knowledge..

This post is nothing more than a personal attack against Mike. It has no redeeming value. I'ts also rude.

--Tom
KB1CGA
Mike Deignan wrote:

> In article <01be4891$3bae77a0$b09b45d1@leescott>,
> Lee Scott <DownWithJunkMail@Spam.Net> wrote:
>
> >I got into Ham Radio because of the NO-CODE Tech class license. Learning
> >the code takes a lot of time that I just don't have right now. I work a
> >full time job as an Electrical Engineer and I take classes at night (I'm 42
> >so I'm no kid) to finish up a degree in Math/Computer Science. Now for the
> >record, I am getting a degree in computer science just for the hell of it,
> >nobody twisted my arm to do it. I like computers as a hobby so I decided to
> >get the degree. What I don't need is someone twisting my arm to take a
> >Morse Code test for a mode I currently have zero interest in using.
>
> Gee, you're a busy guy. You're so busy, one has to wonder how much time
> you have to actually OPERATE. After all, you're SOOOOO busy that you can't
> learn morse code, you must be SOOOOOO busy that you can't get on the air
> and operate 2 meter FM on a repeater, right?
>
> >I don't have a problem with taking any tech exams
>
> Well, gooooool-leeee. Wonder why not? Maybe 'cuz you already KNOW all that
> material, so don't have to expend an erg of energy to actually get a ham
> license in that manner?
>
> MD
>
> --
> -- Never argue with an idiot -- they'll just bring you down to their level,
> -- and then beat you back with experience.
> --
> -- If you don't like my opinions, that's just too damn bad.

1067. Help--ARRL Radio Designer- Circles utility

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-25 00:00:00 UTC
From: Derf Henderson <ke4ros@bellsouth.net>
Message-ID: <36ACFDDC.574FC1E8@bellsouth.net>
Source record: 74369

Hello all,
Can anyone give some guidance on setting up a 2 port network to use with the Circles utility to model a matching network for a load consisting of an equivalent parallel resistance of 772 ohms and an equivalent parallel capacitance of 3.3 pf ??
Using paper Smith Chart, pencil, calculator, etc, I can solve for the value of needed inductance and capacitance and determine if they should be in parallel or series to the load and in what configuration. BUT I am unable to do the same in the Circles utility. In particular, I can't figure out how to make it a 2 port network - I can only come up with a one port which circles doesn't like. Also, I am trying not to make any assumptions concerning the configuration of the needed matching components (ie series or parallel inductor or capacitor) like I do when working with paper Smith Charts.-I let the Chart do the work.

I'm rather new to the ARRL Designer, so be kind (hi hi)

thanks
Derf KE4ROS

1068. Re: WTB: 200pf 10KV Doorknob Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Ron Higgs <erhiggs@flash.net>
Message-ID: <36AE3C47.6A9E64CC@flash.net>
Source record: 74171

Don't know what the group is coming too....

One person is looking for bottles, another for doorknobs :-)

Ron

1069. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <36AE43A1.AB2F5CA6@mlecmn.net>
Source record: 74172

Harry Whitfield wrote:

> Timing of Morse Code
>
> The basic time interval is the dot-time.
>
> Letters are made up from dots and dashes separated by gaps.
> A dash is three dot-times long.
>
> The gap between items in the same letter is one dot-time.
> The gap between letters in the same word is three dot-times.
> The gap between words is seven dot-times.
>
> The following timings are based on the word P A R I S.
>
> The morse code is .--. .- .-. .. ...
>
> This contains: dot-times
> 10 dots 20
> 4 dashes 16
> 4 letter gaps 8 extra
> 1 word gap 6 extra
> __
> 50
>
> So, for example, 12wpm would require 12*50=600 dot-times/minute.
> A dot-time would be 100mS.
>
> wpm dot-time(mS) clock-rate(Hz)
>
> 12 100 10.00
> 16 75 13.33
> 20 60 16.67
> 24 50 20.00
>
> The dot-time (in mS) is 1200/wpm.
>
> The clock-rate is 5*wpm/6 Hz.
>
> --
>
> I can't remember where I found the above, but I hope it helps.
>

> Harry (G6AUC).

All of the above is true, but it may be a little confusing. Yes, the dot-time in milliseconds is 1200/wpm. However, in a string of dots, each is followed by an equal silent period, so that at 12 wpm the total interval from the beginning of one dot to the beginning of the next is 200 milliseconds.

From THE RADIO AMATEUR'S HANDBOOK (ARRL), 1971edition:

"..... the code speed can be found from

Speed (w.p.m.) = (dots/min)/25

E.g.: A properly adjusted electronic key gives a string of dots that counts to 10 dots per second. Speed = (60 X 10)/25 = 24 w.p.m."

Lyle, K0LR

1070. Re: Help--ARRL Radio Designer- Circles utility

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Derf Henderson <ke4ros@bellsouth.net>
Message-ID: <36AE4BCC.8543B812@bellsouth.net>
Source record: 74173

Thanks, Bill
--- this almost seem too simple. I was evidently trying to make the 2 port too complicated. Could I also normilize the chart to 50 ohms instead of 500, or would that be more difficult to plot on the chart? By the way, sorry for not specifying the frequency- I was designing for 51.8 Mhz. One question, the entry "RES 1 2 R=50" I don't quite understand, I would think is should be R=500 since we are normalizing to 500??? What am I missing?

Derf

William E. Sabin wrote:

> Derf Henderson wrote:
>
> > Hello all,
> > Can anyone give some guidance on setting up a 2 port network to use with
> > the Circles utility to model a matching network for a load consisting of
> > an equivalent parallel resistance of 772 ohms and an equivalent parallel
> > capacitance of 3.3 pf ??
>
> I will assume a frequency of 10MHz, since you did not specify.
>
> The 770 ohm, 3.3 pF load is difficult to plot on a 50 ohm Smith chart, so we
> will normalize the chart at 500 ohms and assume a freq =10MHz.To access the
> Circles Utility, make up a "dummy" circuit file as follows:
>
> BLK
> RES 1 2 R=50
> TEST1:2POR 1 2
> END
>
> FREQ
> 10MHZ
> END
>
> Note that the FREQ block contains the desired frequency.
>
> The task is to locate the load on the chart and also locate the 50 ohm point
> that you want to match to.
>
> The normalized load conductance is G = 500/770 = 0.649
> The capacitive reactance is 4823 ohms therefore:
> The normalized load susceptance is B =500/4823 = 0.1037
> On the chart, draw a G=0.649 circle
> Draw a B=+0.1037 circle

> Draw an R=50/500 = 0.1 circle. It intersects the horixontal axis at 0.1 + j0
> ohms
>
> You now have the load admittance at the junction of the G and B circles and
> you have the 0.1 +j0 goal. You can now design a wide variety of networks
> that go from the load to 0.1 ohms.
>
> After you get the network that you want, modify the dummy circuit file with
> the values that you want, after you calculate the L and C values. You can
> also use transmission lines. Keep in mind the 500 conversion factor when
> doing all of this.
>
> I will now e-mail a picture of the Circles chart to you in PDF format. You
> can read it using Acrobat Reader.
>
> Bill W0IYH

1071. Re: outboard SSB add-on?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36ae38df.7373369@news.prestel.co.uk>
Source record: 74174
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Mon, 25 Jan 1999 18:35:50 +0000, Robin Birch <robin@falstaf.demon.co.uk>
wrote:

>In article <36ab83a3.6888148@news.prestel.co.uk>, Jim Dunnett
><olympus@0spam.prestel.co.uk> writes
>>On Sat, 23 Jan 1999 23:54:33 +0000, Robin Birch <robin@falstaf.demon.co.uk>
>>wrote:
>>
>>>But then I've always started from the position of having a set that was
>>>reasonably well aligned to start with. I don't think I would like to
>>>start with a set that had had its settings scrambled. Although I'd have
>>>a go if someone presented me with one.
>>
>>And they stay in alignment for years.
>>
>Very true, one of the most stable (over long periods of time) circuits
>that I have ever seen (in I must admit a relatively limited life :-))

Relative to what?

--
- 73 de Jim, g(m)4rga | To call it toadying would be to invite a
olympus%jimdee.prestel.co.uk | group libel action from toads.
dynastic%cwcom.net | - Matthew Parris, on a particularly
marula%zdnetmail.com | unctious question to Blair from
g4rga@gb7tjf.#45.gbr.eu | John Hatton, MP.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: wwwkeys.uk.pgp.net:11371

1072. WTB:sp 940. matching speaker for a kenwood ts940

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: WebMonkey <demoman@rollanet.org>
Message-ID: <36AE58CD.461D@rollanet.org>
Source record: 74175
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

al kimrey, n0jqx, has become the owner of a fine ts940.
he is having a cow because he doesn't have the matching speaker.
can anyone help?

thanks
email below
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

1073. Where to buy Xtals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: "Bruce J. Howes KG2IC" <bhowes@buffnet.net>
Message-ID: <36ae61a6.0@news3.buffnet.net>
Source record: 74176

Hello group,

Can anyone suggest a good source for crystals for use in the amateur bands?

Thank you.

--
73,

Bruce KG2IC

****
Bruce J. Howes KG2IC email: kg2ic@amsat.org
East Amherst, NY 14051 web: http://www.buffnet.net/~bhowes
AMSAT-NA Area Coordinator ARMY MARS AAR2AJ
****

1074. Re: Help--ARRL Radio Designer- Circles utility

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36AE5BA3.B08220A0@mwci.net>
Source record: 74177

Derf Henderson wrote:

> Thanks, Bill
> --- this almost seem too simple. I was evidently trying to make the 2 port too
> complicated. Could I also normilize the chart to 50 ohms instead of 500, or
> would that be more difficult to plot on the chart? By the way, sorry for not
> specifying the frequency- I was designing for 51.8 Mhz. One question, the entry
> "RES 1 2 R=50" I don't quite understand, I would think is should be R=500 since
> we are normalizing to 500??? What am I missing?

The R=50 is part of the "dummy" file, which is just a nonsense two-port file that enables you to access the Circles Utility. It has no meaning beyond that.

Bill W0IYH

> > I will assume a frequency of 10MHz, since you did not specify.
> >
> > The 770 ohm, 3.3 pF load is difficult to plot on a 50 ohm Smith chart, so we
> > will normalize the chart at 500 ohms and assume a freq =10MHz.To access the
> > Circles Utility, make up a "dummy" circuit file as follows:
> >
> > BLK
> > RES 1 2 R=50
> > TEST1:2POR 1 2
> > END
> >
> > FREQ
> > 10MHZ
> > END
> >
> > Note that the FREQ block contains the desired frequency.
> >
> > The task is to locate the load on the chart and also locate the 50 ohm point
> > that you want to match to.
> >
> > The normalized load conductance is G = 500/770 = 0.649
> > The capacitive reactance is 4823 ohms therefore:
> > The normalized load susceptance is B =500/4823 = 0.1037
> > On the chart, draw a G=0.649 circle
> > Draw a B=+0.1037 circle
> > Draw an R=50/500 = 0.1 circle. It intersects the horixontal axis at 0.1 + j0
> > ohms
> >
> > You now have the load admittance at the junction of the G and B circles and
> > you have the 0.1 +j0 goal. You can now design a wide variety of networks

> > that go from the load to 0.1 ohms.
> >
> > After you get the network that you want, modify the dummy circuit file with
> > the values that you want, after you calculate the L and C values. You can
> > also use transmission lines. Keep in mind the 500 conversion factor when
> > doing all of this.

Bill W0IYH

1075. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Gary - KJ6Q <davison7@spamlessgte.net>
Message-ID: <78lql4$l4m$1@news-2.news.gte.net>
Source record: 74178
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

covert628103@my-dejanews.com wrote in message
<78lomiqbq1@nnrp1.dejanews.com>...
>I've lost patience with people like you and the old men who
traditionally run
>the ARRL. The latter almost destroyed ham radio with incentive
licensing (CB
>radio grew to outsize ham radio by a factor of at least 10 in 1970).

HMMMm - pretty STRANGE that with all your keen analytical abilities, you NEVER connected the fact that the "easy to obtain" CB license just *might* have contributed to the far greater numbers - and poorer quality - of occupants on CB... OR, that ever lowering the "bar" to get into ham radio might deliver the SAME result... Dumbing down exams to increase our numbers MIGHT work, but at what cost?

"A thing easily obtained, is little valued"... Unfortunately, the very bands that are opened to those unwilling to "jump thru the hoops", in conventional style, will/have become the virtual communication pig-pens we are now "enjoying"... HELL, why not just GIVE the damn licenses away - look at the demand for equipment and lobbying power we would then have on our CB-style bands...

Gary - KJ6Q

1076. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: LMFthebrewer <louiefisher@earthlink.net>
Message-ID: <78lsml$969$1@ash.prod.itd.earthlink.net>
Source record: 74179
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

I Like my local brew supplier, but Bottles cost alot. $15 to $20 a dozen.I bought 3 cases foolishly. I have many gross that I got for free. I got them from a german restraunt in my town. Got to this sort of place, or a bar and ask them to save bottles. You get a great assortment!
Tom MC wrote in message ...
>Does anyone know where I can BUY some bottles?
>
>Thanks
>
>Tom MC
>
>

1077. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: kevin <kevin@webpdx.com>
Message-ID: <36AE9DAE.24816269@webpdx.com>
Source record: 74180
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers,alt.homebrewing

Maybe you missed what I said...

"...then go in the back and pick out what I want..."

Ian Wade wrote:

> Are these 6V6s or 807s?
>
> (That'll get 'em going in the other brewing groups :-))
>
> 73
> Ian, G3NRW
> (reading rec.radio.amateur.homebrew)

1078. Re: ARRL Radio Designer - Bug ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <36AD07EB.6B708208@berlin.snafu.de>
Source record: 74237
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Bert Douglas wrote:

> Is there a list of known "fixes" like this for ARRL Radio Designer?

There used to be a mailing list for the Radio Designer.
Has it quietly died, or did I somehow drop from it?

Gerhard

--
on the air: DK4XP
in the air: D-8551

1079. MC13135/36 Vhf receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: "M.Ursicino" <m.ursi@flashnet.it>
Message-ID: <36ACFD53.8245B881@flashnet.it>
Source record: 74238
Cross-posted to: rec.radio.amateur.homebrew,sci.electonics.design,rec.radio.amateur.misc

I have built a VHF receiver using the MC13135. I have reproduced the
circuit given in its datasheet. It is a dual conversion VHF receiver
using a very limited number of parts.
The circuit works fine, but the bipolar transistor based front-end is
not adequate to the rest of the circuit, high intermodulation and low
sensitivity.
Apart the low sensitivity, it seems to me to have an excessively high
intermodulation distortion. Despite the excellent selectivity, it is
completely dumbed by a 2W transmitter placed not closer than 30 meters,
even if it transmits 1-2 MHz from the receiving frequency. There must be

soething wrong. The data sheet did not indicate the supply voltage and I

used 5V. Maybe it is too low for the front-end?
Has anybody else faced and solved the problem, or can anyway help
suggesting a schematic for a simple but adequeate front-end?

1080. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: dr.dongle@juno.com
Message-ID: <78j7s9ncu1@nnrp1.dejanews.com>
Source record: 74239
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <78h2l8$a2m$1@usenet43.supernews.com>,
CBRambo@W6RCeicilA.net (HamMan) wrote:
> No-Code whiners are liberals. They don't like something so they trash other
> people to make themselves feel better. The ARRL is BOD is also full of
> liberals. Their restructuring proposal is just a membership drive aimed at
> liberals. Liberals always have their hand out waiting for someone to put
> something in it for free. That is why they like the ARRL proposal too. They
> can get something they don't have to work for.
>
>
This is such B.S that it dosent warent a serious responce!
dr.d
Kiss Technologys
The more complicated the plumbing
the easer it is to stop up the pipes M. Scott

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1081. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19990125193522.28136.00002485@ng-fv1.aol.com>
Source record: 74240
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I agree with the original post except in my opinion they ought to up the minimum to 20wpm and reduce the number of lids on HAM radio and the CBers back to 11 meters.

1082. Re: Help >> PCB/PWB Layout Software Suggestion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36AD0640.F12C100@usit.net>
Source record: 74241

easytrax

WB4LNM wrote:
>
> I'd appreciate folks experience with PWB layout software that is in the
> "affordable" range for ham use.
>
> I only need to do simple boards with manual routing and at the most two sided,
> but probably single sided is fine. I have looked at all of these and none
> appear to be RF friendly:
>
> Express PCB
> Eagle
> Easytrax
> Traxmaker
> Cadint
>
> The closest thing I can find so far to my needs is CIRCAD, which appears to be
> a DOS program although it seems to work ok in Win95.
>
> I will, at most have one or two DIP packages, with most of the rest being
> TO-92, SOT surface mount, or RF power transistors (need to have the capability
> to layout microstrip lines). Want to be able to print a 1:1 output on my HP
> laserjet printer for the iron-on transfer method to PWB material. Manual
> routing is mandatory. I don't want autorouting.
>
> Anyone who has any suggestions, I'd sure like to hear it. Please reply here or
> to WB4LNMxx@aol.com (remove the xx before mailing). Thanks and 73
>
> John...
>

1083. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Lou <luigi_giordano@msn.com.au>
Message-ID: <36acf6cc.0@139.134.5.33>
Source record: 74242
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

Try going to your local Scout Group, or hotel/restaurant. Scouts tend to collect just about anything that can be recycled and you may find that a local restaurant has more bottles than they know what to do with. I have an arrangement with a bar near where I live (Melbourne Australia) and can get as many 750 ml dark brown bottles as I can fit in my car. Don't buy what you can get free!

To clean, get a plastic garbage can (clean) and pour in about a cup of chlorine bleach. Fill with cold water and then sink the bottles. Let them sit in that solution for about a week or so. Then dump out and rinse with hot tap water. The bleach sterilizes and removes stains and other yuck deposits. I them put my bottles in a 100 c oven for about half an hour, then let them cool with the oven door closed. I then charge and fill. Works great.

Tom MC wrote in message ...
>Does anyone know where I can BUY some bottles?
>
>Thanks
>
>Tom MC
>
>

1084. tube socket info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Ed <edzeb@unix.asb.com>
Message-ID: <01be48ce$291d4700$77c2fea5@gjxwysqy>
Source record: 74243

I have a tube socket that I am trying to identify. It is a Johnson
124-116. What type is it? Is there an Eimac equivalent? Any info would
be greatly appreciated.
Thaks
Ed
edzeb@unix.asb.com

1085. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Brian G <brian.graf@worldnet.att.net>
Message-ID: <36AD2933.39E7920C@worldnet.att.net>
Source record: 74244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Very well said!

Dan Starkenburg wrote:

> > No-Code whiners are liberals. They don't like something so they trash other
> > people to make themselves feel better. The ARRL is BOD is also full of
> > liberals. Their restructuring proposal is just a membership drive aimed at
> > liberals. Liberals always have their hand out waiting for someone to put
> > something in it for free. That is why they like the ARRL proposal too. They
> > can get something they don't have to work for.
>
> There's a reason why the ARRL has offered a restructuring proposal: Amateur
> Radio is dying. This fact is evident by looking at the decline of new amateur
> licenses being granted. Also, the median age of hams is getting significantly
> older. The ARRL figures that by doing away with the code requirements, it will
> attract more people to the hobby.
>
> Why is Amateur Radio dying? Because people such as yourself are carrying on a
> "holier than though" attitude towards those who don't yet know the code. Your
> attitude disgusts them, and they have no desire to become what you already are.
> So, if people such as yourself would drop the no-code issue, and be a bit more
> welcoming towards ham prospects, perhaps there would not be a need for the
> proposal.
>
> Morse Code is in no way related to Clinton. Which brings me to my next point:
> Memorizing Dits-and-Dashes (which is very easy to do with a program such as
> CodeQuick) does not make an Amateur Operator more knowledgeable about the
> hobby. It just allows the operator to communicate via another communication
> method.
>
> Finally, your posting describes how No-Codes "trash other people to make
> themselves feel better". Well, what do you think your entire posting just did?
> It's almost as if you are upset that you ever learned the code. Now, you are
> just upset that others might not have to go through the "initiation" to get into
> the hobby, like you did.
>
> I support Morse Code and am currently studying it so I can upgrade my license.
> In my opinion, a 5 wpm requirement should at least be kept. Code has been
> proven to be superior to other types of communication in times of necessity, so
> it would be preferable if the majority of hams knew at least 5 wpm. The reason
> I posted this message was because the attitudes of "Code-Enthusiasts" is really
> degrading to amateur radio, a hobby in which good-will is supposed to be so
> evident.

>
> --
> Dan Starkenburg - kc0eao
> dan.starkenburg@cwix.com

1086. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: brillo pad <hottuna@drinko.com>
Message-ID: <01be48d2$5920b3c0$81a71a26@f7f39g023h7dw>
Source record: 74245
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Wow, a suggested linkage of the Clinton Impeachment proceedings
and code! That's a novel approach. You win a free happy meal from
McDonalds and you get to share lunch with Mr Happy, wa8pbm, as well.

Congratulations, and don't forget to tell him to soak his teeth in the glass
on the porcelean sink the nite B-4.

HamMan <CBRambo@W6RCeicilA.net> wrote in article <78h2l8$a2m$1@usenet43.supernews.com>...
> No-Code whiners are liberals. They don't like something so they trash other
> people to make themselves feel better.
> Liberals always have their hand out waiting for someone to put
> something in it for free. That is why they like the ARRL proposal too. They
> can get something they don't have to work for.

1087. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: brillo pad <hottuna@drinko.com>
Message-ID: <01be48d2$d9ea5e20$81a71a26@f7f39g023h7dw>
Source record: 74246
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Unclaimed Mysteries <cls@ro.com> wrote in article <36ABE453.37A5FC15@ro.com>...
>
> Thank you for writing. It's all true. CW is representative of the old
> captialist/conservative system, popular among angry white males, that
> emphasizes acquisition of licenses to operate a station much as he
> oppresses women and minorities on his non-ham life. We of the United
> Conspiracies believe it is time for a new age in communications, not
> governed by so-called standards such as Ohm's Law and other scientific
> principles named after dead white European males.
>
> We propose a class-based system where the have-nots can modify standards
> to compensate for the generations of oppression at the hands of the
> techno-fascists. We realize this will distress the privileged elite, but
> the inevitable march of history cannot be stopped. Eliminating code
> requirements are only the beginning. Soon there will be a speech code
> enforced. Many on this group are making statements that create an
> atmosphere of hostility toward those in government who are trying to
> implement the New Radio Order. The American People will not tolerate
> this (polls show), and we will put a stop to it.
>
> Wishing you a good seat at the re-education center, I remain

Yes, but I remain CONFUSED. You start off speaking like a liberal
2-lander from NY, then morph into something from 3950 on Saturday
night....

I like you :)

Brillo - SWL & Retired USPS with too much free time :)
>
> --
> It Came from Unclaimed Mysteries
> C. L. "Mmmm...Delicious flame bait" Smith, Maximum Director
> K4DOH
> http://www.nasw.org/users/clsmith/
>

1088. Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: java1@internet.cafe
Message-ID: <SAar2.4517$9P6.13191845@newsgate.direct.ca>
Source record: 74247

I built an iambic electronic keyer.

I wish to calibrate the speed pot on it.
Isn't there a formula like like count the number of dits
in 10 seconds and multiply by a factor or something?

Please reply via this NG.

many, many thanks
Bill

1089. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: John in Roseville CA 95678 <nospam@nospam.net>
Message-ID: <iQar2.178$Oa3.2280658@nnrp2.ni.net>
Source record: 74248

I use the 572B bottles in my amp and they work great!
3-500Z work good too.
73 John

Lou wrote in message <36acf6cc.0@139.134.5.33>...
>Try going to your local Scout Group, or hotel/restaurant. Scouts tend to
>collect just about anything that can be recycled and you may find that a
>local restaurant has more bottles than they know what to do with. I have
an
>arrangement with a bar near where I live (Melbourne Australia) and can get
>as many 750 ml dark brown bottles as I can fit in my car. Don't buy what
>you can get free!
>
>To clean, get a plastic garbage can (clean) and pour in about a cup of
>chlorine bleach. Fill with cold water and then sink the bottles. Let them
>sit in that solution for about a week or so. Then dump out and rinse with
>hot tap water. The bleach sterilizes and removes stains and other yuck
>deposits. I them put my bottles in a 100 c oven for about half an hour,
>then let them cool with the oven door closed. I then charge and fill.
>Works great.
>
>
>Tom MC wrote in message ...
>>Does anyone know where I can BUY some bottles?
>>
>>Thanks
>>
>>Tom MC
>>
>>
>
>

1090. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Dan Starkenburg <dan.starkenburg@cwix.com>
Message-ID: <36AD60E6.2FDF27F6@cwix.com>
Source record: 74249
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> The reason
> I posted this message was because the attitudes of "Code-Enthusiasts" is really
> degrading to amateur radio, a hobby in which good-will is supposed to be so
> evident.

I'm sorry. I didn't word this very effectively. I don't have anything against extra class, or people who really like Morse code. The above sentence was a little misleading, as you can't generalize "Code-Enthusiasts" as the problem. I should have said "Code-Enthusiasts who think everybody else has to be a code enthusiast or they have no business being a ham".

I think the key ideas here are that this is a hobby and morse code is just another communication method. For instance, if somebody has a Tech No-Code license and are active in repeaters and simplex, but they don't care for packet, you can't blame them for not wanting to jump head-over-heals into packet. Somebody e-mailed me saying, "As long as conversations are rewarding, educational or otherwise stimulating, what difference does it make ?" If some people find CW rewarding, that's great, but it might not be everybody's cup of tea... and that's okay, too.

--
Dan Starkenburg - kc0eao
dan.starkenburg@cwix.com

1091. Re: (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <78jj77$lte@nnrp1.farm.idt.net>
Source record: 74250
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dan Starkenburg wrote in message <36AD60E6.2FDF27F6@cwix.com>...
>I think the key ideas here are that this is a hobby and morse code is just another
>communication method. For instance, if somebody has a Tech No-Code license and are
>active in repeaters and simplex, but they don't care for packet, you can't blame
>them for not wanting to jump head-over-heals into packet. Somebody e-mailed me
>saying, "As long as conversations are rewarding, educational or otherwise
>stimulating, what difference does it make ?" If some people find CW rewarding,
>that's great, but it might not be everybody's cup of tea... and that's okay, too.

Dan, you are right. Ham Radio is big enough for each of us to find the area of interest we want. However there will always be those who can't see it that way. The really sad part is they don't understand your point, never will and there is nothing the rest of us can do about it.

73's
Leland C. Scott
KC8LDO
ARRL member
NCI member

1092. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Marty <martyk@naples.infi.net>
Message-ID: <36AD4FCE.8DB275A1@naples.infi.net>
Source record: 74251

Send an e-mail to k1rh@erols.com and ask him for a copy of his article
on determining code speed.

Bill Good wrote:
>
> I built an iambic electronic keyer.
>
> I wish to calibrate the speed pot on it.
> Isn't there a formula like like count the number of dits
> in 10 seconds and multiply by a factor or something?
>
> Please reply via this NG.
>
> many, many thanks
> Bill

1093. Opinions on Kikusui oscilloscope?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Nick Kennedy <nkennedy@cswnet.com>
Message-ID: <36AD621E.E992A5F7@cswnet.com>
Source record: 74252

I'm shopping around for an O-scope for ham use. I've read on the newsgroups that some of the tektronics scopes from the '70's are good for hobbyists.

Now I have a line on a Kikusui COS6100M, which I hadn't heard of before, but it was supposedly built as a replacement for a Tek 465B. The price is fairly reasonable, but the seller doesn't have a manual. Anyone have experience with the Kikusui?

Nick, WA5BDU

1094. 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Dave Becker <k7prz@teleport.com>
Message-ID: <Dlfr2.6338$202.3298218@news1.teleport.com>
Source record: 74253

Looking for a 1 or 2 watt 10 meter cw transmitter
for a 28.2xx mhz beacon. Need ideas, or offers.

Thanks
73,
Dave k7prz@teleport.com
.

1095. Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <RPLbWTA88Wr2EwaN@ifwtech.demon.co.uk>
Source record: 74254

Lyle Koehler wrote:
>Bill Good wrote:
>
>> I built an iambic electronic keyer.
>>
>> I wish to calibrate the speed pot on it.
>> Isn't there a formula like like count the number of dits
>> in 10 seconds and multiply by a factor or something?
>>
>
>10 dits per second = 24 WPM.

It's much easier to count the number of complete dashes in 5 seconds.
That gives you WPM directly (within 4%).

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

1096. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Dave Heil <K8MN@cats-net.com>
Message-ID: <36AE0C95.1DD5@cats-net.com>
Source record: 74255
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Leland C. Scott wrote:
>
> Wrong, I'm on the radio while driving to and from school from home/work. Now
> how would one work a code key while driving down the expressway at 65MPH?
> What does CQ sound like in Morse Code while driving over pot-holes? ;-))

Been there; done that; got the QSL cards. Of course you have to be able
to copy in your head. With a keyer and paddle, CQ still sounds like
CQ--even over potholes. An automatic transmission helps.

Dave 5H3US, K8MN

1097. Re: Opinions on Kikusui oscilloscope?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: puppin@netpar.com.br
Message-ID: <78kqtk$14r$1@nnrp1.dejanews.com>
Source record: 74256

In article <36AD621E.E992A5F7@cswnet.com>,
Nick Kennedy <nkennedy@cswnet.com> wrote:
> I'm shopping around for an O-scope for ham use. I've read on the
> newsgroups that some of the tektronics scopes from the '70's are good
> for hobbyists.
>
> Now I have a line on a Kikusui COS6100M, which I hadn't heard of before,
> but it was supposedly built as a replacement for a Tek 465B. The price
> is fairly reasonable, but the seller doesn't have a manual. Anyone have
> experience with the Kikusui?
>
> Nick, WA5BDU
>
>

Hi Nick,
I use a Kikusui model 5531 since 1984 with no kind of problem.
This osciloscope never a failed.
Is that enough?

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1098. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: "Thomas R. Williams" <n2cu@buffnet.net>
Message-ID: <36ADD3A6.6568@buffnet.net>
Source record: 74257
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ever have to do something you didn't want to, to achieve an end result? Maybe it was as a child, or taking a class in college that had nothing to do with your degree. Maybe your line of work requires you to do something you don't like. It's a fact of life. We all have to do things we don't like. Too many people are dumbing us down because they don't want to hear the whining, and want to be politically correct. This has become a no-skills hobby. Just memorize some answers from a question pool and get a friendly VE examiner and you're in.
73,
Tom N2CU (Extra class, CW fan, ham for 26 years)

1099. Re: High Dynamic Range Front End

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36adc1d3.0@news.netwalk.com>
Source record: 74258

I would like the same information, so either also post answer here or send
me a copy directly.

I have been 'designing' a 160/80/40 rig for about the past 15 years or so.

Jim
N8EE

bkizerian@my-dejanews.com wrote in message
<78i7ov$re8$1@nnrp1.dejanews.com>...
>Have been re-reading Jacob Makhinson's article "A High Dynamic MF/HF
Receiver
>Front End" from the Feb. 93 QST. I understand that someone has upgraded his
>design using a more readily available quad J-FET replacement for the
>Si8901/SD8901. Can anyone direct me to this reference? My plan is to build
a
>"bullet proof" single-band receiver. Any information you have on low phase
>noise VFO's would also be appreciated. Please contact me directly at
>kizerian@ced.utah.edu
>
>Thanks
>
>Bruce Kizerian kk7zz
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1100. WTB: NOS TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <36ADDEE4.4FBB6FB3@erols.com>
Source record: 74259

Looking for the following NOS (preferably in
original boxes) tubes.

6V6GT, 6L6GC, 5AR4, 5Y3GT, 5R4, 6CA7/EL34, 6BQ5/EL84, 7189A,
7591A, 7581A, 12AX7A , 5751, 12AY7, 7025, 12AT7, 7199, 5881, 6550,
7868, KT-66,77,88.

Also, octal socket extenders/savers.

Please list brand, price, qty available, and whether in
original box.

Thanks,
Mike
703-430-8713
bluestat@erols.com

1101. Re: Camera TV interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Jim Muehlberg <muehlberX@plains.nodak.edu>
Message-ID: <36ADE6D0.3013@plains.nodak.edu>
Source record: 74260

beau winburn wrote:
>
> Has anyone any info on how to connect one of the new "fish eye" cameras
> to a standard tv? I am looking for an alternative way to replace my
> defunct rear monitoring system on my motor home.
> beau

You need a video modulator. They might have these at Radio Schack. Or,
if you tinker, you can pull one out of an old VCR. You connect the
video signal from the camera to the modulator and it will give you a
picture on channel 3 or 4. Try an electronics part store. They might
have a generic sort in stock.

--
Jim Muehlberg Don't forget the reason for the season!
muehlberX@plains.nodak.edu
*****REMOVE "X" TO REPLY*****

1102. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: kevin <kevin@webpdx.com>
Message-ID: <36ADECB4.7546EFC8@webpdx.com>
Source record: 74261
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

Others have already suggested sources for NEW bottles, here is what I
have done:
I typically keg most of my brews, but I always bottle some from every
brew for tasting and samples.
In Oregon we have a bottle LAW, so everything has a store deposit. I ask
the grocery if I can buy back some bottles, at the 5 cent deposit rate.
I then go in the back and pick out what I want, many have been sorted
for return to his suppliers so its pretty easy to get exactly what I
want.
When I get these home I fill the bathtub with soapy anti-bacterial water
as hot as I can get it...I fill the bottles and let then soak overnight.
Then I shake the water from each one and put then in the dishwasher on
POTS and PANS cycle using NO detergent.
5 cents a piece...my choice...all I need. It works great.

kevin

Tom MC wrote:

> Does anyone know where I can BUY some bottles?
>
> Thanks
>
> Tom MC

1103. Re: ARRL Radio Designer - Bug ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36ADE5FA.81628702@mwci.net>
Source record: 74262
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

William E. Sabin wrote:

> Bert Douglas wrote:
>
> > I seem to have discovered a bug in ARRL Radio Designer.
> >
> > The model for transmission lines does not seem to give correct results,
> > especially when one end of the line is connected to node zero (ground).
> > Here are two circuits that should give very similar results, but they do
> > not.
> >
> > BLK
> > TRL 0 1 0 0 Z=20 E=20 F=2.44 A=0.8
> > CAP 1 2 C=5PF
> > TEST1: 1POR 2 0
> > END
> >

The actual problem here was found to be in the TRL statement which should read:

TRL 0 1 0 0 Z=20 E=20 F=2.44GHZ A=0.8
instead of
TRL 0 1 0 0 Z=20 E=20 F=2.44 A=0.8

There was no "bug" in the Radio Designer Program or in the TRL element..

Bill W0IYH

1104. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Ian Wade <ian@dowrmain.demon.co.uk>
Message-ID: <urL7ZZA44fr2EwPZ@dowrmain.demon.co.uk>
Source record: 74263
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

In article <36ADECB4.7546EFC8@webpdx.com>, kevin <kevin@webpdx.com>
writes
>Others have already suggested sources for NEW bottles, here is what I
>have done:
>I typically keg most of my brews, but I always bottle some from every
>brew for tasting and samples.
>In Oregon we have a bottle LAW, so everything has a store deposit. I ask
>the grocery if I can buy back some bottles, at the 5 cent deposit rate.
>I then go in the back and pick out what I want, many have been sorted
>for return to his suppliers so its pretty easy to get exactly what I
>want.
>When I get these home I fill the bathtub with soapy anti-bacterial water
>as hot as I can get it...I fill the bottles and let then soak overnight.
>Then I shake the water from each one and put then in the dishwasher on
>POTS and PANS cycle using NO detergent.
>5 cents a piece...my choice...all I need. It works great.

Are these 6V6s or 807s?

(That'll get 'em going in the other brewing groups :-))

73
Ian, G3NRW
(reading rec.radio.amateur.homebrew)

1105. Re: 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: k5dh@rtis.ray.com
Message-ID: <78l0m0$89i@news.rsc.raytheon.com>
Source record: 74264

In article <Dlfr2.6338$202.3298218@news1.teleport.com>, k7prz@teleport.com says...
>
>Looking for a 1 or 2 watt 10 meter cw transmitter
>for a 28.2xx mhz beacon. Need ideas, or offers.

Pick up an old CB radio at a flea market or yard sale, convert it to 10m, lock it in Transmit, and key the VCC to the driver and PA stages (use some kind of small relay, as the current may be up to 2A or so on peaks). Power output will be in the 3 to 5 Watt range, but you should be able to de-tune it for less power.

73,
Dean / K5DH

1106. Cellphone to 902 MHz Ham ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: xhduff@ica.net
Message-ID: <36ae0c96.0@lightning.ica.net>
Source record: 74265

While there's a thread about cellphones on the go,
has anyone successfully converted a cellphone for
902 MHz Ham use ?

From where I sit, it looks like a pretty complex
undertaking since, for starters, the micro would have
to be reprogrammed and I would imagine that it is likely
a mask programmed ROM part...more than likely need to be replaced.
One would have to have the necessary programming tools
(cross-assembler and programming hardware).
Also, cellphones are full duplex...probably need some hardware
changes. Furthermore, a handheld unit would be a bugger to work on.

Any comments ?
Reply here on the NG or remove both 'x' from my address
to reply by email.

Hugh VA3TO Toronto

1107. Re: 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: xhduff@ica.net
Message-ID: <36ae0f4c.0@lightning.ica.net>
Source record: 74266

Instead of re-inventing the wheel, I would
use a cheap CB ...

For oscillator stability, instead of keying the PTT line,
I would wire the TX oscillator to always be running
and key the buffer or driver stage with a PIC or other
simple micro.
Maybe consider beefing up the heatsinking
fot the PA. section too.
Some older PLL CBs could be programmed
to get into the 28.2 range...otherwise,
a crystal change could probably get you there
using a rockbound or PLL CB under ROM table
control.

Hugh VA3TO Toronto

"Dave Becker" <k7prz@teleport.com> wrote:
>Looking for a 1 or 2 watt 10 meter cw transmitter
>for a 28.2xx mhz beacon. Need ideas, or offers.
>Thanks
>73,
>Dave k7prz@teleport.com
>.

1108. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Harry Whitfield <harry.whitfield@ncl.ac.uk>
Message-ID: <harry.whitfield-ya023580002601991923550001@news.ncl.ac.uk>
Source record: 74267

In article <SAar2.4517$9P6.13191845@newsgate.direct.ca>,
java1@internet.cafe (Bill Good) wrote:

>I built an iambic electronic keyer.
>
>I wish to calibrate the speed pot on it.
>Isn't there a formula like like count the number of dits
>in 10 seconds and multiply by a factor or something?
>
>Bill

Timing of Morse Code

The basic time interval is the dot-time.

Letters are made up from dots and dashes separated by gaps.
A dash is three dot-times long.

The gap between items in the same letter is one dot-time.
The gap between letters in the same word is three dot-times.
The gap between words is seven dot-times.

The following timings are based on the word P A R I S.

The morse code is .--. .- .-. .. ...

This contains: dot-times
10 dots 20
4 dashes 16
4 letter gaps 8 extra
1 word gap 6 extra

--
50

So, for example, 12wpm would require 12*50=600 dot-times/minute.
A dot-time would be 100mS.

wpm dot-time(mS) clock-rate(Hz)

12 100 10.00
16 75 13.33
20 60 16.67
24 50 20.00

The dot-time (in mS) is 1200/wpm.

The clock-rate is 5*wpm/6 Hz.

--

I can't remember where I found the above, but I hope it helps.

Harry (G6AUC).

1109. Swapmeet Sunday (31Jan)- Georgetown, Tx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Jeff Schmidt <rsja60@email.sps.mot.com>
Message-ID: <36AE27B6.F87182A6@email.sps.mot.com>
Source record: 74268
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The WCARC "High-Noon" Swapmeet is coming up THIS WEEKEND Jan 31st Sunday
in San Gabriel Park. Below is specific info. The hall is about half reserved
so far (60-75 tables max) and we expect to fill the place up.

Bottom line is, tables are $8 and $10, Set-up at 10AM, Public in at 12noon.
Raffles, Lion's Club food, comic relief, friends and equipment will be in abundance!
Thanks for all your support!!
N5MNW Jeff

SWAPFEST
FREE ADMISSION
WILLIAMSON COUNTY ARC

Sunday, Jan. 31, 1999
Community Center, San Gabriel Park
Georgetown, Texas
Vendor Set-up at 10 A.M.
Opens to the public at 12:00 Noon
Talk in assistance on 146.64 minus offset, no tone

Sellers may set up starting at 10:00 A.M.
CITY DOES NOT ALLOW TAILGATING (outdoor selling)

Tables Available to Dealers and Hams
$8.00 - no electricity / $10.00 - with electricity
To reserve a table contact:
Jeff Schmidt (before Jan 28) n5mnw@aol.com home- 512-255-6753

Lunch/Snack Concession Available, courtesy Lion□s Club
VE testing session starts at 8:30, meet at Community Center

1110. Re: Cellphone to 902 MHz Ham ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: davem@harpo.cs.ubc.ca
Message-ID: <78lcfk$baq@harpo.cs.ubc.ca>
Source record: 74269

xhduffx@ica.net writes:
>While there's a thread about cellphones on the go,
>has anyone successfully converted a cellphone for
>902 MHz Ham use ?

>From where I sit, it looks like a pretty complex
>undertaking since, for starters, the micro would have
>to be reprogrammed and I would imagine that it is likely
>a mask programmed ROM part...more than likely need to be replaced.

One possible way of dealing with this would be to use the RF part and just ditch the control portion. The several cellphones I've dissected have all the RF circuitry on one board and the main CPU, display, and sometimes keypad on a second board, probably along with the audio stuff. There is a single multi-pin connector between these two boards.

If you could figure out what's wired to where on that connector, you could run all of the RF stuff from any other CPU.

However, there would still need to be a bunch of work done on the RF stuff to move it to 902+ MHz. Full-duplex operation depends on a duplexer, which seems to be made out of a bunch of tuned ceramic resonators coupled together, and with tuning of the individual resonators done by drilling or chipping little bits out of the ceramic. It's unlikely you could move these to a new frequency. At least one of the cellphones has a similar two-resonator filter between the VCO and the RF power module - that would have to be replaced or removed.

On the other hand, the frequency-determining parts (PLL and VCO) might well work at the slightly higher frequency, and the IF would likely be usable unchanged. (Though you might want to use narrower filters - AMPS is 12 kHz deviation for good sound quality, while amateur practice seems to be to use 5 kHz).

Dave

1111. R1842/WSC-5(V)-- conversion info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-26 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36AE3A97.4DBD@pop.valley.net>
Source record: 74270

Hello--

Does anyone know of a source of specs (e.g., frequency coverage)--
and especially the connector pinouts? Has anyone ever put these boxes
to use other than as parts sources?

Tnx es 73,
Brad AA1IP

1112. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Lou Albert <labert@uakron.edu>
Message-ID: <36AF87C9.24F541F7@uakron.edu>
Source record: 74071
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am a NO-CODE and a liberal!

Lou WA8PHD
http://ifip.com/wa8phd.htm

covert628103@my-dejanews.com wrote:

> In article <36ADD3A6.6568@buffnet.net>,
> n2cu@buffnet.net wrote:
>
> > Tom N2CU (Extra class, CW fan, ham for 26 years)
>
> Allow me to pull rank on you, Tom. I've been a ham since 1954 (and no I
> won't give you my call on the internet), have gone through all of the CW
> crap, and long ago concluded that it is no different than asking prospective
> members to memorize smoke signals. Yet I have watched the old men who could
> not readjust their thinking fight the notion of abandoning a morse code
> requirement since the first days of incentive licensing in the 1960's.
>
> I've lost patience with people like you and the old men who traditionally run
> the ARRL. The latter almost destroyed ham radio with incentive licensing (CB
> radio grew to outsize ham radio by a factor of at least 10 in 1970). I
> watched the number of hams decline while CB radio grew to be so large that it
> was demanding additional spectrum space in the VHF bands and was being taken
> seriously. That was the ARRL's fault, and was a direct result of them
> lobbying for incentive licensing AGAINST THE FCC'S OWN RECOMMENDATIONS!!!
>
> The ARRL couldn't even deal with transistors in their handbooks until long,
> long after they were in use almost everywhere. The Radio Amateur's Handbook
> was a technical anachronism from 1965 to at least 1975. Technology had
> outpaced the skills of the people who wrote for the ARRL publications, and it
> was painfully obvious.
>
> It was even embarrassing.
>
> People who pound the "we have to have code testing" drum frankly anger me.
> Your spirit is the one which has largely killed ham radio.
>
> Thanks to you and people like you, there is almost no hobby left.
>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1113. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36AF9B74.4FA6@pop.removethistomailme.net>
Source record: 74072
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mark Zenier wrote:
>
> In article <36AD470D.3117@pop.removethistomailme.net>,
> John Miles <jmiles@pop.removethistomailme.net> wrote:
> >Mark Zenier wrote:
> >>
> >> In article <36A90F11.6638@pop.removethistomailme.net>,
> >> John Miles <jmiles@pop.removethistomailme.net> wrote:
> >> >
> >> > http://www.amazon.com/exec/obidos/isbn=0471520195
> >> > http://www.amazon.com/exec/obidos/isbn=0872594920
> >>
> >> AARRRRRRRRGGGGGGGGH. Will you just put the authors and titles here
> >> instead of putting some USELESS URL.
> >>
> >> 1. Usenet is NOT the Internet, and no small number of people read
> >> the newsgroups (or the r.a.a.h mailing list mirror) without keeping
> >> up a direct connection. And any future use of these postings off
> >> an archive or printed copy will be extra work if not futile.
> >
> >Sorry, Mark, gotta agree to disagree on this one. Anyone who can't look
> >up a simple URL is nothing more than roadkill on the 'information
> >superhighway.'
>
> You are a pathetic fatuous Internet Fashion Victim. A braindead
> exclusivist...
> <snip>

Understood, thanks for the feedback.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1114. Re: Cellphone oscillator/IF frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <78o7p5$kdm@groucho.cs.ubc.ca>
Source record: 74073

Michael Black <blackm00@CAM.ORG> writes:

>I've wondered about the TCXOs in cellphones. Obviously they can't cost
>the manufacturer too much if they are being put in these. Does that mean
>they aren't particularly good? Because cellphones doe seem to be a cheap
>source of TCXO's

They're probably not the most expensive TCX0's in the world, but if you look at cellphone specs they're generally rated at something like 3 PPM frequency accuracy (1 PPM for NAMPS). Amateur gear, using uncompensated crystals, is usually specified for 5 or 10 PPM. So cellphones do have better oscillators.

>Both of the cellphones I took apart had 15.36MHz TCXOs. One could use it
>in a frequency counter as long as you included the divier chain.

One of mine was 15.36. That's a bit of a pain to use. Most frequency counters are set up for a 10 MHz timebase, and to get that from 15.36 you need to divide by 192 and multiply by 125. That can be done by some counters and a PLL but it's not trivial. The other one is 12.0 MHz, where you'd need only divide by 6 and multiply by 5 - but it still needs a PLL.

This applies to off-the-shelf frequency counters. If you were building one from scratch including writing the code for the CPU, you could use just about any timebase frequency and get the display correct.

Some GPS receivers are also a good source of TCXOs. Sometimes they are a weird frequency like 16.368 MHz (16 times the 1.023 MHz chip clock), but I've also seen 10.0 and 25.0 MHz.

Dave

1115. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36AF9835.6FBD3ECD@starc.org>
Source record: 74074
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Funny :)

I'll have to remember that game... especially with some of the posts that are going up these days

--Tom
KB1CGA

Jeff Goodspeed wrote:

> Greetings Hobbyists:
>
> Did you ever play that game when you were a kid where you take the significant
> words out of a story and let the people in the room pick new nouns and verbs etc.
> without
> them really knowing what the story is? It turns out all goofy and funny. That was
> the
> twisted frame of mind I was in when I read this post, and decided to have fun with
> it.
>
> If you just substitute a few words for Dan's flame, it casts an entirely different
> light.
>
> P.S...This is not an attack on Dan, but his writing style is easy to work with.
> P.S.S...I really no longer give a rats #!*%& what happens with the code issue. Why
> should
> ham radio be any more noble that the society at large?
>
> Dan Starkenburg wrote:
>
> > > No-Code whiners are liberals. They don't like something so they trash other
> > > people to make themselves feel better. The ARRL is BOD is also full of
> > > liberals. Their restructuring proposal is just a membership drive aimed at
> > > liberals. Liberals always have their hand out waiting for someone to put
> > > something in it for free. That is why they like the ARRL proposal too. They
> > > can get something they don't have to work for.
> >
> > There's a reason why the ARRL has offered a restructuring proposal: Amateur
> > Radio is dying. This fact is evident by looking at the decline of new amateur
> > licenses being granted. Also, the median age of hams is getting significantly
> > older. The ARRL figures that by doing away with the code requirements, it will
> > attract more people to the hobby.
> >
> > Why is Amateur Radio dying? Because people such as yourself are carrying on a

> > "holier than though" attitude towards those who don't yet know the code. Your
> > attitude disgusts them, and they have no desire to become what you already are.
> > So, if people such as yourself would drop the no-code issue, and be a bit more
> > welcoming towards ham prospects, perhaps there would not be a need for the
> > proposal.
> >
> > Morse Code is in no way related to Clinton. Which brings me to my next point:
> > Memorizing Dits-and-Dashes (which is very easy to do with a program such as
> > CodeQuick) does not make an Amateur Operator more knowledgeable about the
> > hobby. It just allows the operator to communicate via another communication
> > method.
> >
> > Finally, your posting describes how No-Codes "trash other people to make
> > themselves feel better". Well, what do you think your entire posting just did?
> > It's almost as if you are upset that you ever learned the code. Now, you are
> > just upset that others might not have to go through the "initiation" to get into
> > the hobby, like you did.
> >
> > I support Morse Code and am currently studying it so I can upgrade my license.
> > In my opinion, a 5 wpm requirement should at least be kept. Code has been
> > proven to be superior to other types of communication in times of necessity, so
> > it would be preferable if the majority of hams knew at least 5 wpm. The reason
> > I posted this message was because the attitudes of "Code-Enthusiasts" is really
> > degrading to amateur radio, a hobby in which good-will is supposed to be so
> > evident.
> >
> > --
> > Dan Starkenburg - kc0eao
> > dan.starkenburg@cwix.com
>
> There's a reason why NAMBLA has offered a restructuring proposal: Pedophilia is
> dying.
> This fact is evident by looking at the decline of new marriage licenses being
> granted. Also,
> the median age of boys is getting significantly older. The North American Man Boy
> Love
> Association figures that by doing away with the age requirements, it will attract
> more
> creepy old men to the hobby.
>
> Why is man boy love dying? Because people such as yourself are carrying on a
> "holier than though" attitude towards those who don't yet know the ecstasy. Your
> attitude disgusts them, and they have no desire to become what you already are.
> So, if people such as yourself would drop the young age issue, and be a bit more
> welcoming towards our prospects, perhaps there would not be a need for the
> proposal.
>
> Man boy Love is in no way related to Clinton. Which brings me to my next point:
> Memorizing Sex Crime Laws (which is very easy to do with a program such as
> BoyQuickie) does not make a Boy Lover more knowledgeable about the

> hobby. It just allows the pervert to molest via another molestation
> method.
>
> Finally, your posting describes how NAMBLA members "trash other people to make
> themselves feel better". Well, what do you think your entire posting just did?
> It's almost as if you are upset that you ever learned to live straight. Now, you
> are
> just upset that others might not have to go through a ï¿½complete moral collapse" to
> get into
> the hobby, like you did.
>
> I support Man Boy Love and am currently studying it so I can get my marriage
> license.
> In my opinion, a homosexual requirement should at least be kept. May Boy Love has
> been
> proven to be superior to other types of sex in times of necessity, so
> it would be preferable if the majority of perverts knew at least one child. The
> reason
> I posted this message was because the attitudes of "heterosexuality" is really
> degrading to NAMBLA, a hobby in which good-sex is supposed to be so
> evident.

1116. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36AFBA25.3582@pop.removethistomailme.net>
Source record: 74075
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

It would be even funnier someplace other than
rec.radio.amateur.homebrew.

Followups set, please respect them.

-- jm KE5FX

Tom Repstad wrote:
>
> Funny :)
>
> I'll have to remember that game... especially with some of the posts that are going up
> these days
>
> --Tom
> KB1CGA
>
> Jeff Goodspeed wrote:
>
> > Greetings Hobbyists:
> >
> > Did you ever play that game when you were a kid where you take the significant
> > words out of a story and let the people in the room pick new nouns and verbs etc.
> > without
> > them really knowing what the story is? It turns out all goofy and funny. That was
> > the
> > twisted frame of mind I was in when I read this post, and decided to have fun with
> > it.
> >
> > If you just substitute a few words for Dan's flame, it casts an entirely different
> > light.
> >
> > P.S...This is not an attack on Dan, but his writing style is easy to work with.
> > P.S.S...I really no longer give a rats #!*%& what happens with the code issue. Why
> > should
> > ham radio be any more noble that the society at large?
> >
> > Dan Starkenburg wrote:
> >
> > > > No-Code whiners are liberals. They don't like something so they trash other
> > > > people to make themselves feel better. The ARRL is BOD is also full of
> > > > liberals. Their restructuring proposal is just a membership drive aimed at
> > > > liberals. Liberals always have their hand out waiting for someone to put

> > > > something in it for free. That is why they like the ARRL proposal too. They
> > > > can get something they don't have to work for.
> > >
> > > There's a reason why the ARRL has offered a restructuring proposal: Amateur
> > > Radio is dying. This fact is evident by looking at the decline of new amateur
> > > licenses being granted. Also, the median age of hams is getting significantly
> > > older. The ARRL figures that by doing away with the code requirements, it will
> > > attract more people to the hobby.
> > >
> > > Why is Amateur Radio dying? Because people such as yourself are carrying on a
> > > "holier than though" attitude towards those who don't yet know the code. Your
> > > attitude disgusts them, and they have no desire to become what you already are.
> > > So, if people such as yourself would drop the no-code issue, and be a bit more
> > > welcoming towards ham prospects, perhaps there would not be a need for the
> > > proposal.
> > >
> > > Morse Code is in no way related to Clinton. Which brings me to my next point:
> > > Memorizing Dits-and-Dashes (which is very easy to do with a program such as
> > > CodeQuick) does not make an Amateur Operator more knowledgeable about the
> > > hobby. It just allows the operator to communicate via another communication
> > > method.
> > >
> > > Finally, your posting describes how No-Codes "trash other people to make
> > > themselves feel better". Well, what do you think your entire posting just did?
> > > It's almost as if you are upset that you ever learned the code. Now, you are
> > > just upset that others might not have to go through the "initiation" to get into
> > > the hobby, like you did.
> > >
> > > I support Morse Code and am currently studying it so I can upgrade my license.
> > > In my opinion, a 5 wpm requirement should at least be kept. Code has been
> > > proven to be superior to other types of communication in times of necessity, so
> > > it would be preferable if the majority of hams knew at least 5 wpm. The reason
> > > I posted this message was because the attitudes of "Code-Enthusiasts" is really
> > > degrading to amateur radio, a hobby in which good-will is supposed to be so
> > > evident.
> > >
> > > --
> > > Dan Starkenburg - kc0eao
> > > dan.starkenburg@cwix.com
> >
> > There's a reason why NAMBLA has offered a restructuring proposal: Pedophilia is
> > dying.
> > This fact is evident by looking at the decline of new marriage licenses being
> > granted. Also,
> > the median age of boys is getting significantly older. The North American Man Boy
> > Love
> > Association figures that by doing away with the age requirements, it will attract
> > more
> > creepy old men to the hobby.
> >

> > Why is man boy love dying? Because people such as yourself are carrying on a
> > "holier than though" attitude towards those who don't yet know the ecstasy. Your
> > attitude disgusts them, and they have no desire to become what you already are.
> > So, if people such as yourself would drop the young age issue, and be a bit more
> > welcoming towards our prospects, perhaps there would not be a need for the
> > proposal.
> >
> > Man boy Love is in no way related to Clinton. Which brings me to my next point:
> > Memorizing Sex Crime Laws (which is very easy to do with a program such as
> > BoyQuickie) does not make a Boy Lover more knowledgeable about the
> > hobby. It just allows the pervert to molest via another molestation
> > method.
> >
> > Finally, your posting describes how NAMBLA members "trash other people to make
> > themselves feel better". Well, what do you think your entire posting just did?
> > It's almost as if you are upset that you ever learned to live straight. Now, you
> > are
> > just upset that others might not have to go through a ï¿½complete moral collapse" to
> > get into
> > the hobby, like you did.
> >
> > I support Man Boy Love and am currently studying it so I can get my marriage
> > license.
> > In my opinion, a homosexual requirement should at least be kept. May Boy Love has
> > been
> > proven to be superior to other types of sex in times of necessity, so
> > it would be preferable if the majority of perverts knew at least one child. The
> > reason
> > I posted this message was because the attitudes of "heterosexuality" is really
> > degrading to NAMBLA, a hobby in which good-sex is supposed to be so
> > evident.

--

Note: My E-mail address has been altered to avoid spam

1117. Building a Compact TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Daniel Zimmerman <zimmerds@clarkson.edu>
Message-ID: <36AFC8B4.12C8AC6F@clarkson.edu>
Source record: 74076

I've recently acquired an HP48G calculator which I have found would make an ideal terminal for operating portable packet with a handheld. The problem I have is that the only TNC that I have is a Kantronics Kam+, which is a bit large and a bit too power-hungry for portable use. I will probably end up purchasing a small battery powered TNC, but I was wondering if anyone could point me in the right direction for constructing a small homebrew one. The catch is, since I am using a calculator as the terminal, which has 32K max of storage+operating memory, I need a true TNC. I can't use any type of software encoding/decoding. I need it to decode/encode everything, and send the data via RS232. If anyone can help, I'd be interested.
Thanks.
-Dan
N3UMH

1118. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: "Timm@ComTech" <tvan@wpa.net>
Message-ID: <78or50$se0$1@news3.infoave.net>
Source record: 74077
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I just finished reading all of the "anti-cw" bla bla bla. Wow, what a mixed bag.
But the truth is, morse code is the root of all forms of electronic communication devices. I've been a cw only operator for 30 years, and don't begrudge anyone
that wants to talk with their mouth or a modem. But those of you who don't use a key are really missing a unique form of expression. Copying one another's code can be like listening to and creating music.
(especially up around 30 wpm).

1119. WTB B&W 850 or 851

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Paul Cooper <pcooper@primenet.com>
Message-ID: <36AFDB54.B3CB9F7@primenet.com>
Source record: 74078

Looking for the old Barker & Williamson bandswitching inductors. Either an 851 (500W) or the 850 (KW).

Paul, K6PY

--
Paul Cooper - - - - - - - - - -- - -pcooper@primenet.com

818.341.3499 Voice
818.772.8863 FAX

1120. Re: oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36AFD541.A2398FC0@mwci.net>
Source record: 74079

Bert Douglas wrote:

> Phil Rice wrote in message ...
> >Previously Bert Douglas asked
> >"should the phase slope be positive or negative wrt frequency?"
> >
> >At the risk of attracting some flames, here's my (27 year old) recollection
> >on this.
> >
> >Fosters reactance theorem states (some thing like) "the derivative of the
> >reactance with respect to frequency is always positive". ie. if the
> >impedance is represented as R + jX, then as the frequency is raised the
> >value of X becomes more positive / less negative. At parallel resonant
> >frequencies (infinite impedance), this becomes a little obscure as the sign
> >of X suddenly switches from + to -, but the slope is always positive.
>
> Thanks for the answer, but no crystal is involved. Just a transistor, and a
> capacitor, and some lengths of microstrip. I am asking about the phase
> slope of S11, not impedance. ARRL radio designer does not show impedance(it
> lies). I can convert to impedance manually for a few points, but it is
> difficult to get a clear picture (and tedious). I can arrange things so the
> phase slope of S11 goes either up or down. I presume that one way is
> better. Or does it matter at all?
>
> Thanks,
> Bert Douglas

For a one-port network ARD gives the input impedance using MZ11, PZ11, RZ11 and IZ11. To get input admittance use MY11, PY11, RY11 and IY11.

Bill W0IYH

1121. VX-5R accesories big help needed! =)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: firewave@REMOVE.videotron.ca
Message-ID: <firewave-2701992344040001@192.168.1.4>
Source record: 74080
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,

i m in the process of looking at a place to buy my VX-5R (i live in montreal (sorry for my english) if you have an idea of how i can order it without paying the local tax or if its from the US how not to pay the canadian tax (if any) when entering the country (custums taxes?) or any other suggestion for the cheapest price with the best things :))

I have questions about accesories mostly, because all i have is there name and i d like to get feedback from people who have them or who have pictures of them etc any information is useful! :-)

First of all, what is the VX-5R comming with? i heard it was charger/ battery/ antenna/ clip...Is that all? the charger is the radio right? or is it an external one? and does it comes with a DC cable?

Accesories:

What are the NC-72B(18$US?) (Charger for Lithium-Ion battery & Rx AC adapter) and CD-15(29$US?) (Rapid charger for use with NC-72B charger) for? Or more exactly how do they fit together? are they really useful together? and the NC-72B alone? How long for a full charge? (considering i heard the radio was taking 4.5hours) and what is the E-DC-6(7$US) (DC power cable; plug, wire and fuses only) cable for? doesnt that comes with the radio?

E-DC-5B(26$US) (DC cable with voltage regulator and cigarette lighter plug) is a good choice?

FNB-58LI(69$US) (Lithium-Ion battery 7.2v @1100mah) is there a better battery than that? is buying a second battery that useful (Read: will the first one die within a year or 2?) and if i buy a 2nd one is the above charger + quick charger add on needed?

FBA-23(25$US) (Case for 2 AA alkaline battery) What is the Tx power when i transmit with this? is there a better AA case? 4 or 6 batterys?

CN-3(8$US) (SMA to BNC adapter) self explanatory but im including it anyway for others who are looking for accesories :)

CT-44(12$US) (Converts to 2 pin microphone connections) Ok, what is this? is it only a one hole plug like the small sound plug used on Soundblaster/radio etc? or else, are there any earphone/mic like the MH-34B4B(30$US) (Compact speaker microphone) or the MH-37A4B(30$US) (Compact lapel mic with earphone) that also have a normal sound plug(so i can plug the radio into my soundblaster)? How do these or other

earphone/mic performs? any suggestion for a small earphone/mic on the shirt with a normal sound plug that works with a VX-5R ?

SU-1(35$US) (Barometric pressure sensor for pressure and altitude) Is that really accurate(how accurate in pressure and in altitude?)? is it worth it? does it use a lot more batterys? Is it conflicting with radio hardware or software modification? how does it plug to the radio?

CSC-73($19US)(Case for the VX-5 radio) is that case worth that much money? shoudnt i just make my own? :)

VC-25(62$US) (Lightweight VOX headset) what is this exactly? the same as the earphone/mic but for home use? (big headset?)

Computer DB9 cable...here i have a bigger problem...i dont want the cloning software i ll just enter things by hand but i d like to be able to modify the radio with the software mods...is there a place where i can only buy the cable at a much more reasonable price? (http://www.icongrp.com/~sllewd/pcware.htm this is a shematic i found i think its the same for the VX-1 VX-5 IC-Q7 and more)

Users: what are your impressions? how much can you transmit before the battery dies? etc? :-)

THANKS A LOT in advance for all the answers, it ll probably help other choose their accessories =)

Alexandre

1122. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: "Tom C. Brown, Jr." <tcb@netdoor.com>
Message-ID: <X9Sr2.181$gU1.869@axe.netdoor.com>
Source record: 74081

Ian White, G3SEK wrote in message ...

[text removed]

>
>But that is probably analysing it too much. The simple bottom line is:
>
> WPM = number of dashes in 5 seconds... close enough for ham radio.
>

Unless you are timing your bug, which doesn't make dashes automatically!
:-)

I got into that a while back when I was checking to see just how slow this or that bug would run, and I arrived at the same dot figures that have already been posted.

I was watching the bug's output through an ohms probe on a storage oscilloscope, catching one-shot displays. My reference was the period of one dot/space combination [120 ms = 20 wpm], and in the process, I found out an interesting thing: the bugs that I tested did *not* slow down as the pendulum travel was increased from what I consider to be fairly short travel all the way out to really long travel. As a matter of fact, the speed actually increased by a [probably] negligible but repeatably measurable amount as the travel was drastically increased.

I've always heard that the opposite was true....

Thanks for the info on the dashes though, Ian! That would be quite handy on a keyer.

73, Tom AE5I

1123. [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36AFFCA9.425E@pop.removethistomailme.net>
Source record: 74082
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

I'm wondering if anyone can answer a couple of basic questions, and/or point me towards some good, easy-to-understand references on FSK communications theory. I've done the DejaNews thing, looked at a few dozen web pages, and pored over various editions of the ARRL handbook, but haven't yet found the answer(s) I'm looking for. Thought I'd throw the issues out for general discussion.

Here's the problem: I'm interested in determining a reasonable channel bandwidth for an RF modem capable of handling 10-megabit Manchester-encoded Ethernet data from a 10BaseT interface. The modem will use simple FSK modulation, probably with the MC13155 chip, and I need to determine some good working values for the peak FM deviation and IF bandwidth requirements.

It's my understanding that support for 10-megabit Ethernet dictates that signals up to 20 MHz be passed without substantial phase distortion. Looking at an actual data stream on a storage scope, it appears that every Ethernet packet is preceded by a dozen or so cycles of a 20 MHz burst, presumably for clock synchronization, so I'm assuming that the system 3-dB bandwidth needs to be at 25 MHz or so. Unless I'm off base, 25 MHz seems like a good starting point.

A good estimation of the RF/IF bandwidth required for an FM channel is given by Carson's rule, i.e.,

bw = 2 * (highest modulating frequency + peak FM deviation)

This works out reasonably well for conventional FM audio transmission applications with modulation indices of somewhere around 1 or more. An 18 kHz FM channel can carry a 4 kHz signal with a deviation of 6 kHz (modulation index = 6/4 = 1.5), and so forth.

Now, for conventional FM voice communications, typical NBFM modulation indexes seem to be in the 1 to 2 range. What I am wondering, is what modulation index values are generally chosen for FSK data transmission, and on what basis? Plugging in a modulation index of 1.5 for my 25 MHz channel yields a total bandwidth requirement of

2 * (25 MHz + 37.5 MHz deviation) = 125 MHz

125 MHz for 10-megabit FSK seems awfully high to me, in light of existing designs that seem to get away with much less bandwidth. Glenn Elmore's page at http://www.tapr.org/~n6gn/uwavelink/faster.html suggests that it's reasonable to use a peak deviation of 2 MHz with 10 Mbps data, yielding a channel bandwidth of only 14 MHz, but I have two questions about his derivation:

1) Glenn's application of Carson's rule, 2*(2+5)=14, assumes that a low-pass cutoff of 5 MHz is sufficient to transmit 10 Mbps Ethernet data. I don't see how this could be the case, given the presence of much higher-frequency components (like my observed 20 MHz burst) in a real-world 10BaseT signal.

2) A peak deviation of 2 MHz with even a 5 MHz maximum frequency works out to an FM modulation index of only 0.4. With a 25 MHz cutoff the modulation index would become 0.08. These figures are much lower than the the modulation indices used on FM voice channels, suggesting that perhaps I'm mistaken in applying terms like "modulation index" to FSK in the first place. Are these modulation index values reasonable for FSK data transmission, and if not, what should I be shooting for instead?

Obviously these are some pretty fundamental questions, and I don't mind replies like "you don't even have the basics right, you need to hit the books," as long as they are accompanied by pointers to good references on the subject. I know Glenn Elmore hangs out here, but I have already bugged him enough in email on this project, and have concluded that what he is calling "10 MBps Ethernet" on his web site is somehow very different from what I am seeing with an actual 10BaseT link. :) He reports success in running a MC13055 demodulator at 10 megabits with the above FM parameters, but I have been completely unable to duplicate this feat on my own bench. No doubt I'll get good empirical results by tinkering around with the faster MC13155 chip, but this is one of those cases where I would rather have a sound theoretical knowledge of what's going on.

TIA for any insights!

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1124. Correction: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36AFFEC3.5B37@pop.removethistomailme.net>
Source record: 74083
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

John Miles wrote:
>
> <snip>

I see I mis-remembered my observation with the storage scope: the
leading burst in each packet was at 10 MHz, not 20 MHz. Still, I'd like
to end up with a decent 20 MHz-wide channel if possible.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1125. Re: Camera TV interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: n7hmf@ucares.org
Message-ID: <78m6uh$5np$1@nnrp1.dejanews.com>
Source record: 74181

Another source for these is to visit your local thrift store and find an old original Nintendo system. Inside is a 12v powered modulator for ch 3 and 4.

I bought several of these at the local thrift for $3 apiece.

In article <36ADE6D0.3013@plains.nodak.edu>,
Jim Muehlberg <muehlberX@plains.nodak.edu> wrote:
> beau winburn wrote:
> >
> > Has anyone any info on how to connect one of the new "fish eye" cameras
> > to a standard tv? I am looking for an alternative way to replace my
> > defunct rear monitoring system on my motor home.
> > beau
>
> You need a video modulator. They might have these at Radio Schack. Or,
> if you tinker, you can pull one out of an old VCR. You connect the
> video signal from the camera to the modulator and it will give you a
> picture on channel 3 or 4. Try an electronics part store. They might
> have a generic sort in stock.
>
> --
> Jim Muehlberg Don't forget the reason for the season!
> muehlberX@plains.nodak.edu
> *****REMOVE "X" TO REPLY*****
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1126. wtd: socket and chimney for Burle 8890 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: kf8od@aol.com
Message-ID: <19990126192921.08625.00003330@ng13.aol.com>
Source record: 74182

Looking for socket and chimney for Burle 8890 tube

Chimney no. 8822
Socket no. cd 89-085

thanks,
Mike KF8OD

Long live QRO!

1127. Re: 6M Amplifier using 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: kf8od@aol.com
Message-ID: <19990126193724.08625.00003340@ng13.aol.com>
Source record: 74183

Dan,
I have a article here that describes a inductivly tuned 6m 3-500 amp. If your interested I will make a copy and send to you. Are you good in the callbook.

Are you near cleveland

73,Mike
KF8OD

Long live QRO!

1128. phase slope of oscillator at resonance, up or down?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <lztr2.2169$VB.3119045@news4.mia>
Source record: 74184
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

When I look at an negative resistance oscillator as a one port, and the phase is zero at resonance, should the phase slope be positive or negative wrt frequency?

Thanks,
Bert Douglas

1129. Need 12vdc DPDT enclosed relays with OCTAL plug

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Joe Mehaffey <joe@mehaffey.com>
Message-ID: <36AE7A89.7AC664AF@mehaffey.com>
Source record: 74185

I need from 3 to 10 <Potter and Brumfield or Equal) type KUP style relays 12vdc coil, 10 amp (or more) contacts, enclosed with octal plug connector. I can use the connectors also, but the relays are my major immediate need.

Does anyone have some of these about that you are tired of looking at? If so, let me know what you will take for a few of them.

Many Thanks!

Joe Mehaffey
--
Got a Question about GPS technology? Looking for a GPS FAQ site?
See: http://joe.mehaffey.com

1130. Re: Where to buy Xtals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <36AE8005.B51EFE7F@att.net>
Source record: 74186

A few xtal vendor/manufacturers:

International Crystal (no address)

JAN Crystals address at:
http://www.sci.ouc.bc.ca/ve7ouc/eng/kc6wdk-mirror/suppliers.html

http://www.sentrymfg.com/

For a long, general list of ham suppliers:
http://www.arrl.org/tis/info/address.html

Woody

"Bruce J. Howes KG2IC" wrote:
>
> Hello group,
>
> Can anyone suggest a good source for crystals for use in the amateur bands?
>
> Thank you.
>
> --
> 73,
>
> Bruce KG2IC
>
> **
> ***********
> Bruce J. Howes KG2IC email: kg2ic@amsat.org
> East Amherst, NY 14051 web: http://www.buffnet.net/~bhowes
> AMSAT-NA Area Coordinator ARMY MARS AAR2AJ
> **
> ************

--

----------- de Woody, WB4QXE -----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

1131. Re: RFI in my Microphone!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: jtyburczy@aol.com
Message-ID: <19990126232114.08983.00000349@ng27.aol.com>
Source record: 74187

Same deal here with my IC745 and D104. My cure was a 60 foot wire attached to my antenna tuner ground lug: an extra COUNTERPOISE in effect.

That electret condenser mic preference of ICOM has caused a lot of people a lot of trouble. For one thing, you can't easily experiment with microphones. It's either the SM6, 8 or 20, and that's it. I've heard the HEIL preamp works, but is kind of pricey.

Good luck - 73, Joe , W1GFH

1132. oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <i6xr2.3219$oi.3219832@news3.mia>
Source record: 74188
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

When I look at an negative resistance oscillator as a one port, and the phase is zero at resonance, should the phase slope be positive or negative wrt frequency?

Thanks,
Bert Douglas

1133. CUSHCRAFT! send me the capacitors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be49ba$bbf20e20$26d0a0cd@kovar.inav.net>
Source record: 74189

-- Charles,

As much as I would like to follow in your thoughts, I stray with common
sense.
The responses I receive are apparent in negative content.
CushCraft is now the AMF of Harley motorcycles.

If CushCraft had personal pride in their products they would support
there functionality with spare parts.
The lack of personal drive that keeps a person from doing the best they can
baffles me.
Money never makes up for loss in personal pride.
As a cart in front of the horse, Money will not buy the personal pride of
a job well done.
The argument is with CushCrafts lack in talent customer
relations and availability of parts.
This is the focus I wish to make others aware of.

On the topic of antennas!
My limited understanding in design of collinear arrangements providing
10dbd gain on both VHF and UHF while mounted in a radome with .7 windload
forces me to offer my dependence on others.
My understanding of Smith charts, Grid dip meters, antenna analyzers,
and System analyzers is fair enough to understand my limitations in
manufacturing a ARX270.
There is no perfect Antenna or anything in this world.
I express myself as paying nearly $300 for a good design damaged by a
storm.
Again I do not fault in the design and antenna itself.
I just need a few SMALL replacement parts.
What I need are a few capacitors, and a few Cushcraft employees to get
off their $##$% and walk over to a parts bin and gather what I need.

Your Harley may be the perfect design for you.
A BMW motorcycle meets my needs.

Next time you need a new oil seal on your Harley maybe they will tell you
you must purchase a whole New evolution engine to fix the problem.
Hey nothing is perfect!
The history of Harley/ AMF and how the pride effected the quality and
support is something we can reflect on.
Hey! 0000000, If thats a Honda in the picture then The AMF stuff
didn't make sense did it?

YA! YA! I wear a Helmet and have been for 25 years.
My choice, after I witnessed the effects of cyclist cranium plunge into a

windshield, caused by less than perfect attention span.
I have tested the Cause and effects of helmets as I raced Enduros
in younger days.
Maybe Effects are still evident!

Ps.
I have made so many Ham antennas over the years, AU and CU trace elements
are making my hair silver.
I will be in working in Richardson mid March
Take care of your pride,

Jack Kovar
k0var

--
Jack Kovar
k0var
Iowa

Charles Brabham <n5pvl@texoma.net> wrote in article
<78k392$3sa@enews4.newsguy.com>...
>
> kovar wrote in message <01be44fc$71d22f40$02ede6ce@kovar.inav.net>...
>
> > Responses and concerns of others with opinions to Cushcraft products
> >and customer support follow.
>
>
> I'm amazed... I don't know how he did it! We all know how hard it is to
> find Hams who are willing to complain about something.
>
> If you want the best quality, stand by to cough up some significant cash.
If
> you don't want to cough up the cash, prepare yourself to get by on
something
> less than perfect. You get what you pay for.
>
> I use home-brew antennas that cost next to nothing. When they don't work
> well, I never have any trouble getting in touch with the manufacturer,
and
> each antenna has a "Lifetime warranty".
>
> "LifeTime Warranty": Guaranteed for the life of the antenna!
> When it breaks, the lifetime of the antenna is over and the warranty is
thus
> no longer valid.
>
> 73 DE Charles Brabham,
> N5PVL @ N5PVL.#NTX.TX.USA.NOAM
> http://www.texoma.net/~n5pvl
>

>
>
>

Jack Kovar
k0var
Iowa

1134. Re: Where to buy Xtals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: baumann <baumann@dave-world.net>
Message-ID: <36AEB2E1.65C6088C@dave-world.net>
Source record: 74190

Woody White wrote:

> A few xtal vendor/manufacturers:
>
> International Crystal (no address)
>
>

http://www.icmfg.com/

1135. 20m to 10m transverter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: "Robin K. K." <rkk@ascom.dk>
Message-ID: <vwzr2.285$B11.574@news.get2net.dk>
Source record: 74191

I have a MFJ-9429 SSB rig. It covers 14.150 - 14.350 MHz. I would like to build a transverter to cover the SSB section of 10m, namely 28.350 - 28.550 MHz.

Anyone have any good ideas, or references for such a transverter. I believe the problem I have is that it is not a clean 14MHz shift, but 14.2 MHz ?

73
Robin
OZ6ABM

1136. Need Collins 312B-3 spkr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36aeca7e.0@news1.ibm.net>
Source record: 74192
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Pls state condx and price.

Lane
ku7i
San Diego

1137. Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <N1F84IAEmsr2Ew6a@ifwtech.demon.co.uk>
Source record: 74193

Lyle Koehler wrote:
>
>E.g.: A properly adjusted electronic key gives a string of dots that
>counts to 10 dots per second. Speed = (60 X 10)/25 = 24 w.p.m."
>
That's true, but who can count 10 dots at that speed while also
accurately timing 1 second?

Counting dashes for 5 seconds lets you count at half the speed, and it
also makes the interval timing much more accurate. It also eliminates
the arithmetic.

Proof:
Count 24 dashes in 5 seconds.
A dash is (three bits mark + 1 bit space, so that's (24 x 4)/5
bits/second.
Using the conversion above, that 10 dots/second = 24WPM, it means that
20 bits/second = 24WPM.
So our count of (24 x 4)/5 bits/second = (24 x 4)/5 x (24/20) WPM
= 23.04 WPM

So, you're out by a whole 4%! If you make it a rule to count the last
dash if it *started* before the 5 seconds ran out, the chances are
you'll count exactly the right answer (to the nearest whole number) at
normal communication speeds.

But that is probably analysing it too much. The simple bottom line is:

WPM = number of dashes in 5 seconds... close enough for ham radio.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

1138. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Ian Wade <ian@dowrmain.demon.co.uk>
Message-ID: <6LN+xcAhtvr2EwvC@dowrmain.demon.co.uk>
Source record: 74194

In article <SAar2.4517$9P6.13191845@newsgate.direct.ca>, Bill Good
<java1@internet.cafe> writes
>I built an iambic electronic keyer.
>
>I wish to calibrate the speed pot on it.
>Isn't there a formula like like count the number of dits
>in 10 seconds and multiply by a factor or something?
>
>Please reply via this NG.

Erm, this may be a silly question, but WHY do you want to calibrate it?

Surely you just USE it, setting the speed to a comfortable rate and/or
to match the other guy.

73
Ian, G3NRW

1139. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: David Dickason <davelara@teleweb.net>
Message-ID: <36AF18B3.B79F65F7@teleweb.net>
Source record: 74195
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

Try your local beer store - they have a wide variety of bottles and some of them have intriguing samples of things you may want to try reproducing!

(http://www.arachnyd.com/david/)

Tom MC wrote:
>
> Does anyone know where I can BUY some bottles?
>
> Thanks
>
> Tom MC

1140. FS: 300W VHF Power Fets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be49f3$7d1d37e0$4c003bcb@default>
Source record: 74196

Who wants to build a 2 meter linear?
Phillips power transistors
See data at Phillips website
http://www-us2.semiconductors.phillips.com/search/

BLF278 (2)

Dual balanced FET
Pout 300W at 108 MHz
250W at 225 MHz (CW class B/AB)
Gain (typ) 16 dB at 225MHz
VSWR up to 7:1 at rated power
Vdd 50V
New AUS$200

BLF277 (2)

Single FET
Pout 150W at 108 Mhz
otherwise as for the BLF278

New AUS$80

Also quantity of high power SM ceramic caps
as yet uncatalogued
Please E mail

Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

1141. e-zine update

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: n9vjg19-nospam@idt.net
Message-ID: <n9vjg19-nospam-2701990816180001@ppp-30.ts-9.nyc.idt.net>
Source record: 74197

We have another handful of valuable and refreshing articles and updates all over the FBOM Magazine Online web site. http://www.n-lemma.com/FBOM/

More fest listings searchable by LOCATION and DATE
http://n-lemma.com/FBOM/fest/what.html

Why Too Kay and You! Is the Y2K threat something that your personal computer should be concerned with? Remember, many repeaters are controlled with computers--often old ones at that.
http://www.n-lemma.com/FBOM/y2k/y2k.html

Your letters and emails:
http://www.n-lemma.com/FBOM/input.html

New RF Horoscopes:
http://www.n-lemma.com/FBOM/horo/horo.html

Truly Hidden Antennas:
http://www.n-lemma.com/FBOM/stuff/stuff.html

And of course, our latest MESSY RADIO ROOM contest winner!
http://n-lemma.com/FBOM/contest.html

1142. Re: Icom 2000 keyed in CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <78o42h$q2h$1@nnrp1.dejanews.com>
Source record: 74198
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <78j3am$18p$1@smithers.eaglequest.com>,
"Tim Hynde" <ka8ddz@eaglequest.com> wrote:
> I've got an Icom 2000 50w FM rig in the car that I'd like to use to work
> RS-13 in mode A, thats 145.965 up CW. While I can probably get away with not
> changing the transmit freq it doesn't make it very easy. Any Icom specialits
> out there with thoughts of changing the TX freq +/- 5 KHz? variable.

The IC-2000H is very similar to most other VHF/UHF FM radios, that it
is a single-loop, single VCO PLL design that has a moderately long
PLL lock-up time (I believe greater than 100mS). During this
lock-up time, the transmitter bounces onto frequency. It doesn't
sound pretty and the speed with you can send is quite limited.
Before you try operating Morse with the radio by keying the
PTT line, try listening to the signal. You can get a much better
transmitted signal by keying the driver stages in the transmitter,
holding PTT down the entire time, but this might not be trivial.

What are you going to do for a receiver? The FM receiver won't
make much sense, but it occurs to me maybe you could use the
AM receiver mode with the addition of a 455KHz BFO. You've
got to build this carefully if it is to be even remotely reliable
in a mobile.

> I haven't even looked at the schematic yet but was thinking about a varicap
> diode tapped into the LO and using a pot to swing it up and down. Can
> someone give me a sanity check on this? Am I headed in the right direction
> or is there a better way?

Not for transmit, maybe for receive, but I think you're better off
with a tunable BFO. It won't work for transmit because there's no
LO to adjust, the loop synthesizes on-frequency.

Dana K6JQ
Dana@Source.Net

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1143. FS: Vacuum Capacitors, fixed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <78o56p$r3o$1@nnrp1.dejanews.com>
Source record: 74199

**********Fixed Vacuum Capacitors **********

-- various manufacturers $10 each

12pF 20KV
25pF 32KV
50pF 5KV
50pF 32KV
75pF 20KV

plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific
Time please) or via: Marv_E_Ads@Juno.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1144. FS: Vacuum Variable Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <78o5dt$r70$1@nnrp1.dejanews.com>
Source record: 74200

********** VACUUM VARIBLES **********

Jennings Vacuum Variables -- all used (or at least aged)

UCSV-250 250pF 10KV $150 Integral Front Flange + Puller
UCS-300 300pF 7.5KV $80 Has part of a gear driven pull mechanism with a mounting foot
UCS-300 300pF 10KV $125 Integral Front Mounting Flange & typical puller

UCSB-100-10S 100pF 10KV $250 Integral Front & Back Flanges + Puller/later manufacture (blue)
UCS-300-15S 300pF 15KV $250 with puller, later manufacture (blue)
UCSL-750 750pF 3KV $200 with puller
CMV1-4000-0105 4000pF 5KV $250 Ceramic -- Spline shaft

R1G SPST 20KV+ 20Amp? Vacuum Switch $100

plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific Time please) or via: Marv_E_Ads@Juno.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1145. FS: Collins & other filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <78o5jfrap1@nnrp1.dejanews.com>
Source record: 74201

---------- Mechanical Filters ---------------

Collins F455K-15 (526-9168-00) 1.5KHz BW - tubular metal package "new" $70
Collins F455N-20 (526-9163-00) 2.1KHz BW - tubular metal package "new" $70
Collins F455FA-21 (526-9427-00) 2.1KHz BW - plastic package "new" $70

Kokusai MF-455ZL-21H 2.1KHz -3dB@2.1KHz, -6dB@2.5KHz, -66dB@4KHz.
Rectangular metal package "new" $50

"new" means that these are about 30 years old but, never used.

---------- Crystal Filter -------------------

McCoy 48B1 Golden Guardian 9 MHz Filter w/matching BFO crystals NIB $50

plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific
Time please) or via: Marv_E_Ads@Juno.com

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1146. FS: Microwave Switches & Relays

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <78o5o6ril1@nnrp1.dejanews.com>
Source record: 74202

Transco 4 port relay 115 VAC X - band
Hewlett Packard 930A Switch X - band
MBF 4 port failsafe relay 28VDC M - band
Waveline 7578E 4 port switch M - band

Your choice $30 each

plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific
Time please) or via: Marv_E_Ads@Juno.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1147. FS: UHF Heliax & C connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Marv_E_Ads@Juno.com
Message-ID: <78o62frnv1@nnrp1.dejanews.com>
Source record: 74203

used Andrews Heliax UHF connectors

1/2"
44AP male $10 ea
44AU female $10 ea

1"
45AP male $20 ea
45AU female $20 ea

****

UG-643 C Female-Female barrel connectors, used $3 ea
UG-637 UHF Male to C Female adapters, used $5 ea

plus shipping if necessary, naturally! :-)

Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific
Time please) or via: Marv_E_Ads@Juno.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1148. For Sale 4CX5000A/8170 Pull

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990127101811.27181.00000392@ng-ca1.aol.com>
Source record: 74204

```
Verian/Eimac 4CX5000A/8170 Pull
Frequencies up to 220 MHz
Plate volts to 7500 DC
Amps 2.8 = AM 150 watts drive = 16,000 watts
1.9 = AB1 50 to 70 watts drive = 10,000 watts
Filament 5 volts at 90 amps
$250.00 shipped ConUS
Thanks JR
```

1149. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: WebMonkey <usethelink@below.org>
Message-ID: <36AF3182.8D7@below.org>
Source record: 74205

Ian Wade wrote:
>
> In article <36ADECB4.7546EFC8@webpdx.com>, kevin <kevin@webpdx.com>
> writes
> >Others have already suggested sources for NEW bottles, here is what I
> >have done:
> >I typically keg most of my brews, but I always bottle some from every
> >brew for tasting and samples.
> >In Oregon we have a bottle LAW, so everything has a store deposit. I ask
> >the grocery if I can buy back some bottles, at the 5 cent deposit rate.
> >I then go in the back and pick out what I want, many have been sorted
> >for return to his suppliers so its pretty easy to get exactly what I
> >want.
> >When I get these home I fill the bathtub with soapy anti-bacterial water
> >as hot as I can get it...I fill the bottles and let then soak overnight.
> >Then I shake the water from each one and put then in the dishwasher on
> >POTS and PANS cycle using NO detergent.
> >5 cents a piece...my choice...all I need. It works great.
>
> Are these 6V6s or 807s?
>
> (That'll get 'em going in the other brewing groups :-))
>
> 73
> Ian, G3NRW
> (reading rec.radio.amateur.homebrew)

i just thought all the CW fighting had driven a few hams to drinking =]
tucher dunkel heffe weisen rulez
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

1150. unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: James.W.ARnold@student.shu.ac.UK
Message-ID: <msg125588.thr-14b0c7.5b8ff1@amazon.shu.ac.uk>
Source record: 74206

```
unsubscribe Ham-Homebrew
```

1151. Re: unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: tbone107@aol.com
Message-ID: <19990127113633.08198.00001520@ng50.aol.com>
Source record: 74207

>unsubscribe Ham-Homebrew

YOU CAN NOT UNSUBSCRIBE !!!
All you can do is to allow your current
subscription to run out...(or just don't
point n click in this direction anymore.)

1152. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Ron Higgs <erhiggs@flash.net>
Message-ID: <36AF42F6.9942C5E@flash.net>
Source record: 74208

Strange newsgroup -- we have some looking for 'DOORKNOB' capacitors and
others looking for cheap 'BOTTLES' . . . . . :-)

Ron

1153. Re: unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Ron Higgs <erhiggs@flash.net>
Message-ID: <36AF43BF.D668F1D0@flash.net>
Source record: 74209

Or simply delete the newsgroup in your newsgroup reader.

Tbone107 wrote:
>
> >unsubscribe Ham-Homebrew
>
> YOU CAN NOT UNSUBSCRIBE !!!
> All you can do is to allow your current
> subscription to run out...(or just don't
> point n click in this direction anymore.)

1154. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: java1@internet.cafe
Message-ID: <RIHr2.5101$9P6.14448640@newsgate.direct.ca>
Source record: 74210

Well thanks to all that have replied to my enquiry.
Why calibrate it? Simple, I teach and help scouts learn morse code and they want to know their copy speed.

thanks
Bill

>
>Erm, this may be a silly question, but WHY do you want to calibrate it?
>
>Surely you just USE it, setting the speed to a comfortable rate and/or
>to match the other guy.
>
>73
>Ian, G3NRW

1155. Re: unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <36AF46FE.167EB0E7@my-dejanews.com>
Source record: 74211

James W. Arnold wrote:
>
> unsubscribe Ham-Homebrew

This message should have been sent to the list server at
"listserv@ucsd.edu", not posted to this news group. I see
this happening more and more lately.

Martin

--
Martin E. Meserve martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1156. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF68BMx.LpF@netcom.com>
Source record: 74212
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <36AD470D.3117@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>Mark Zenier wrote:
>>
>> In article <36A90F11.6638@pop.removethistomailme.net>,
>> John Miles <jmiles@pop.removethistomailme.net> wrote:
>> >
>> > http://www.amazon.com/exec/obidos/isbn=0471520195
>> > http://www.amazon.com/exec/obidos/isbn=0872594920
>>
>> AARRRRRRRRGGGGGGGGH. Will you just put the authors and titles here
>> instead of putting some USELESS URL.
>>
>> 1. Usenet is NOT the Internet, and no small number of people read
>> the newsgroups (or the r.a.a.h mailing list mirror) without keeping
>> up a direct connection. And any future use of these postings off
>> an archive or printed copy will be extra work if not futile.
>
>Sorry, Mark, gotta agree to disagree on this one. Anyone who can't look
>up a simple URL is nothing more than roadkill on the 'information
>superhighway.'

You are a pathetic fatuous Internet Fashion Victim. A braindead
exclusivist brother to the (now thankfully out of date) yuppie
who deliberatly irritates everyone around him by loudly conversing
on his cell phone. An insecure wretch who's actions are demands
for attention though the display of his adult toys. You're just
saying "LOOK AT ME, I OWN THIS NEAT TOY!!!!!".

>I 'd suggest changing your way of accessing Usenet to one
>which conforms with modern standards. Believe me, the ability to
>dereference a URL at will is worth the $20 a month it costs (in the US,
>at least).

Why does everyone think I'm objecting to this because they think I
lack the access? I'm objecting to it because, after being 'here'
for a dozen years and begin proponent for one of these newsgroups,
(and sticking my oar in during the creation of the other), I have a
philosophy of inclusivity when it comes to access to the newsgroups.
(In other words, I think about how postings are used and the value they
have to the entire user population).

Tieing things together that don't need to be is considered a bad idea.
(Too bad the authors of browser software are incapable of absorbing

that concept).

Remember:
Newsgroups can be gatewayed to mailing lists. Users of these Email systems may be limited by their software or simply not have access if someone else provides their connection, as in the case of an employee who can only use what they are given or have to operate through a restricted firewall.

News is just data. Even people accessing through a BBS in East Possum Trot have a right to participate.

News hangs around. Some day Amazon isn't going to be around. Or you may want to print out a message thread for someone who has better things to do with their time.

News is just data. My offline news reading system lets me read news faster than the autorepeat in my keyboard. Probably 20 times the rate of someone online through a serial port to an nntp server. I have kill files that can do ANYTHING. All on a Linux system that's worth so little some people wouldn't dig it out of a dumpster. (Next stage is to get a laptop and get a newsreading system portable enough to use in the bathroom, or on a bus, a parkbench, ...). Don't project your methods of access to everyone else.

>Besides, in my understanding at least, ISBN numbers are not going away
>anytime soon. Even if you can't follow the URL itself, or if you are a
>conscientious Amazon objector, the "isbn=" part of the link should be
>easy to check out at any conventional bookstore or library. If it
>isn't, again, I'm sorry, but that's more your problem than mine. My
>advice was clearly worth exactly what you paid for it....

Look, all I need to do is look at my bookshelf and read them off the barcodes on the back. You could have typed "Hayward's Intro to RF..." in less time that it took to play with your mouse to extract that URL.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1157. Re: Cellphone oscillator/IF frequencies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36af5b41.0@news.netwalk.com>
Source record: 74213

Dave Martindale wrote in message <78ituf$q22@zeppo.cs.ubc.ca>...
>I can see how that works for people signing contracts. Many analog
>phones can be had for free with a contract.
>
>But I recently got a Motorola DPC 650e as part of a "pay as you go"
>offering from the local B carrier. Total cost was $130 CDN, which
>included $60 worth of airtime. Of course, the airtime doesn't cost the
>carrier $60, but if the wholesale cost of the phone was more than $130
>CDN (about $85 US), they lost money.
>

Beleive me, they are not loosing money!

On things like this, they are counting on most people going over the $60 worth of airtime per month.

I used to work for a major US cellular company. I know how ruthless they can be. How do you think they pay for all those employee golf outings?

Jim
N8EE

1158. Re: phase slope of oscillator at resonance, up or down?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <cryU3OA1jrr2Ewoo@jmwa.demon.co.uk>
Source record: 74214
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<lztr2.2169$VB.3119045@news4.mia>, Bert Douglas <bertdNOSPAM@dibbs.net>
wrote:
>When I look at an negative resistance oscillator as a one port, and the
>phase is zero at resonance, should the phase slope be positive or negative
>wrt frequency?
>
Does it depend on whether your NRO is open-circuit or short-circuit
stable? O/c stable looks like a parallel-tuned circuit of infinite Q,
and s/c stable looks like a series circuit, IIRC.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

1159. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <b8Jr2.994$2c.78@firefly>
Source record: 74215

In a previous article, erhiggs@flash.net (Ron Higgs) says:

>Strange newsgroup -- we have some looking for 'DOORKNOB' capacitors and
>others looking for cheap 'BOTTLES' . . . . . :-)
>
>Ron
>

I could use a few SMA 'SPIGOTS' :-)

Zack W9SZ

--

1160. Re: Camera TV interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36af5bf6.0@news.netwalk.com>
Source record: 74216

Jim Muehlberg wrote in message <36ADE6D0.3013@plains.nodak.edu>...
>beau winburn wrote:
>>
>> Has anyone any info on how to connect one of the new "fish eye" cameras
>> to a standard tv? I am looking for an alternative way to replace my
>> defunct rear monitoring system on my motor home.
>> beau
>
>You need a video modulator. They might have these at Radio Schack. Or,
>if you tinker, you can pull one out of an old VCR. You connect the
>video signal from the camera to the modulator and it will give you a
>picture on channel 3 or 4. Try an electronics part store. They might
>have a generic sort in stock.

Some modern TVs have a direct video input, intended to hook to a VCR. This gives better picture quality than the RF interface.

Of course, the camera must operate in the correct NTSB format. I would not make that assumption without verification. This must also be true for the RF modulator.

Jim
N8EE

1161. FS:OLD PANEL METERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <78no8dkop1@remarQ.com>
Source record: 74217

>All these meters are in good working order. All good glass, cases, and
>dials. Some yellowed dials where noted. No blemishes or stains. Most old
>Bakelite or hard plastic type cases as used by E.F. Johnson and others.
>Dimensions in inches.
>
>TRIPLET VDC 0-300, 1000 ohms per volt model 0327-AT. Square black face 3
>1/8x3 1/8 Hole 2 3/4
>
>TRIPLET DC amps 0-10 model 327-T, square black face 3x3, hole 2 3/4
>
>SIMPSON AC amps 0-10 no.16850 Square face 3x3 Hole 2 3/4
>
>TRIPLET DC ma 0-300 Model 327-T Square face 3x3 Hole 2 3/4
>
>WESTON DC ma 0-2.5 FS=20V Amp Model 301 Square face 3x3 Hole 2 3/4
>
>WESTON 1.9v DECIBELS Zero power level 6mw 6000ohms Model 840 Type 43
>Black metal square face 2 5/16x2 5/16 Hole 2 3/16 MIL brass
>case-stainless steel hdwr
>
>MFG? Volts DC 0-6 FS=20v amp. Black square face 3x3 Hole 2 3/4
>
>MFG? tag says 40 D071V5E1 500v stock 10/19. Grey dial says
>0-45-90-135-180. +/- POSTS Square black face 3x3 Hole 2 3/4
>
>MARION DC ma 0-300 model 53 Square black face 3x3 Hole 2 3/4
>
>RIFKIN DEVELOPMENT CO. Percent Modulation 0-150 model 144, Square black
>metal face 3x3 Hole 2 3/4 yellowed dial but good.
>
>TRIPLET DC ma 0-100 model 227-T Square black face 2 3/16x2 3/16 Hole 2
>1/8
>
>1939 yr. A M FERRANTI ma 0-15 (Moving Coil) Ref No.10A/8514 No. T 45644
>RES 0.5 ohm, Yellowed dial good shape Square black face 2 1/4x2 1/4 Hole
>2
>
>SIMPSON DC ma 0-100 Square black face 3x3 Hole 2 3/16
>
>TRIPLET FILLAMENTS 0-10 model 320-G Modern Clear Face 3 1/2 x 3 1/2 Hole
>2 3/4
>
>HOYT DC volts 1-10 Square black painted brass face (paint scratches) 2
>5/8x 2 5/8 Hole 2 1/8 Dial yellowed but good.

>
>MFG? New unused meter movement in all clear plastic case. Kit
>type...make your own dial. Values unknown. +/- posts. Clear plastic face
>3 1/4x3 1/4 Hole 2 3/4
>
>All guaranteed good. $16.00ea PPD, MO only, COD add $6.50 per order
>To reply remove "X"s from address at top. ac6ts@n2.net
>

--

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

1162. For Sale 4CX5000A/8170

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990127142418.27213.00003216@ng147.aol.com>
Source record: 74218

Verian/Eimac 4CX5000A/8170 Pull
Frequencies up to 220 MHz
Plate volts to 7500 DC
Amps 2.8 = AM 150 watts drive = 16,000 watts
1.9 = AB1 50 to 70 watts drive = 10,000 watts
Filament 5 volts at 90 amps
$250.00 shipped ConUS
Thanks JR

1163. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: Ron Higgs <erhiggs@flash.net>
Message-ID: <36AF689C.E93135B4@flash.net>
Source record: 74219

Tried ebay? :-)

Zack Widup wrote:

> I could use a few SMA 'SPIGOTS' :-)
>
> Zack W9SZ

1164. wtb basic stamp I or II

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-27 00:00:00 UTC
From: richard friedrich <dakota@ccwf.cc.utexas.edu>
Message-ID: <36AF775D.5E9CA712@ccwf.cc.utexas.edu>
Source record: 74220
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,sci.electronics.equipment

wtb basic stamp I or II and development kit.

thanks

richard

1165. Re: oscillator phase slope at resonance, + or - ?

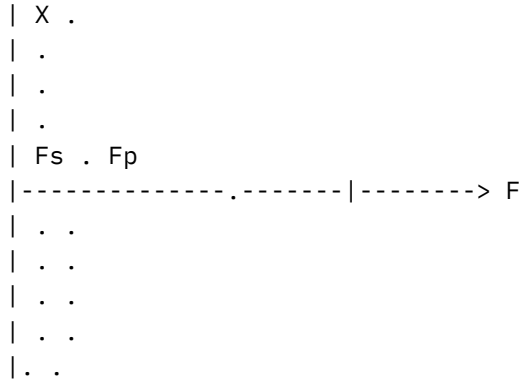
Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R2801990922160001@news.latrobe.edu.au>
Source record: 74084
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Previously Bert Douglas asked
"should the phase slope be positive or negative wrt frequency?"

At the risk of attracting some flames, here's my (27 year old) recollection on this.

Fosters reactance theorem states (some thing like) "the derivative of the reactance with respect to frequency is always positive". ie. if the impedance is represented as R + jX, then as the frequency is raised the value of X becomes more positive / less negative. At parallel resonant frequencies (infinite impedance), this becomes a little obscure as the sign of X suddenly switches from + to -, but the slope is always positive.

Maybe a graph typical of a crystal near its fundamental frequency may help illustrate.



Regards, Phil Rice VK3BHR

1166. Re: oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <nCOr2.3453$oi.3797760@news3.mia>
Source record: 74085

Phil Rice wrote in message ...
>Previously Bert Douglas asked
>"should the phase slope be positive or negative wrt frequency?"
>
>At the risk of attracting some flames, here's my (27 year old) recollection
>on this.
>
>Fosters reactance theorem states (some thing like) "the derivative of the
>reactance with respect to frequency is always positive". ie. if the
>impedance is represented as R + jX, then as the frequency is raised the
>value of X becomes more positive / less negative. At parallel resonant
>frequencies (infinite impedance), this becomes a little obscure as the sign
>of X suddenly switches from + to -, but the slope is always positive.

Thanks for the answer, but no crystal is involved. Just a transistor, and a capacitor, and some lengths of microstrip. I am asking about the phase slope of S11, not impedance. ARRL radio designer does not show impedance(it lies). I can convert to impedance manually for a few points, but it is difficult to get a clear picture (and tedious). I can arrange things so the phase slope of S11 goes either up or down. I presume that one way is better. Or does it matter at all?

Thanks,
Bert Douglas

1167. Re: MC13135/36 Vhf receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <36AFB3BE.523B1400@home.com>
Source record: 74086
Cross-posted to: rec.radio.amateur.homebrew,sci.electonics.design,rec.radio.amateur.misc

M.Ursicino wrote:
>
> I have built a VHF receiver using the MC13135. I have reproduced the
> circuit given in its datasheet. It is a dual conversion VHF receiver
> using a very limited number of parts.
> The circuit works fine, but the bipolar transistor based front-end is
> not adequate to the rest of the circuit, high intermodulation and low
> sensitivity.
> Apart the low sensitivity, it seems to me to have an excessively high
> intermodulation distortion. Despite the excellent selectivity, it is
> completely dumbed by a 2W transmitter placed not closer than 30 meters,
> even if it transmits 1-2 MHz from the receiving frequency. There must be
>
> soething wrong. The data sheet did not indicate the supply voltage and I
>
> used 5V. Maybe it is too low for the front-end?
> Has anybody else faced and solved the problem, or can anyway help
> suggesting a schematic for a simple but adequeate front-end?

I don't think the front end is saturating, I think it's more likely the
MC13135 is saturating. This is a very low power device drawing 3.5 ma
that seems to be intended for toy walkie talkies. The spec sheet says
the input 3rd order intercept point of the 1st mixer stage is -17 dBm
referred to the input. That's not too good for a communication receiver.

If you put a preamp in front of it, then the IP3 referred to the preamp
input is probably below -30 dBm. (It's lowered by whatever the preamp
gain is.)

Also the 2nd mixer has an even worse input IP3 of -27 dBm or -40 dBm with
the preamp! Anything that gets thru the 1st IF filter will really overload
the receiver!

I think the bottom line is you should choose higher level mixers for
your receiver if you want to operate around even a 2 Watt transmitter.

Don

1168. Re: oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <iJOr2.3462$oi.3801954@news3.mia>
Source record: 74087

John Woodgate wrote in message ...
Bert Douglas <bertdNOSPAM@dibbs.net>
>wrote:
>>When I look at an negative resistance oscillator as a one port, and the
>>phase is zero at resonance, should the phase slope be positive or negative
>>wrt frequency?
>>
>Does it depend on whether your NRO is open-circuit or short-circuit
>stable? O/c stable looks like a parallel-tuned circuit of infinite Q,
>and s/c stable looks like a series circuit, IIRC.

It is open circuit stable. Reactance of the transistor is inductive.
Transistor is common base. From emitter there is some transmission line,
then a capacitor, then 50 ohm resistor, then ground.

Thanks,
Bert Douglas

1169. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19990127201626.16732.00000046@ngol05.aol.com>
Source record: 74088

In article <RIHr2.5101$9P6.14448640@newsgate.direct.ca>, java1@internet.cafe (Bill Good) writes:

>Well thanks to all that have replied to my enquiry.
>Why calibrate it? Simple, I teach and help scouts learn morse code and they
>want to know their copy speed.
>

Well, the official standard in the U.S. is the word PARIS sent repeatedly. For 5 w.p.m. for example if the word "PARIS" could be sent exactly five times properly spaced in one minute, the keyer would be set to 5 wpm. However please note that it's probably easier to learn the code in the long term with the wpm set to some speed like 13 wpm (Commonly Called Farnsworth Method) and spaced so that the words are set for 5 wpm. Please note however that I would urge that people learn the characters at some speed like 22 wpm, with the proper spacing to avoid some of the difficulties associated with the old method of learning code again and again. I have yet to meet anyone who can copy let's say code at 5 wpm with the characters sent at 20 wpm who can't copy code sent at 5 wpm exactly for an exam.
-art clemons-

1170. QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "Matt J. McCullar" <mccullar@flash.net>
Message-ID: <36AE6EB1.613A@flash.net>
Source record: 74089

Howdy! I'd like to de-packrat the shack a bit and found a circular from a hamfest featuring back issues of _QST_ on CD-ROM. I've checked out the Radio Era Archives web site and like what I read so far. What I'd like to find out is, how sharp are the pages when displayed on your monitor? Do they print out well? Does the index search engine work well? Is it worth $40 for a four-year set? Pros and cons on this are very welcome.

Thanks!!!

Matt J. McCullar, KJ5BA
Arlington, TX

1171. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: maddog@io.com
Message-ID: <36afedb1.2097886@news.io.com>
Source record: 74090
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 23 Jan 1999 21:54:23 GMT, mzenier@netcom.com (Mark Zenier)
wrote:

>2. Amazon is a pox upon humanity. They're bound to be keeping track
>of everyone's web requests on some lists, over the use of which the rest
>of us will have no control. They have obnoxious employment practices.
>Their stock price vs. value is off in some alternate universe. And if
>they are successful, the zero sum game of book retailing means that an
>existing industry is going to die.

Maybe, but I *love* that they go against the normal grain of the
so-called "system". More. More. More...

monty

1172. Re: oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@dibbs.net>
Message-ID: <GoSr2.2645$VB.3929559@news4.mia>
Source record: 74091

William E. Sabin wrote in message <36AFD541.A2398FC0@mwci.net>...
>
>For a one-port network ARD gives the input impedance using MZ11, PZ11, RZ11
and
>IZ11. To get input admittance use MY11, PY11, RY11 and IY11.

These displays (MZ11, etc) don't seem to have correct information. When I convert manually with my calculator they don't match S11. For starters the magnitude of S11 is greater than one, this should correspond to a value of RZ11 that is less than zero, but it is not.

But I received advice that I have to place manual termination to get results that correlate with S11. I will check this out.

1173. WTB Plate transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <78os8o$10ag_001@slip-9.nlis.net>
Source record: 74092

I need a plate transformer for a capacitor input filter, I would like 4000 to 4200 VAC at an amp, but can't be too picky! what have you got? de Dick NY1E

1174. I need a Schematic for a keyer for my homebrew transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: somewhere@thisplace.com
Message-ID: <917508355.706401@neptune.uniserve.ca>
Source record: 74093

I just built a small non-kit QRP transmitter and would like to put
a simple keyer in it's case. Does anyone know where
I can find a schematic for a little homebrew keyer?

1175. 10 Meter QRP SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: bkizerian@my-dejanews.com
Message-ID: <78q7a5$ia3$1@nnrp1.dejanews.com>
Source record: 74094

I would like to build a 10m QRP SSB rig. Does anyone know where I can get information to do this. Articles, schematics, etc. would be very helpful.

Thanks

Bruce kk7zz kizerian@ced.utah.edu

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1176. Re: For Sale 4CX5000A/8170 Pull

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <78qa0h$kv6$1@nnrp1.dejanews.com>
Source record: 74095

In article <19990127101811.27181.00000392@ng-ca1.aol.com>,
kb5mer@aol.com (KB5MER) wrote:
> Verian/Eimac 4CX5000A/8170 Pull
> Frequencies up to 220 MHz
> Plate volts to 7500 DC
> Amps 2.8 = AM 150 watts drive = 16,000 watts

^^^^^^^^^^^^

So I guess this is a final for a CB, right Wilbern?

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1177. Re: oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36B00E0D.8C24D63F@mwci.net>
Source record: 74096

Bert Douglas wrote:

> William E. Sabin wrote in message <36AFD541.A2398FC0@mwci.net>...
> >
> >For a one-port network ARD gives the input impedance using MZ11, PZ11, RZ11
> and
> >IZ11. To get input admittance use MY11, PY11, RY11 and IY11.
>
> These displays (MZ11, etc) don't seem to have correct information. When I
> convert manually with my calculator they don't match S11. For starters the
> magnitude of S11 is greater than one, this should correspond to a value of
> RZ11 that is less than zero, but it is not.
>
> But I received advice that I have to place manual termination to get
> results that correlate with S11. I will check this out.

There are three things:

1) When setting up the one-port, it should include the circuit's "output" termination "inside" the one-port.

2) If the input resistance is negative, put a resistor across the input so that the net resistance is positive. Then calculate the value of the negative resistance that is in parallel with the positive resistance.

3) Plot MZ11 etc on a rectangular plot rather than a polar plot.

Bill W0IYH

1178. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b02996.34939120@newshost>
Source record: 74097
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Hi John,
I did a similar thing to this almost a decade ago.
My task was to extend our company's computer network about 200 metres (to a new building we had just leased in the next street).
I was given a low power FM video link in the 10.5GHz band. The baseband bandwidth was quoted as 7MHz, but it was only about 1 dB down at 10MHz when I measured it on a network analyser. The link was designed to operate in a 14MHz RF bandwidth. I don't remember what the deviation was set to.
(The link was one of our products, so we had spare ones lying around.)

We used arcnet instead of ethernet (I said this was a long time ago!). Arcnet uses token passing, and runs at 2.5Mbps with 3 level signalling, IIRC. I think it looks a little like filtered AMI. The voltages are huge! Something like 10Vp-p.
I modified an arcnet repeater box, and brought out Tx and Rx streams on separate coax connectors.
[You are using 10baseT, so you already have separate Tx and Rx signals.]
The Tx signal went into a pad to adjust the level and match the 93ohm arcnet and the 75 ohm video input of the link.
The Rx signal from the link went into a high speed opamp for some gain, and then a hybrid buffer amp (LH0002 ?) to drive the arcnet.

Suprisingly, it worked first time. I just had to tweak the gain to get it to work reliably. It only took a few days from being given the task to having a working bench model. It went on-line a few days after that.

The RF output had several spurs many tens of MHz away from the carrier. These were way outside the spectral mask for the channel. Sorry, it was so long ago, I can't remember just how bad it was. However, the power was so low (we used high gain dishes, I think the Tx power was << 0dBm), that the output spectrum was not relevant, as the whole thing was in the "unlicensed" category. YMMV, depending on the communications authority in your country.

I guess I could have tried to filter the Tx baseband signal, but then I would have needed to perform the complementary filter operation in the receiver.
Another way would have been to use comparators to slice the receive signal at some (possibly adaptive) threshold. The outputs of the comparators could be combined in some way to produce a better looking pulse shape.

IIRC, 10baseT uses two level signalling, so you would only need one comparator.

Another thing to look out for is the DC resistance of pulse transformers in network interfaces. My receiver output had a small amount of mains hum which caused a large current to flow at 50Hz. The prototype blew up after a week. I fixed it with a series capacitor.

So much for the cheap and dirty solution. The better way to get ethernet across a radio link is to do the following:
1. Get a pair of ethernet routers or bridges with wan ports. Routers that do address filtering are better, as they reduce the traffic on the wan link.
2. Use a digital radio to connect the wan ports.

I contend that this way is better, because it will be easier to monitor and control, and it won't trash the network at either end when the link gets noisy. Also, each ethernet will be in a separate collision domain, which helps when they are heavily loaded.
Most networks will already have a router, bridge or switch installed somewhere anyway, so there will be no major additional costs.
It is also possible to turn a PC with a high speed serial card into a low cost bridge.

If you want to roll your own bridge, you can do it quite cheaply and with no software. See:
http://www.rad.com/components/componnt/rj017.htm
for an (almost) single chip bridge. Its wan port can be set to any speed up to 40Mbps.

I suggest that 2Mbps is probably enough for most ethernet applications, and 2Mbps digital radios are quite cheap. (We also made these, so they were just lying around...)
You could also get a radio which uses a more bandwidth efficient modulation, such as trellis coded QAM.
For example, 64QAM (not trellis coded) could be used to transmit 10Mbps in only a little over 2MHz of RF bandwidth.

Good luck,
Allan.
(I don't work for that company anymore.)

On Wed, 27 Jan 1999 21:59:05 -0800, John Miles <jmiles@pop.removethistomailme.net> wrote:

>I'm wondering if anyone can answer a couple of basic questions, and/or
>point me towards some good, easy-to-understand references on FSK
>communications theory. I've done the DejaNews thing, looked at a few
>dozen web pages, and pored over various editions of the ARRL handbook,
>but haven't yet found the answer(s) I'm looking for. Thought I'd throw
>the issues out for general discussion.
>
>Here's the problem: I'm interested in determining a reasonable channel

>bandwidth for an RF modem capable of handling 10-megabit
>Manchester-encoded Ethernet data from a 10BaseT interface. The modem
>will use simple FSK modulation, probably with the MC13155 chip, and I
>need to determine some good working values for the peak FM deviation and
>IF bandwidth requirements.
>
>It's my understanding that support for 10-megabit Ethernet dictates that
>signals up to 20 MHz be passed without substantial phase distortion.
>Looking at an actual data stream on a storage scope, it appears that
>every Ethernet packet is preceded by a dozen or so cycles of a 20 MHz
>burst, presumably for clock synchronization, so I'm assuming that the
>system 3-dB bandwidth needs to be at 25 MHz or so. Unless I'm off base,
>25 MHz seems like a good starting point.
>
>A good estimation of the RF/IF bandwidth required for an FM channel is
>given by Carson's rule, i.e.,
>
> bw = 2 * (highest modulating frequency + peak FM deviation)
>
>This works out reasonably well for conventional FM audio transmission
>applications with modulation indices of somewhere around 1 or more. An
>18 kHz FM channel can carry a 4 kHz signal with a deviation of 6 kHz
>(modulation index = 6/4 = 1.5), and so forth.
>
>Now, for conventional FM voice communications, typical NBFM modulation
>indexes seem to be in the 1 to 2 range. What I am wondering, is what
>modulation index values are generally chosen for FSK data transmission,
>and on what basis? Plugging in a modulation index of 1.5 for my 25 MHz
>channel yields a total bandwidth requirement of
>
> 2 * (25 MHz + 37.5 MHz deviation) = 125 MHz
>
>125 MHz for 10-megabit FSK seems awfully high to me, in light of
>existing designs that seem to get away with much less bandwidth. Glenn
>Elmore's page at http://www.tapr.org/~n6gn/uwavelink/faster.html
>suggests that it's reasonable to use a peak deviation of 2 MHz with 10
>Mbps data, yielding a channel bandwidth of only 14 MHz, but I have two
>questions about his derivation:
>
>1) Glenn's application of Carson's rule, 2*(2+5)=14, assumes that a
>low-pass cutoff of 5 MHz is sufficient to transmit 10 Mbps Ethernet
>data. I don't see how this could be the case, given the presence of
>much higher-frequency components (like my observed 20 MHz burst) in a
>real-world 10BaseT signal.
>
>2) A peak deviation of 2 MHz with even a 5 MHz maximum frequency works
>out to an FM modulation index of only 0.4. With a 25 MHz cutoff the
>modulation index would become 0.08. These figures are much lower than
>the the modulation indices used on FM voice channels, suggesting that
>perhaps I'm mistaken in applying terms like "modulation index" to FSK in

>the first place. Are these modulation index values reasonable for FSK
>data transmission, and if not, what should I be shooting for instead?
>
>Obviously these are some pretty fundamental questions, and I don't mind
>replies like "you don't even have the basics right, you need to hit the
>books," as long as they are accompanied by pointers to good references
>on the subject. I know Glenn Elmore hangs out here, but I have already
>bugged him enough in email on this project, and have concluded that what
>he is calling "10 MBps Ethernet" on his web site is somehow very
>different from what I am seeing with an actual 10BaseT link. :) He
>reports success in running a MC13055 demodulator at 10 megabits with the
>above FM parameters, but I have been completely unable to duplicate this
>feat on my own bench. No doubt I'll get good empirical results by
>tinkering around with the faster MC13155 chip, but this is one of those
>cases where I would rather have a sound theoretical knowledge of what's
>going on.
>
>TIA for any insights!
>
>-- jm KE5FX

1179. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <x4GjLEAWZBs2Ew1k@ifwtech.demon.co.uk>
Source record: 74098

Tom C. Brown, Jr. wrote:
>Ian White, G3SEK wrote in message ...
>> WPM = number of dashes in 5 seconds... close enough for ham radio.

>Unless you are timing your bug, which doesn't make dashes automatically!
>:-)

You may just have a point there, Tom...

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

1180. The ANTI-CW fights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Miles Davis <MDD327@aol.com>
Message-ID: <01be4abd$5bcba660$dc34d4cc@pos-staff>
Source record: 74099
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

If a CBer (like me) were tired of the fighting on 11 Meters and wanted to try amateur radio and saw this mess, he wouldn't want to invest in the code anyway. I can pass the technical parts of the tests, need to study the rules and want to learn the code (EGO!) maybe I'll like maybe I won't.

1181. Wanted! 8877 Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <TUZr2.4050$Wm.4002021@brnws01.ne.mediaone.net>
Source record: 74100
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hi,
Looking for 2 good tubes, for my 6 and 2 meter amps.
Please reply with if you have any available and $ amount
Thanks!
regards,
Chuck...

1182. Re: I need a Schematic for a keyer for my homebrew transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: nash23@hatmail.com
Message-ID: <Kh_r2.5766$9P6.15104125@newsgate.direct.ca>
Source record: 74101

There is a nifty little one at http://qrp.pops.net/qrp/multivibrator.htm

73 Graham

In article <917508355.706401@neptune.uniserve.ca>, somewhere@thisplace.com
says...
>
>I just built a small non-kit QRP transmitter and would like to put
>a simple keyer in it's case. Does anyone know where
>I can find a schematic for a little homebrew keyer?
>

1183. Re: oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36B063C8.B263A7C1@mwci.net>
Source record: 74102

William E. Sabin wrote:

> Bert Douglas wrote:
>
> > William E. Sabin wrote in message <36AFD541.A2398FC0@mwci.net>...
> > >
> > >For a one-port network ARD gives the input impedance using MZ11, PZ11, RZ11
> > and
> > >IZ11. To get input admittance use MY11, PY11, RY11 and IY11.
> > >
> > These displays (MZ11, etc) don't seem to have correct information. When I
> > convert manually with my calculator they don't match S11. For starters the
> > magnitude of S11 is greater than one, this should correspond to a value of
> > RZ11 that is less than zero, but it is not.
> > >
> > But I received advice that I have to place manual termination to get
> > results that correlate with S11. I will check this out.
>
> There are three things:
>
> 1) When setting up the one-port, it should include the circuit's "output"
> termination "inside" the one-port.
>
> 2) If the input resistance is negative, put a resistor across the input so that
> the net resistance is positive. Then calculate the value of the negative
> resistance that is in parallel with the positive resistance.
>
> 3) Plot MZ11 etc on a rectangular plot rather than a polar plot.
>
> Bill W0IYH

The Radio Designer program is quite capable of dealing with negative resistance,
according to my testing of it. It is probably best to use the rectangular plot
rather than polar plot.

Bill W0IYH

1184. Re: I need a Schematic for a keyer for my homebrew transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "DJ Wang (KE3ZB)" <ddw2@mail.lehigh.edu>
Message-ID: <36B07F5B.327C@mail.lehigh.edu>
Source record: 74103

Me wrote:
>
> I just built a small non-kit QRP transmitter and would like to put
> a simple keyer in it's case. Does anyone know where
> I can find a schematic for a little homebrew keyer?

Get a keyer chip from K1EL. He will sell you a 8 pin PIC CPU with your call sign preprogrammed in for $6!!! It is a powerful and elegant chip with preprogrammed messages and many other functions! Check his web site at http://members.aol.com/k1el/k8info.html for detail.

DJ KE3ZB

1185. Re: 10 Meter QRP SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: k5dh@rtis.ray.com
Message-ID: <78q8oj$nl2@news.rsc.raytheon.com>
Source record: 74104

In article <78q7a5$ia3$1@nnrp1.dejanews.com>, bkizerian@my-dejanews.com says...
>
>I would like to build a 10m QRP SSB rig. Does anyone know where I can get
>information to do this. Articles, schematics, etc. would be very helpful.

My suggestion is to convert a SSB CB radio to 10m. Cheap to acquire, easy
to convert, good receiver, lots of fun to use.

73,
Dean / K5DH

1186. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <78q9gj$ii2$2@news5.svr.pol.co.uk>
Source record: 74105

IIRC the word PARIS is a useful word for cw speed test, 10 paris's per min = 10wpm
Mike W G8NXD
~~~~~~
Bill Good wrote in message ...
>Well thanks to all that have replied to my enquiry.
>Why calibrate it? Simple, I teach and help scouts learn morse code and they
>want to know their copy speed.
>
>thanks
>Bill
>
>>
>>Erm, this may be a silly question, but WHY do you want to calibrate it?
>>
>>Surely you just USE it, setting the speed to a comfortable rate and/or
>>to match the other guy.
>>
>>73
>>Ian, G3NRW
>
~~~~~~

1187. Re: FS: UHF Heliax & C connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36afba94.32735438@news.online.no>
Source record: 74106

On Wed, 27 Jan 1999 23:04:53 GMT, Marv_E_Ads@Juno.com wrote:

> used Andrews Heliax UHF connectors
>
>1/2"
> 44AP male $10 ea
> 44AU female $10 ea
>
>1"
> 45AP male $20 ea
> 45AU female $20 ea
>
> ************
>
>UG-643 C Female-Female barrel connectors, used $3 ea
>UG-637 UHF Male to C Female adapters, used $5 ea
>
>
>plus shipping if necessary, naturally! :-)
>
>Contact Marv, WC6W, 310 649 3111 (reasonable hours Pacific
>Time please) or via: Marv_E_Ads@Juno.com
>
>
and for 7/8" heliax (LDF5-50) ?

LA8AK@Online.NO

1188. How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <36b0be01.2011435@news.mnsinc.com>
Source record: 74107
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

For a great article on VFO temperature compensation in older radios see:

Designing Temperature Compensation Circuits for Old Radios by J. Robert Burger
WB6VMI
http://www.mnsinc.com/bry/ham/vfo_drift.htm

(I have improved it a it and added those important diagrams that were missing
before!!)

Enjoy! - Tell your friends! - Set links!!

1189. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Ron Higgs <erhiggs@flash.net>
Message-ID: <36B0C7E8.9C8D883C@flash.net>
Source record: 74108
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

How to fix a drifting radio? Drop an anchor . . .

Sorry couldn't resist. . . . Ron

1190. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b0c2d9.10002013@news.online.no>
Source record: 74109

On Thu, 28 Jan 1999 03:56:58 GMT, "Matt J. McCullar" <mccullar@flash.net> wrote:

>Howdy! I'd like to de-packrat the shack a bit and found a circular from
>a hamfest featuring back issues of _QST_ on CD-ROM. I've checked out
>the Radio Era Archives web site and like what I read so far. What I'd
>like to find out is, how sharp are the pages when displayed on your
>monitor? Do they print out well? Does the index search engine work
>well? Is it worth $40 for a four-year set? Pros and cons on this are
>very welcome.
>
>Thanks!!!
>
>Matt J. McCullar, KJ5BA
>Arlington, TX
it looks well on my screen, but I find it too complicated to search, works
sometimes and later it is difficult to remember how to repeat it

you must write year, issue, month and delete 'cover' and write issue instead to
read a certain issue, it is just too bad, takes too much time to change from
reading february 1950 to march 1950, vast improvement is required

---
LA8AK@Online.NO

1191. surplus "NATO UHF" Bases for 4cx250b

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <78qjb0$hlf@freenet-news.carleton.ca>
Source record: 74110

Does anyone know of a reasonably-priced source of surplus "NATO UHF" Bases for (the ones with the Y shaped clamp on the top) as described on

http://www.braeside.demon.co.uk/w1sl.html

for the 4cx250b?

thanx de va3rr@amsat.org

1192. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Dave Hall <nojunkmail_n3cvj@worldlynx.net>
Message-ID: <36B0D586.3679@worldlynx.net>
Source record: 74111
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Gary - KJ6Q wrote:
>
> covert628103@my-dejanews.com wrote in message
> <78lomiqbq1@nnrp1.dejanews.com>...
> >I've lost patience with people like you and the old men who
> traditionally run
> >the ARRL. The latter almost destroyed ham radio with incentive
> licensing (CB
> >radio grew to outsize ham radio by a factor of at least 10 in 1970).
>
> HMMMm - pretty STRANGE that with all your keen analytical abilities, you
> NEVER connected the fact that the "easy to obtain" CB license just
> *might* have contributed to the far greater numbers - and poorer
> quality - of occupants on CB... OR, that ever lowering the "bar" to get
> into ham radio might deliver the SAME result... Dumbing down exams to
> increase our numbers MIGHT work, but at what cost?
>
> "A thing easily obtained, is little valued"... Unfortunately, the very
> bands that are opened to those unwilling to "jump thru the hoops", in
> conventional style, will/have become the virtual communication pig-pens
> we are now "enjoying"... HELL, why not just GIVE the damn licenses
> away - look at the demand for equipment and lobbying power we would then
> have on our CB-style bands...
>
> Gary - KJ6Q

CW is a MODE. Nothing more, nothing less. And as such CW should not be given any special consideration over any other mode.

You talk about "Dumbing down" the ham tests. I couldn't agree more. But why is it only a travesty when we talk about reducing (or eliminating) the CW requirement? Why do the vocal nay-sayers have nothing to say about the fact that the "theory" tests have become nothing more than a formality. People memorize the questions and answers, pass an easy multiple guess test, and presto!, they're hams. I guess it's ok as long as they sweat and learn CW.

I would much prefer the elimination of CW as a requirement, and at the same time, go back to comprehensive theory testing. No more multiple choice. Put those formulas to work, draw a colpitts oscillator schematic, design a simple 2 transistor QRP transmitter from memory. That way, we can be fairly certain that the new "hams" will have a better knowlege of radio, not just one mode of it.....

Dave
N3CVJ

1193. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <78qnj7$de1$1@winter.news.rcn.net>
Source record: 74112

Most colleges have dropped foreign lanquages
and other "liberal arts" courses in the past 20 years.
Thats why most enginears cant spel.

Pete

RWalter7 wrote in message <19990125163836.22193.00003669@ng-fi1.aol.com>...
>They should drop the math requirments for becoming an engineer....
>
>
>>
>>I got into Ham Radio because of the NO-CODE Tech class license. Learning
>>the code takes a lot of time that I just don't have right now. I work a

1194. Re: Ham-Homebrew Digest V99 #19

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: dalejudi@agate.NET
Message-ID: <3.0.1.32.19990127195140.007d43d0@agate.net>
Source record: 74113

Can anyone direct me to a source that tells one how to read schematics ?
thanks ,
Dale
n1txw

1195. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b0d662.15003706@news.online.no>
Source record: 74114
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

On Thu, 28 Jan 1999 19:47:53 GMT, sabbatai_zvi@hotmail.com (Zvi Cedricsson)
wrote:

>For a great article on VFO temperature compensation in older radios see:
>
>Designing Temperature Compensation Circuits for Old Radios by J. Robert Burger
>WB6VMI
>http://www.mnsinc.com/bry/ham/vfo_drift.htm
>
>(I have improved it a it and added those important diagrams that were missing
>before!!)
>
>Enjoy! - Tell your friends! - Set links!!
>
huff and puff is also a great idea.....

LA8AK@Online.NO

1196. Re: Ham-Homebrew Digest V99 #19

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Freeland <Freeland@chickasaw.com>
Message-ID: <7P5s2.480$w5.16875@news.goodnet.com>
Source record: 74115

If you give me your email address, I'll mail you a program that
teaches basic electronics. The program is 345kb.
I realize the spam is coming, it doesn't matter I delete it,
anyway.
Freeland@chickasaw.com
Dale and Judie wrote in message
<3.0.1.32.19990127195140.007d43d0@agate.net>...
>Can anyone direct me to a source that tells one how to read
schematics ?
>thanks ,
>Dale
>n1txw
>
>

1197. Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: bogus@supernews.com
Message-ID: <bogus-2801991359380001@dnai-216-15-121-45.dialup.dnai.com>
Source record: 74116
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

I'm trying to get the maximum brightness from an LED that has these specs:
10-20 mA @3v.

I've tried a 650-ohm series resistor which gives me these measurements,
using a 12.5 volt supply:
16 mA, 1.8 v drop across the LED.

If I'm not mistaken, the actually current and voltage aren't important,
but the total power dissipated by the LED is. I calculate the maximum for
this LED as 60 mW (20 mA x 3 volts). With the 650-ohm resistor, I
calculate only 28 mW is being dissipated by the LED, which leaves lots of
room for improvement.

My confusion comes when I try to calculate what resistor would be best in
this circuit. If the LED draws current determined by the value of the
resistor, and the voltage at the LED depends on the voltage drop across
the resistor, how can one calculate the correct resistor without actually
trying some values and taking measurements?

Am I trying to think of the LED as a linear device (current and voltage
are linearly related), when in reality it is not?

Any help understanding not only a good resistor value for this LED, but
how to properly think about the application of ohm's law in this
circimstance, would be greatly appreciated.

Sorry for the modified return address, but I hate getting spammed. Correct
address is shown below.

Thanks,
Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

1198. Re: For Sale 4CX5000A/8170 Pull

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990128175746.01106.00000223@ng-ca1.aol.com>
Source record: 74117

<<Subject: Re: For Sale 4CX5000A/8170 Pull
From: jstrohm@texas.net
Date: Thu, Jan 28, 1999 1:24 PM
Message-id: <78qa0h$kv6$1@nnrp1.dejanews.com>

In article <19990127101811.27181.00000392@ng-ca1.aol.com>,
kb5mer@aol.com (KB5MER) wrote:
> Verian/Eimac 4CX5000A/8170 Pull
> Frequencies up to 220 MHz
> Plate volts to 7500 DC
> Amps 2.8 = AM 150 watts drive = 16,000 watts

^^^^^^^^^^^^

So I guess this is a final for a CB, right Wilbern?

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>>

1199. Re: For Sale 4CX5000A/8170 Pull

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "Rexford T. Hound" <*****&%$@ix.netcom.com>
Message-ID: <78qq6h$pqo@dfw-ixnews8.ix.netcom.com>
Source record: 74118

Let's give the boy some credit, he found some sucker for the 6-meter amp, at least that's what he claims.

--
From the paws of,
Rexford T. Hound

..
>So I guess this is a final for a CB, right Wilbern?
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1200. Re: For Sale 4CX5000A/8170 Pull

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990128180617.01106.00000227@ng-ca1.aol.com>
Source record: 74119

Hello Jim Strohm, I don't think I
could use it in
a CB Not even in the OLD DATS.
What have you been up to,haven't talk
to you in a year or so, you going to
GeorgeTown ?

1201. Re: For Sale 4CX5000A/8170 Pull

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "Rexford T. Hound" <*****&%$@ix.netcom.com>
Message-ID: <78qr6m$qiu@dfw-ixnews8.ix.netcom.com>
Source record: 74120

I'll be there.

--
From the paws of,
Rexford T. Hound

..
KB5MER wrote in message <19990128180617.01106.00000227@ng-ca1.aol.com>...
> Hello Jim Strohm, I don't think
I
>could use it in
>a CB Not even in the OLD DATS.
> What have you been up to,haven't talk
>to you in a year or so, you going to
>GeorgeTown ?
>

1202. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: jonathan@oxfordbromley.u-net.com
Message-ID: <36b0e827.7254053@news.u-net.com>
Source record: 74121
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

On Thu, 28 Jan 1999 13:59:37 -0800, bogus@supernews.com (DaveC) wrote:

>I'm trying to get the maximum brightness from an LED that has these specs:
>10-20 mA @3v.

<snip clear and detailed expression of problem>

>Am I trying to think of the LED as a linear device (current and voltage
>are linearly related), when in reality it is not?

Precisely so. With a supply as high as 12.5V you will get a very good

approximation by assuming that the LED's forward voltage drop is fixed
at around 1.8V, more or less independent of the current through it
(it might be anywhere between 1.4V and 2.0V depending on the type of
LED and other things, but that won't affect the calculation by more
than a few percent as you will see).

So with a 12.5V supply and 1.8V lost across the LED you have 10.7V
left to drive current through the resistor. 10.7V at 20mA sounds
a lot like 535 ohms to me - err on the high side so you don't risk
exceeding the LED's maximum current, and go for 560 ohm.

If the LED forward voltage was as high as 2.2V (very unlikely - I
don't know where the 3V figure came from, it's bogus) then your
circuit would put only 10.3V across the resistor and the current
would be a tad lower. No big deal though.

I don't think it is very helpful to ask about the power dissipation
in the LED. Unlike filament lamps, LEDs don't rely on the heating
effect of the dissipated electrical power. Go for the LED's rated
current, and ignore the voltage specs except as a guide to calculating
resistor values as above.

Note that the calculation I've given is only slightly affected by
changes in the LED forward voltage, because your chosen supply
voltage (12.5V) is so much higher than the LED's voltage drop. But
if you try to do the same thing with, let's say, a 3.6V supply
(one lithium cell) then the calculation becomes unpleasantly
sensitive to changes in the LED forward voltage drop, and it
can be a good idea to do something a bit cleverer with
a constant-current source to drive it.

While you're at it, look up any good electronics primer such
as Horowitz and Hill, and find out about load lines - they

will help to answer your question.

HTH
Jonathan Bromley

1203. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Tim Shoppa <shoppa@trailing-edge.com>
Message-ID: <36B0A875.2D6DFBC6@trailing-edge.com>
Source record: 74122
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote:
>
> I'm trying to get the maximum brightness from an LED that has these specs:
> 10-20 mA @3v.

Unfortunately, those are incredibly vague specs. Is this your garden-variety red LED? If so, the forward voltage drop at 20 mA is more like 1.8 to 2.0V.

> I've tried a 650-ohm series resistor which gives me these measurements,
> using a 12.5 volt supply:
> 16 mA, 1.8 v drop across the LED.

That's pretty close to the 20mA rated current. Most garden-variety red/green/yellow LED's will be rated for a 20 or 25 or 30 mA max continuous current. If you pulse the LED's, things get more complicated, but 20 mA average with maximum pulse of 50 or 100 mA is typical.

> My confusion comes when I try to calculate what resistor would be best in
> this circuit. If the LED draws current determined by the value of the
> resistor, and the voltage at the LED depends on the voltage drop across
> the resistor, how can one calculate the correct resistor without actually
> trying some values and taking measurements?

You can't, really. Most LED manufacturers publish a forward current vs forward voltage curve that would take place of such measurements. But it sounds to me like you might not even know who manufactures your LED.

> Am I trying to think of the LED as a linear device (current and voltage
> are linearly related), when in reality it is not?

Current and voltage are defintely not linearly related for an LED. A better model is that of a diode.

> Any help understanding not only a good resistor value for this LED, but
> how to properly think about the application of ohm's law in this
> circimstance, would be greatly appreciated.

A better model is a diode, with a forward voltage drop of 1.8 or 2.0 V. If the power supply that's powering the LED will have a large variation in voltage (i.e. a battery, or a non-regulated supply) and you're concerned about getting a constant current, then I'd seriously look at a constant-current regulator (take

a look at the LM317T data sheet for a very simple example.)

If maximum brightness from the LED under varying conditions is important to you, you'll really need the specs and curves for the LED you're using. In addition to this, a good application note to read is HP's series on their super flux LED's - particularly Application Note 1149-4, "Thermal Management Considerations for Super Flux LED's".

--
Tim Shoppa Email: shoppa@trailing-edge.com
Trailing Edge Technology WWW: http://www.trailing-edge.com/
7328 Bradley Blvd Voice: 301-767-5917
Bethesda, MD, USA 20817 Fax: 301-767-5927

1204. antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: m c beutler <mbeutler@tds.net>
Message-ID: <36B0F8DB.258FAED7@tds.net>
Source record: 74123
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Anyone have an opinion on the simple 2 knob antenna tuners offered by MJF? Want a low power tuner for random wire and "L" antennas.(200 watt capability more than sufficient) Can't seem to find much in the way of consistent data for building one on the bench.

Would actually prefer to make one but have not found values (inductance steps, # of turns of a given wire on a given coil form size, etc) anywhere for a tapped or variable inductor.

Any assistance would be greatly appreciated.
--
-
Regards,
mark beutler
-

1205. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: neil.chatfield@gecm-nospam.com
Message-ID: <36B0F4A4.18424859@gecm-nospam.com>
Source record: 74124
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

The LED will drop a pretty constant voltage irrespective of current passed (within limits). So assume a volt drop (1.8v) and then decide what current you want to give a resistor value. If you want to get lots more oomph out of the LED you can pulse it with up to an amp or so, but the pulse of current needs to be very short - microseconds/milliseconds - so a timer/oscillator is needed.
hope it helps
Neil
(remove -nospam for email)

1206. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Al Welch <awelch@execpc.com>
Message-ID: <78qtp9$v3@newsops.execpc.com>
Source record: 74125
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Ron Higgs wrote:
>
> How to fix a drifting radio? Drop an anchor . . .
>
> Sorry couldn't resist. . . . Ron

Yeah, like my radio hums because it doesn't know the words.

1207. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: bb840@scn.org
Message-ID: <F6AFtG.C5@scn.org>
Source record: 74126

Check out the latest issue of QST. You can by a complete set of CD-ROM's
that contain every issue of QST ever published from 1915 through 1994 for
less than $400; there's a big price break (about $66) if you order them
all at once.

And that four-year set (recent years) includes four (not one) disks.

73 de W7WJM

In a previous article, mccullar@flash.net ("Matt J. McCullar") says:

>Howdy! I'd like to de-packrat the shack a bit and found a circular from
>a hamfest featuring back issues of _QST_ on CD-ROM. I've checked out
>the Radio Era Archives web site and like what I read so far. What I'd
>like to find out is, how sharp are the pages when displayed on your
>monitor? Do they print out well? Does the index search engine work
>well? Is it worth $40 for a four-year set? Pros and cons on this are
>very welcome.
>
>Thanks!!!
>
>Matt J. McCullar, KJ5BA
>Arlington, TX
>

--
A.D. 1999 - The LAST year of the 1900's.
A.D. 2000 - The LAST year of the 20th Century.
Jim Aeschliman bb840@scn.org
Black Diamond, Washington W7WJM

1208. Re: The ANTI-CW fights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <78qq4c$de9@nnrp4.farm.idt.net>
Source record: 74127
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Hi Miles,

Go ahead and try for your license. Don't let the butt-heads in this news group
scare you off. It just seems like some other people can't accept what others choose
to do with their Ham ticket or how they got one.

73's

Leland C. Scott
KC8LDO
ARRL member
NCI member

"Decision is a risk rooted in the courage of being free"

"We should have much peace if we would not busy
ourselves with the sayings and doings of others"

"Live and let live' sets us free from the compulsion to
criticize, judge, condemn, and retaliate . . . which can
damage us far more than those against whom we use
such weapons."

Miles Davis wrote in message <01be4abd$5bcba660$dc34d4cc@pos-staff>...
>If a CBer (like me) were tired of the fighting on 11 Meters and wanted to
>try amateur radio and saw this mess, he wouldn't want to invest in the code
>anyway. I can pass the technical parts of the tests, need to study the
>rules and want to learn the code (EGO!) maybe I'll like maybe I won't.
>

1209. WTB:REEL TO REEL TAPE PLAYER W5ZQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: p7777@webtv.net
Message-ID: <18717-36B102A0-27@newsd-141.iap.bryant.webtv.net>
Source record: 74128

GENE AND JOAN

1210. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Brian Denley <bdenley@erols.com>
Message-ID: <78r2psqnd1@winter.news.rcn.net>
Source record: 74129
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I use the MFJ 16010 antenna tuner which is the one you are referring to (I think) and use it to match my coax feedline from my long wire to my receivers. It seems to work fairly well although the tuning doesn't seem to be very fussy and I usually don't have to retune at all unless I get up beyond about 12 Mhz.
Brian Denley

--
"There are only two ways to live your life: One is as though nothing is a miracle. The other is as if everything is." - Albert Einstein
m c beutler wrote in message <36B0F8DB.258FAED7@tds.net>...
>Anyone have an opinion on the simple 2 knob antenna tuners offered by
>MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
>capability more than sufficient) Can't seem to find much in the way of
>consistent data for building one on the bench.
>
>Would actually prefer to make one but have not found values (inductance
>steps, # of turns of a given wire on a given coil form size, etc)
>anywhere for a tapped or variable inductor.
>
>Any assistance would be greatly appreciated.
>--
>-
>Regards,
>mark beutler
>-
>
>

1211. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B1129F.7FD6@pop.removethistomailme.net>
Source record: 74130
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Allan Herriman wrote:
>
> Here I go, replying to my own posts again....
>
> >We used arcnet instead of ethernet (I said this was a long time ago!).
>
> We actually were using 10base2 ethernet for our computer network at
> the time. I figured that the bandwidth of ethernet would have been
> much too high for the FM video link (as you've found), and decided
> that arcnet, at 2.5Mbps, would be much easier.
>
> There was a Novell Netware server at each end of the link, so I just
> plugged an arcnet card into each, and loaded the appropriate driver to
> get it to route packets between the ethernet and arcnet.
>
> Allan.

Sounds like you got lucky with the 10base2 transceiver, getting it to work the first time you powered it up! I am seldom so lucky... it'll be interesting to play with the MC13155 chip this weekend and see if my luck changes versus what I was getting with the slower 13055.

I am just planning to run this link across a ~150-foot parking lot with a couple of K-band Gunnplexers, so I am not horribly concerned about total occupied bandwidth as long as it turns out to be within the 13155's limits. I am, however, concerned with the fact that I don't know, and can't seem to find in any textbooks, the theory behind how much frequency deviation should be used for FSK and what the tradeoffs are.

I agree that the "better" way is to get a couple of actual Ethernet bridges and connect them with a commercial radio link, but considering that all I am trying to do is learn a little about high-speed data transmission and play a decent game of Quake, I don't think I can justify the $6K-$15K budget that the commercial solutions demand. This is strictly for personal amusement and telecommuting rather than any type of mission-critical commercial application.

There is a severe shortage of good literature in the ham community on 10-megabit data transmission theory and practice. There are plenty of DejaNews entries with people asking "how do I make the N6GN design work at 10 megabits," but to date nobody has reported details of a successful, reproducable project. If all goes well with the MC13155, it might be nice to put a short article in QST or QEX detailing the design

of the RF modem and its 10BaseT interface, just for the benefit of posterity. That is one reason I am not comfortable just fiddling with the deviation and channel bandwidth until it happens to work -- it is hard to look scientifically-enlightened when you can't fill at least a couple paragraphs with complicated-looking equations. :-)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1212. S-120

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Freeland <Freeland@chickasaw.com>
Message-ID: <CM8s2.508$w5.17437@news.goodnet.com>
Source record: 74131

Well, I'm going to try and get one of you wizards interested. I have a hallicrafters S-120. Voltages to the tubes are ok. I can hear slight noise through headphones when fired up. Is it not tuned? Tubes have all been replaced. Would there be a difference if I changed the IF transformers? Trying to restore it, in the mean time, I guess the new ten tec is working fine. Just wanted new IF cans can't seem to find any that size. Put some smaller 455khz cans in, doesn't seem to help, even when I tune them. Any ideas? Thanks. 73 de KD5FES.

1213. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: Tom <topdog@advicom.net>
Message-ID: <36B0CC57.225B@advicom.net>
Source record: 74132
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

m c beutler wrote:
>
> Anyone have an opinion on the simple 2 knob antenna tuners offered by
> MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
> capability more than sufficient) Can't seem to find much in the way of
> consistent data for building one on the bench.
>
> Would actually prefer to make one but have not found values (inductance
> steps, # of turns of a given wire on a given coil form size, etc)
> anywhere for a tapped or variable inductor.
>
> Any assistance would be greatly appreciated.
> --
> -
> Regards,
> mark beutler
> -

Mark,

I've been using a second-hand tuner, a small 3-knob, 200 watt
MFJ-901B, connected to my Yaesu FT-1000 MP. It's about as small as
I've seen. I took the cover off and squeezed the connector rivets to
ensure a good ground. I turned off the the rig's built-in automatic
tuner and connected the external tuner, and found it does a good job
while running 100 watts. It's small, compact and has a balun inside.
I'm going back to the auto tuner and will save the external tuner for
homebrew projects. No problems - I'd buy it again.

73's-
Tom K4AKC

1214. IC-T2A mods :/

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: firewave@REMOVE.videotron.ca
Message-ID: <firewave-2801992148000001@192.168.1.4>
Source record: 74133
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I know this must have been asked a zillion times...but i couldnt find it anywhere here or dejanews or altavista etc...

Could anyone point me to a place where i can find Mod(s) for the ICOM IC-T2A radio? (is it the same as the T2H?)

thanks a lot,

alex

1215. Re: Wanted! 8877 Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: John Allen <jallen@ibnets.com>
Message-ID: <36B12552.ED3BB90F@ibnets.com>
Source record: 74134
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Sure, I got some.

Chuck O'Neal wrote:

> Hi,
> Looking for 2 good tubes, for my 6 and 2 meter amps.
> Please reply with if you have any available and $ amount
> Thanks!
> regards,
> Chuck...

--
John Allen jallen@IronBridgeNetworks.com
IronBridge Networks / 55 Hayden Avenue phone: 781-372-8151
Lexington MA 02421 / USA fax: 781-372-8092
Main Number 781-372-8000

1216. Clipperton L parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: The Calhoun Printers <calprint@gnat.net>
Message-ID: <36B0E864.BD4024C2@gnat.net>
Source record: 74135

Have most of the parts from a disassembled good Clipperton L. No
Transformer. Many tank parts
Tube board, switchs, filament RF choke, knobs, capacitors, AMP SUPPLY
faceplate meter in
perfect condx. w/precision shunt resistor and switch for High-Low
voltage selection. Waht do
you need? Make offer?

73,

Vince

1217. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: dozier@mahler.udel.edu
Message-ID: <78rb97rja1@mahler.udel.edu>
Source record: 74136
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <bogus-2801991359380001@dnai-216-15-121-45.dialup.dnai.com>,
DaveC <bogus@supernews.com> wrote:
>I'm trying to get the maximum brightness from an LED that has these specs:
>10-20 mA @3v.
>
>I've tried a 650-ohm series resistor which gives me these measurements,
>using a 12.5 volt supply:
>16 mA, 1.8 v drop across the LED.

Which is below the maximum voltage drop of 3 volts and below the 20 mA
maximum and 16 mA is in the center of the range of (10-20 mA). R =
(12.5-3)/15mA = 633 ohms. Pick the closest standard resistor (e.g 620
ohms) and err on the high side.

>
>If I'm not mistaken, the actually current and voltage aren't important,
>but the total power dissipated by the LED is. I calculate the maximum for
>this LED as 60 mW (20 mA x 3 volts). With the 650-ohm resistor, I
>calculate only 28 mW is being dissipated by the LED, which leaves lots of
>room for improvement.

Do you want heat or light? The above calculates the heat dissapated by
the LED, not the optical power.
>
>My confusion comes when I try to calculate what resistor would be best in
>this circuit. If the LED draws current determined by the value of the
>resistor, and the voltage at the LED depends on the voltage drop across
>the resistor, how can one calculate the correct resistor without actually
>trying some values and taking measurements?

Use a current source or sink.

>
>Am I trying to think of the LED as a linear device (current and voltage
>are linearly related), when in reality it is not?
>
I hope not. It's a Light Emitting Diode. I don't see resistor here.
Diodes have forward voltage drops. I = Io * e (qV/Akt-1) for an ideal
diode. Io a constant, q=charge on electron, V = voltage, k = boltsman's
constant, t =absolute temperature.

>Any help understanding not only a good resistor value for this LED, but
>how to properly think about the application of ohm's law in this
>circimstance, would be greatly appreciated.

The product of the voltage across the LED and the current through is it
the heat dissapated by the LED that is not converted to optical power.

Perceived brigtness is also dependent on the eye's sensitivity and it's
different for RED, GREEN, BLUE and AMBER light.

>Sorry for the modified return address, but I hate getting spammed. Correct
>address is shown below.
>
>Thanks,
>Dave
>
>--
>Dave Carpenter
>Sound Logic
>
>Note: "From" address is invalid.
>Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

I need to add this to make "rn" happy: %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
%%%
%%%
%%

1218. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: "William L. Bahn" <bahn@bfe.com>
Message-ID: <78rd4oibf1@newman.pcisys.net>
Source record: 74137
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Ron Dozier wrote in message <78rb97rja1@mahler.udel.edu>...

<snip>

>
>The product of the voltage across the LED and the current through is it
>the heat dissapated by the LED that is not converted to optical power.

Think about this. From the standpoint of the external circuit, the product of voltage across a load and the current through the load is the rate at which electrical energy is being dumped into the load and is equal to the rate at which electrical energy is being extracted from the rest of the circuit (due to that load). So, if what you say is true then ALL of the electrical energy that is dumped into an LED appears as heat leaving none for the photons that make up the optical output - therefore there can be no optical output unless one of three things is true: (1) photons have no energy, (2) an LED is a free-energy device or (3) An LED has some other energy input.

Since I don't buy any of these three, I am forced to conclude that your statement is flawed and that the product of the voltage across the LED and the current through it is equal to the sum of the rate at which heat is being generated in it AND the optical output power.

1219. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-28 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36B137D1.8FDAD98F@hevanet.com>
Source record: 74138
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

JD wrote:

> If you wish to get the max brightness out of an led there is a way of
> doing it that will light it brighter than the max voltage and current
> it can take. Design a small circuit that puts out a squarewave in
> the region of 60khz to 140 khz.. If you use a 555 timer this should
> allow you to make the frequency variable.
>
> Apply the output of the circuit to the base of an npn transistor for
> example a 2n2222. Apply Your dc power including any needed dropping
> resistor to limit the current to the collector of the transistor.
> Connect the anode of the diode to the emitter of the transistor and
> the cathode to ground.. ''The transistor is now going to act like a
> simple switch to turn on and off the led....
>
> Tuning the squarewave oscillator you will come to a point when the led
> seems really bright. It will also draw less current as it is been
> switched on and off very fast.
>
> The reason it seems brighter than standard methods is because of the
> memory effect of the human eye..... This is an elobrate way of doing
> it but it works very well...
>
> bfn...jd..

This is the way we used to do it in the old days with multiplexed LED
digit displays.
You can probably do better with duty cycle much lower than 50%.
Once you've decided to go for the switching overhead, you can add an
inductor and make
it like a switching regulator.
miker

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

1220. Re: I need a Schematic for a keyer for my homebrew transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <78tdn0gou1@scotty.tinet.ie>
Source record: 74021

Me wrote in message <917508355.706401@neptune.uniserve.ca>...
>I just built a small non-kit QRP transmitter and would like to put
>a simple keyer in it's case. Does anyone know where
>I can find a schematic for a little homebrew keyer?
>

If you have access to a PIC programmer, have a look at:

www.nettaxi.com/citizens/ei9gq/index.html

73, Ed.

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/

****

1221. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: im@home.now
Message-ID: <36b2352b.287889@news.atl.mindspring.com>
Source record: 74022
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Hi bruce I am scratching my head hear trying to remember as far
as I can recall it was in the order of 100HZ TO 1KHZ. The freq I
posted orignally was wrong.... Its one of these things you need to
experiment with but it does work..... If you were using a backlight
lcd display instead of the single led you would be amazed at how
bright you could make it over traditional methods while not exceeding
the max current spec of the device....

This is one area in which it is very useful.... It really comes down
to the human eye which has what is called persistance of vision.
Basically when the eye is exposed to light for a short period of time
it will remember it for a small ammount of time... The result is that
the perceived brightness is closer to a high pulsed brightness
than to the brightness achieved by standard dc power...

Best regards JD...

On Fri, 29 Jan 1999 12:37:36 -0800, "Bruce Nepple"
<brucen@imagenation.extra.com> wrote:

>The tests I did (years ago) basically showed that the eye integrated the
>light and there was no brightness difference over a 10:1 ratio. Have you
>actually done this? Is there a particular frequency where this effect
>works?
>
>bruce
>

1222. Re: Switching LEDs question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36B23FED.CFD52868@hevanet.com>
Source record: 74023
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote:

> Very cool idea.
>
> My questions:
>
> 1) How much current for each LED should I calculate when choosing series
> resistors, if the max standard current is 20 mA per LED? I suppose I can
> use a pot and adjust the brightness, but what current value should I limit
> the LED to when switching it on and off?
>
> 2) If I want to switch a large number (40) of LEDs at once, what
> transistor would be good in place of a 2n2222 (should be max 1A
> capability, I think) ?
>
> So, in addition to the components needed to run the 555 timer at 60-140
> KHz, all I need is the transistor and one resistor? Anything else?

> KHz, all I need is the transistor and one resistor? Anything else?

Well, you need 40 resistors if you have 40 leds. If you have enough voltage, you
can put
some of the leds in series. 10 strings of 4 in series each. This can be much
more efficient
and uses fewer parts.

Here's an example from a traffic light changer. (a gizmo that flashes infrared
light at the traffic
signal to make it go green). The one I looked at had 72 leds. 18 strings of 4
each in series.
It flashed at 14 Hz with a duty cycle of 0.3%. Average current for the system was
71 mA.
dividing that by the df gives 23.6A peak divided by 18 = 1.3A peak per led
string.

I didn't measure the actual currents. At these peaks, there will be significant
losses.
miker

>
>
> Any observations and assistance in getting this circuit running would be
> greatly appreciated.
>

> Sorry for the modified return address, but I hate getting spammed. Correct
> address is shown below, if you choose to e-mail me directly.
>
> Thanks,
> Dave
>
> =====
>
> In article <36b0f91d.3679628@news.atl.mindspring.com>, im@home.now (JD) wrote:
>
> > If you wish to get the max brightness out of an led there is a way of
> > doing it that will light it brighter than the max voltage and current
> > it can take. Design a small circuit that puts out a squarewave in
> > the region of 60khz to 140 khz.. If you use a 555 timer this should
> > allow you to make the frequency variable.
> >
> > Apply the output of the circuit to the base of an npn transistor for
> > example a 2n2222. Apply Your dc power including any needed dropping
> > resistor to limit the current to the collector of the transistor.
> > Connect the anode of the diode to the emitter of the transistor and
> > the cathode to ground... ''The transistor is now going to act like a
> > simple switch to turn on and off the led...
> >
> > Tuning the squarewave oscillator you will come to a point when the led
> > seems really bright. It will also draw less current as it is been
> > switched on and off very fast.
> >
> > The reason it seems brighter than standard methods is because of the
> > memory effect of the human eye... This is an elobrate way of doing
> > it but it works very well...
>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

1223. Re: Icom 2000 keyed in CW

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <78tgd0$n5p@apple.telalink.net>
Source record: 74024
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dana H. Myers K6JQ wrote in message <78o42h$q2h$1@nnrp1.dejanews.com>...
>The IC-2000H is very similar to most other VHF/UHF FM radios, that it
>is a single-loop, single VCO PLL design that has a moderately long
>PLL lock-up time (I believe greater than 100mS). During this
>lock-up time, the transmitter bounces onto frequency. It doesn't
>sound pretty and the speed with you can send is quite limited.

I once tried this trick with a Kenwood TR-7730 & had the same problem.

>You can get a much better transmitted signal by keying the driver stages in
the transmitter,
>holding PTT down the entire time, but this might not be trivial.

I tried keying the B+ to the PA (leaving PTT closed) but it didn't work any
better. At that point I gave up on transmitting. Some day, I'm going to
fix my transverter & put up a real antenna...

>What are you going to do for a receiver? The FM receiver won't
>make much sense, but it occurs to me maybe you could use the
>AM receiver mode with the addition of a 455KHz BFO.

I had much better luck with receive. I tapped a small cap (2pF or so)
across the collector of the mixer, and hooked it to the input of a Sony
ICF-2010; then, tuned the '2010 to 10.7MHz. It worked great! Tune the 2m
radio to the nearest multiple of 5KHz, then tune the 2010 either side of
10700 to find the stations you want. Actually, since I had no way of
warping the transmitter, I left the '2010 on 10700, figuring there was no
way to work anyone not on an exact multiple of 5KHz.

73 Doug

1224. Re: Spice-y Oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: brians@opus.hpl.hp.com
Message-ID: <78tg70mte1@hplms2.hpl.hp.com>
Source record: 74025

I've always been able to get good results from Spice simulations
of oscillators. Since you're trying to simulate proven designs,
it's possible that you only need to tweak some of the simulation
parameters to improve the results. Some of the phenomena you've
described could result from the simulation timesteps being too
coarse. Adjusting the parameters of the .tran statement will
frequently solve problems like these. Also, many simulators
allow the user to specify transient accuracy parameters in
.option statements. Often, these parameters default to a low-
accuracy mode to reduce simulation time. Forcing the simulator
to use a higher-accuracy mode will help.

If you continue to experience difficulty, I'd be happy to take
a look at your Spice deck and might be able to offer some better
suggestions for your specific circuit. If you want to pursue
this route you can send me the files via e-mail.

Good luck,

Brian Setterberg
N7FMF

Monty Northrup (maddog@io.com) wrote:
: I've recently been exploring the value of using Spice Simulation
: programs for developing RF circuits, and so far I've had a lot of fun
: with it. Sure can be a time saver...

: But I've had lots of unhappy results with simulating oscillators at HF
: frequencies (mostly 3.5 - 20 MHz). When observing the graphical
: analyses of the output of several proven Colpitts oscillator designs
: using BJTs (2N2222's), the frequency looks to be approximately as
: expected, but the waveform envelope observed over say, 1000-2000
: cycles, looks more like a badly modulated A.M. signal. Some analyses
: programs (like Orcad/Microsim) require that you insert a single short
: pulse to "start" the oscillator, and some (like Electronics Workbench)
: don't need the start pulse, but all seem to have the modulated
: envelope. Has anyone else noticed this phenomenon? Can this be a
: sampling/undersampling phenomenon? Any ideas on how to correct it?

: Also, when observing a single cycle of oscillator output, the output
: usually looks assymettrical, as if it's being clipped or limited in
: some way. Would this be indicative of biasing or feedback problems
: that should be corrected, or is this normal (for a practical
: oscillator to start reliably)?

: Thanks in advance,
: monty

1225. FS Tubes, 20LF6,8950,2057,6LQ6,7581A,6KD6, 6JM6, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: The Calhoun Printers <calprint@gnat.net>
Message-ID: <36B21A46.2192F594@gnat.net>
Source record: 74026

Cleaning out old stock and supplies. Some of these tubes are new, some may be used,
all test good, and look new: (No obvious heat marks).

These are all beam power pentodes used in various ham gear and linears made during
the 60s and 70s. Today they are difficult to find, and quite expensive.

I only have up to a half dozen of the types listed, in some cases only two tubes.
E-mail me if you are interested. I would like to sell them.

Best wishes- Vince N4BWD

1226. schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: dalejudi@agate.NET
Message-ID: <3.0.1.32.19990129174249.007cda90@agate.net>
Source record: 74027

Can someone direct me to a good source for learning how
to read radio schematics ?

Thanks
Dale n1txw

1227. FS Tubes, 20LF6,8950,2057,6LQ6,7581A,6KD6, 6JM6, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: The Calhoun Printers <calprint@gnat.net>
Message-ID: <36B21C57.51C76DD@gnat.net>
Source record: 74028

Cleaning out old stock and supplies. Some of these tubes are new, some may be used,
all test good, and look new: (No obvious heat marks).

These are all beam power pentodes used in various ham gear and linears made during
the 60s and 70s. Today they are difficult to find, and quite expensive.

I only have up to a half dozen of the types listed, in some cases only two tubes.
E-mail me if you are interested. I would like to sell them.

Best wishes- Vince N4BWD

1228. FS: HP 8443A 1 Mhz OCXO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36B26A74.48E56F06@calweb.com>
Source record: 74029
Cross-posted to: sci.electronics.components,sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.homebrew

OCXO removed from HP 8443A Counter-Tracking Oscillator. Mfg. by Vectron
model CO-216-3. 24 VDC power, 1 Mhz, Coarse and fine mechanical
adjustments. RF out via subminax connector,about 2X2X3 inches.
Excellent condition. $90 Post Paid conus.

tnx for the read,

Bob, KE6F

1229. FS: HP Precision RF Attenuator set from HP 8443A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36B26CF4.F2F68CF1@calweb.com>
Source record: 74030
Cross-posted to: sci.electronics.components,sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.homebrew

For Sale:

Two attenuators removed from HP 8443A counter-tracking oscillator.
One unit is 0 to -120 db in 10 db steps and the second unit is 0 to12 db
in in unit steps. Includes calibrated knobs, flex couplings, and
interconneting cables with subminax to BNC couplings for input and
output. Excellent condition. $100 Post Paid conus

Tnx for the read,

Bob, KE6F

1230. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: WindsorLX <maxwedgenospam@mindspring.com>
Message-ID: <36B285E7.51D73EC5@mindspring.com>
Source record: 74031
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Timm@ComTech" wrote:

> I just finished reading all of the "anti-cw" bla bla bla. Wow, what a mixed
> bag.
> But the truth is, morse code is the root of all forms of electronic
> communication devices. I've been a cw only operator for 30 years, and don't
> begrudge anyone
> that wants to talk with their mouth or a modem. But those of you who don't
> use a key are really missing a unique form of expression. Copying one
> another's code can be like listening to and creating music.
> (especially up around 30 wpm).

I don't at all doubt the latter, but some of us just aren't that interested. Just because computers communicate in binary doesn't mean I want/need to. Also, because of binary being the way computers operate, I do not see CW as "the root of all forms of communication". My point being that at one time the way to use a telephone was by turning the crank on a generator. Now if there were still a cult of people that used phones of this type because that is what they liked and prefered for whatever reason would you feel the same way? I'm not anti cw, in fact I am learnig code right now, but I think it needs to be put into perspective. The only way to get some people interested in code now, is to get them interested in radio first.

1231. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: WindsorLX <maxwedgenospam@mindspring.com>
Message-ID: <36B28855.B25C05B2@mindspring.com>
Source record: 74032
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dave Hall wrote:

>
> CW is a MODE. Nothing more, nothing less. And as such CW should not be
> given any special consideration over any other mode.
>
> You talk about "Dumbing down" the ham tests. I couldn't agree more. But
> why is it only a travesty when we talk about reducing (or eliminating)
> the CW requirement? Why do the vocal nay-sayers have nothing to say
> about the fact that the "theory" tests have become nothing more than a
> formality. People memorize the questions and answers, pass an easy
> multiple guess test, and presto!, they're hams. I guess it's ok as long
> as they sweat and learn CW.
>
> I would much prefer the elimination of CW as a requirement, and at the
> same time, go back to comprehensive theory testing. No more multiple
> choice. Put those formulas to work, draw a colpitts oscillator
> schematic, design a simple 2 transistor QRP transmitter from memory.
> That way, we can be fairly certain that the new "hams" will have a
> better knowlege of radio, not just one mode of it......
>
> Dave
> N3CVJ

Possibly true, any of which I could do once I read to figure out what the hell a "colpitts osc." is. Not that I want to know. At this point however; I could assure you that CBRambo would be correct and in the wrong tense. Ham radio would be long dead as a hobby and the commercial interests would have the whole spetrum to themselves except for the small areas of "FRB" and CB.

1232. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <78u6kc$1mo$1@remarQ.com>
Source record: 74033

>...What I'd
>like to find out is, how sharp are the pages when displayed on your
>monitor? Do they print out well? Does the index search engine work
>well? Is it worth $40 for a four-year set? Pros and cons on this are
>very welcome.

Matt,

I bought the 1930's CD. The software interface is somewhat clumsy, but once learned is tolerable. The picture quality is very poor. Very little detail can be seen. Line drawings such as schematics are very good. Pages print very legibly, but photographs look like about four level grey scale. It's still better than not having the magazines.

73,

John, K6QQ

1233. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <78u79picp1@remarQ.com>
Source record: 74034
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mark Zenier wrote in message ...

>You are a pathetic fatuous Internet Fashion Victim. A braindead
>exclusivist brother ...

Mark,

Have you had your medications checked lately?

Peace,

John

1234. Amplifier (2watts to 20, 35, 40, whatever)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Rollins <rollins@island.net>
Message-ID: <78uf47$7og$1@frasier.island.net>
Source record: 74035

Hello. I'm looking at building an amp. for my ht. It puts out around 2 watts, and i'd like to go up around 20-40 watts. Does anybody have a schematic, ive had no luck finding one on the net. Thanks.

Sean Rollins, VE7SNR
Visit my page http://www.island.net/~rollins

1235. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Anselmo Stiffan <anselmos@worldcom.ch>
Message-ID: <36B23093.536A6739@worldcom.ch>
Source record: 74036
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have since two years now the MFJ-16010 two knob tuner for random wire.
It's small, cheap and tunes almost everything.
I made athe same design (L tuner) using a roller inductor and a variable
capacitor, both motor driven, and it works very, very well.
The MFJ-16010 is very useful when camping because it can tune any wire
trown on the trees. I used it up to 150W without any problem.

Anselmo HB9ICK

m c beutler wrote:

> Anyone have an opinion on the simple 2 knob antenna tuners offered by
> MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
> capability more than sufficient) Can't seem to find much in the way of
> consistent data for building one on the bench.
>
> Would actually prefer to make one but have not found values (inductance
> steps, # of turns of a given wire on a given coil form size, etc)
> anywhere for a tapped or variable inductor.
>
> Any assistance would be greatly appreciated.
> --
> -
> Regards,
> mark beutler
> -

1236. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be4b5f$cf416ba0$385eac3e@default>
Source record: 74139
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

For design of tuning and loading coils download program
SOLENOID from my web site.

For values of inductance and capacitance in networks to
tune/match random endfed wires against a ground electrode
system, download program ENDFEED.
--
****
Reg, G4FGQ For programs go to
http://www.btinternet.com/~g4fgq.regp

****

m c beutler <mbeutler@tds.net> wrote in article
<36B0F8DB.258FAED7@tds.net>...
> Anyone have an opinion on the simple 2 knob antenna
tuners offered by
> MJF? Want a low power tuner for random wire and "L"
antennas.(200 watt
> capability more than sufficient) Can't seem to find much
in the way of
> consistent data for building one on the bench.
>
> Would actually prefer to make one but have not found
values (inductance
> steps, # of turns of a given wire on a given coil form
size, etc)
> anywhere for a tapped or variable inductor.
>
> Any assistance would be greatly appreciated.
> --
> -
> Regards,
> mark beutler
> -
>
>
>

1237. WANTED: Norcal 20 QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: kd5gch@usa.net.NOSPAM
Message-ID: <ZZ6s2.93$OS5.230974@news3.mia>
Source record: 74140

I am looking for a Norcal 20 QRP rig. If you have one, for sale, please email me.

Thanks and 73.

==========
73 de KD5GCH. Remove the "NOSPAM" from my email before replying.
Spam Bait: admin@loopback, $LOGIN@localhost, $LOGNAME@localhost,
$USER@localhost, $USER@$HOST,-h1024@localhost,root@mailloop.com
==========

1238. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.99Jan28190734@colossus.stdavids.picker.com>
Source record: 74141
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Go on the basis of the current spec - 20 mA max. Adjust your resistor for
that.

--- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
+Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
| Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html

In article <bogus-2801991359380001@dnai-216-15-121-45.dialup.dnai.com> bogus@supernews.com
(DaveC) writes:

I'm trying to get the maximum brightness from an LED that has these specs:
10-20 mA @3v.

I've tried a 650-ohm series resistor which gives me these measurements,
using a 12.5 volt supply:
16 mA, 1.8 v drop across the LED.

If I'm not mistaken, the actually current and voltage aren't important,
but the total power dissipated by the LED is. I calculate the maximum for
this LED as 60 mW (20 mA x 3 volts). With the 650-ohm resistor, I
calculate only 28 mW is being dissipated by the LED, which leaves lots of
room for improvement.

My confusion comes when I try to calculate what resistor would be best in
this circuit. If the LED draws current determined by the value of the
resistor, and the voltage at the LED depends on the voltage drop across
the resistor, how can one calculate the correct resistor without actually
trying some values and taking measurements?

Am I trying to think of the LED as a linear device (current and voltage
are linearly related), when in reality it is not?

Any help understanding not only a good resistor value for this LED, but
how to properly think about the application of ohm's law in this
circimstance, would be greatly appreciated.

Sorry for the modified return address, but I hate getting spammed. Correct
address is shown below.

Thanks,
Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

1239. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: im@home.now
Message-ID: <36b0f91d.3679628@news.atl.mindspring.com>
Source record: 74142
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

If you wish to get the max brightness out of an led there is a way of doing it that will light it brighter than the max voltage and current it can take. Design a small circuit that puts out a squarewave in the region of 60khz to 140 khz.. If you use a 555 timer this should allow you to make the frequency variable.

Apply the output of the circuit to the base of an npn transistor for example a 2n2222. Apply Your dc power including any needed dropping resistor to limit the current to the collector of the transistor. Connect the anode of the diode to the emitter of the transistor and the cathode to ground.. ''The transistor is now going to act like a simple switch to turn on and off the led....

Tuning the squarewave oscillator you will come to a point when the led seems really bright. It will also draw less current as it is been switched on and off very fast.

The reason it seems brighter than standard methods is because of the memory effect of the human eye..... This is an elobrate way of doing it but it works very well...

bfn...jd..

1240. Re: For Sale 4CX5000A/8170 Pull

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990128193424.28702.00000677@ng99.aol.com>
Source record: 74143

<<Subject: Re: For Sale 4CX5000A/8170 Pull
From: "Rexford T. Hound" <*****&%$@ix.netcom.com>
Date: Thu, Jan 28, 1999 5:58 PM
Message-id: <78qq6h$pqo@dfw-ixnews8.ix.netcom.com>

Let's give the boy some credit, he found some sucker for the 6-meter amp, at
least that's what he claims.

--
From the paws of,
Rexford T. Hound

..
>So I guess this is a final for a CB, right Wilbern?
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

>>I have never used a 4CX5000A/8170 in
a CB BUT you are the Master Batter
you can find out the next time you FISH
Have FUN , Build something .
If you can,I will even give you the PARTS
to do so.
NOT TO HIDE (JR) (BILL) KB5MER
You can even look it up

1241. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: c.c.tqbssz@CurrentXli.killspam.us.com
Message-ID: <78qvu7pit1@samba.rahul.net>
Source record: 74144
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Tim Shoppa (shoppa@trailing-edge.com) wrote:
: DaveC wrote:
: >
: > I'm trying to get the maximum brightness from an LED that has these specs:
: > 10-20 mA @3v.

: Unfortunately, those are incredibly vague specs. Is this your
: garden-variety red LED? If so, the forward voltage drop at 20 mA
: is more like 1.8 to 2.0V.

Having written a few hundred LED data sheets I would suspect the 3 volt spec is actually is the _maximum_ forward voltage the part will have at 20 mA. An individual LED with 3 V Vf at 20 mA would be a pretty crappy part but a lot of specs were written years ago when production distributions were very wide and manufacturers wanted to ship as many parts as possible.

Stephen

: > I've tried a 650-ohm series resistor which gives me these measurements,
: > using a 12.5 volt supply:
: > 16 mA, 1.8 v drop across the LED.

: That's pretty close to the 20mA rated current. Most garden-
: variety red/green/yellow LED's will be rated for a 20 or 25 or
: 30 mA max continuous current. If you pulse the LED's, things
: get more complicated, but 20 mA average with maximum pulse of
: 50 or 100 mA is typical.

: > My confusion comes when I try to calculate what resistor would be best in
: > this circuit. If the LED draws current determined by the value of the
: > resistor, and the voltage at the LED depends on the voltage drop across
: > the resistor, how can one calculate the correct resistor without actually
: > trying some values and taking measurements?

: You can't, really. Most LED manufacturers publish a forward
: current vs forward voltage curve that would take place of such
: measurements. But it sounds to me like you might not even know
: who manufactures your LED.

: > Am I trying to think of the LED as a linear device (current and voltage
: > are linearly related), when in reality it is not?

: Current and voltage are defintely not linearly related for an LED.
: A better model is that of a diode.

: > Any help understanding not only a good resistor value for this LED, but
: > how to properly think about the application of ohm's law in this
: > circimstance, would be greatly appreciated.

: A better model is a diode, with a forward voltage drop of 1.8 or
: 2.0 V. If the power supply that's powering the LED will have
: a large variation in voltage (i.e. a battery, or a non-regulated
: supply) and you're concerned about getting a constant current,
: then I'd seriously look at a constant-current regulator (take
: a look at the LM317T data sheet for a very simple example.)

: If maximum brightness from the LED under varying conditions is
: important to you, you'll really need the specs and curves for
: the LED you're using. In addition to this, a good application
: note to read is HP's series on their super flux LED's -
: particularly Application Note 1149-4, "Thermal Management
: Considerations for Super Flux LED's".

: --
: Tim Shoppa Email: shoppa@trailing-edge.com
: Trailing Edge Technology WWW: http://www.trailing-edge.com/
: 7328 Bradley Blvd Voice: 301-767-5917
: Bethesda, MD, USA 20817 Fax: 301-767-5927

1242. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <36B10548.FE43A7FC@home.com>
Source record: 74145
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Hi,
It is called counter-drifting measure, hi, hi.
Tony, VE6CGX

Zvi Cedricsson wrote:
>
> For a great article on VFO temperature compensation in older radios see:
>
> Designing Temperature Compensation Circuits for Old Radios by J. Robert Burger
> WB6VMI
> http://www.mnsinc.com/bry/ham/vfo_drift.htm
>
> (I have improved it a it and added those important diagrams that were missing
> before!!)
>
> Enjoy! - Tell your friends! - Set links!!

1243. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b10608.2499418@newshost>
Source record: 74146
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Here I go, replying to my own posts again....

>We used arcnet instead of ethernet (I said this was a long time ago!).

We actually were using 10base2 ethernet for our computer network at
the time. I figured that the bandwidth of ethernet would have been
much too high for the FM video link (as you've found), and decided
that arcnet, at 2.5Mbps, would be much easier.

There was a Novell Netware server at each end of the link, so I just
plugged an arcnet card into each, and loaded the appropriate driver to
get it to route packets between the ethernet and arcnet.

Allan.

1244. WTB Communications Quarterly magazines, Fall'96 - present

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: crabtreejr@aol.com
Message-ID: <19990128201147.17470.00000874@ng33.aol.com>
Source record: 74147

Please e-mail directly with a list of issues, condition and price. TIA

John Crabtree
Edina, MN

1245. Re: Need to calibibrate my homebrew electonic keyer. How do you count WPM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36b116e5.2098238@news.io.com>
Source record: 74148

On Wed, 27 Jan 1999 22:59:42 -0600, "Tom C. Brown, Jr."
<tcb@netdoor.com> wrote:

>
>Ian White, G3SEK wrote in message ...
>I was watching the bug's output through an ohms probe on a storage
>oscilloscope, catching one-shot displays. My reference was the period of
>one dot/space combination [120 ms = 20 wpm], and in the process, I found out
>an interesting thing: the bugs that I tested did *not* slow down as the
>pendulum travel was increased from what I consider to be fairly short travel
>all the way out to really long travel. As a matter of fact, the speed
>actually increased by a [probably] negligible but repeatably measurable
>amount as the travel was drastically increased.

Now, hold on a second, Tom. I'm must not be understanding what your
saying. Are you saying that when you move the weight to the far end
of the bug's pendulum, it runs *faster* (i.e., shorter dots) than when
you move it to the closest-in part of the pendulum? No bug I ever
used worked that way...

Or maybe you're talking about increasing the space to the mechanical
stops that limit how much of a "push" you give the pendulum? That I
might believe, at least to a small degree, though I've never actually
looked for that...

watsa?

monty

1246. Spice-y Oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36b1193a.2695408@news.io.com>
Source record: 74149

I've recently been exploring the value of using Spice Simulation programs for developing RF circuits, and so far I've had a lot of fun with it. Sure can be a time saver...

But I've had lots of unhappy results with simulating oscillators at HF frequencies (mostly 3.5 - 20 MHz). When observing the graphical analyses of the output of several proven Colpitts oscillator designs using BJTs (2N2222's), the frequency looks to be approximately as expected, but the waveform envelope observed over say, 1000-2000 cycles, looks more like a badly modulated A.M. signal. Some analyses programs (like Orcad/Microsim) require that you insert a single short pulse to "start" the oscillator, and some (like Electronics Workbench) don't need the start pulse, but all seem to have the modulated envelope. Has anyone else noticed this phenomenon? Can this be a sampling/undersampling phenomenon? Any ideas on how to correct it?

Also, when observing a single cycle of oscillator output, the output usually looks assymettrical, as if it's being clipped or limited in some way. Would this be indicative of biasing or feedback problems that should be corrected, or is this normal (for a practical oscillator to start reliably)?

Thanks in advance,
monty

1247. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36b11f19.4198809@news.io.com>
Source record: 74150

On Thu, 28 Jan 1999 21:10:55 GMT, la8ak@online.no (J.-M. Noeding)
wrote:

>On Thu, 28 Jan 1999 03:56:58 GMT, "Matt J. McCullar" <mccullar@flash.net> wrote:

>you must write year, issue, month and delete 'cover' and write issue instead to
>read a certain issue, it is just too bad, takes too much time to change from
>reading february 1950 to march 1950, vast improvement is required

I'm in agreement, Matt. Seems like they might update the software
with a search technique that's a little more user friendly, and make
that available via download from the internet. I think it would sell
CD's. (Is the ARRL listening?)

My question about using them is this:

When using "QST View" for issues prior to 1994, the search engine
seems to find all the articles on any and all the CD's in one search;
But with the single-issue years (from 1995 on), you have to load each
CD in, search it, then the next year, etc (Or else I'm doing something
wrong) Seems like there could be a consolidated index released each
year. This would also help CD sales, as it would entice someone to
buy the "1964" CD if it had a particular subject you were interested
in. (ARRL, am I all wet?)

monty

1248. Re: Solid State Replacements for the 866 tube-Where to get?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990129013624.11238.00001883@ngol06.aol.com>
Source record: 74151

In article <36af762f.0@news3.buffnet.net>, "Bruce J. Howes KG2IC"
<bhowes@buffnet.net> writes:

>Subject: Solid State Replacements for the 866 tube-Where to get?
>From: "Bruce J. Howes KG2IC" <bhowes@buffnet.net>
>Date: Wed, 27 Jan 1999 16:01:58 -0500
>
>Looking for the solid state replacement for the 866 tube.
>
>Any suggestions?

Hello Bruce,

Personally, I just LOVE the blue glow of MV rectifiers. But you must have a reason to want to replace yours.

First, be aware that there are two tubes that can substitute for the 866. The first is the 3B28, which is a xenon gas rectifier of identical ratings. They work over a wider temeperature range, have very long life, and no hash noise. The 1616 is a high vacuum rectifier of similar ratings (double check the tube books first) that can substitute in many applications.

Or, you can build your own replacements. An 866 is basically a 10kV, .5 amp diode. Depending on the application, you can use a single silicon diode or a string of them. What rig are you planning to use these in? You might want to put a resistor across the filter choke (about 3-5 K per henry) to reduce the inductive kick on starting and shutoff.

Some folks replace the tube sockets and plate cap arrangement, while others make up plug in replacements out of an old 4 pin tube base and cap, and a piece of PVC pipe. That way you can always put the tubes back in.

73 de Jim, N2EY

1249. What op-amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: MAC <fbmac@ipr.nl>
Message-ID: <78s2frhrh1@news.news-service.com>
Source record: 74152
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I'm working on a little potable receiver. It works from 100Hz to 10.000Hz.
(Yes,.Hertz) Since it's working with dual voltage from two 9 Volt battaries,
i'm looking for very low power opamps.

In the inputstage I'm considering a INA118 of Burr-Brown.
After that i get my filtering (Lowwpass) followd by a line driver and a
headphone amp.

Any good tips?.....

Fred
fbmac@ipr.nl

1250. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Bill sloman <bill.sloman@ieee.com>
Message-ID: <36B19BD2.211A3DB1@ieee.com>
Source record: 74153
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

JD wrote:
>
> If you wish to get the max brightness out of an led there is a way of
> doing it that will light it brighter than the max voltage and current
> it can take. Design a small circuit that puts out a squarewave in
> the region of 60khz to 140 khz.. If you use a 555 timer this should
> allow you to make the frequency variable.
>
> Apply the output of the circuit to the base of an npn transistor for
> example a 2n2222. Apply Your dc power including any needed dropping
> resistor to limit the current to the collector of the transistor.
> Connect the anode of the diode to the emitter of the transistor and
> the cathode to ground.. ''The transistor is now going to act like a
> simple switch to turn on and off the led....
>
> Tuning the squarewave oscillator you will come to a point when the led
> seems really bright. It will also draw less current as it is been
> switched on and off very fast.
>
> The reason it seems brighter than standard methods is because of the
> memory effect of the human eye..... This is an elobrate way of doing
> it but it works very well...

This sounds wrong. In the bad old days, the light output from many
LED's increased more than linearly with increasing current, and there
was a real advantage to driving the LED with a brief pulse of high
current.

This doesn't seem to be true of modern, high efficiency LED's, and
the last one I looked at had a fairly low absolute maximum current
limit (which didn't stop me from using it in crude stroboscope with
an 8:1 duty cycle).

The human eye is an integrating detector for optical sources
cycling faster than about 60Hz (for bright sources - it can drop
to a few Hertz in dim light, a trick I saw exploited with a
primitive phased array ultrasound imager back in 1976).

If you pulse the LED in the range 7Hz to about 15Hz you risk
inducing epileptic fits in susceptible viewers, but about that
chopping the light source doesn't affect its perceived
brightness - the eye just counts the number of photons.

Of course, if you seriously over-drive a LED you might generate higher wavelength photons - Rev.Sci.Instrum. recently had a short paper on getting near U.V out of a blue LED by hitting it with 1nsec wide pulses of current, but this degraded the junction, which could only survive some ten billion pulses (10 seconds of UV).

This sort of effect could appreciably raise the perceived brightness of a red LED, but would degrade the preceived brightness of a nominally green or blue emitter.

I wouldn't bother with the elaboration - in most cases it would be cheaper to buy a brighter/more efficient LED and you'd have some confidence about the improvement in the perceived brightness.

Bill Sloman, Nijmegen

1251. Re: What op-amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: xxx@yyy.com
Message-ID: <36B1BCE2.5D1849B8@yyy.com>
Source record: 74154
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

If you are using very low power opamps, you should be talking about
2-6 volts single sided supplly instead of 2-9 volt batteries, as almost
any opamp will work with 2 9 volt batteries.

Assuming really low power opamps, a number of them come to mind:-

LM324 : run of the mill garden variety quad opamp,
used in almost all cordless phones
that operate off a single 3.6 volt nicad battery.
MC3403 : ditto as above
RC4136 : ditto as above

TLV2074: High speed and high quality low power quad opamp
(improved version of TLO74 quad opamp)

TLC2274: high speed rail to rail but not low power, should work with
proper bias of 9 volt bat.
TLO74 : ditto as above

AD713 : high speed low lost quad opamp. May work with single 9 volt bat
after biasing.

CA3130 : This is a old single opamp. This has rail to rail input/output
and this is still one of my favorites.

LM837N : Low Noise qud opamp, It is recommended for audio apps.
Should work of a single 9 volt battery after proper biasing

I am sure a lot of people will like to add their favosites like the LT series
etc.

MAC wrote:

> I'm working on a little potable receiver. It works from 100Hz to 10.000Hz.
> (Yes,.Hertz) Since it's working with dual voltage from two 9 Volt battaries,
> i'm looking for very low power opamps.
>
> In the inputstage I'm considering a INA118 of Burr-Brown.
> After that i get my filtering (Lowwpass) followd by a line driver and a
> headphone amp.
>
> Any good tips?.....
>
> Fred
> fbmac@ipr.nl

1252. re:Spice-y Oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <36B1BEA3.81175259@lafn.org>
Source record: 74155

> maddog@io.com (Monty Northrup) wrote:
>
> I've recently been exploring the value of using Spice Simulation
> programs for developing RF circuits.
>
> But I've had lots of unhappy results with simulating oscillators at HF
> frequencies (mostly 3.5 - 20 MHz). When observing the graphical
> analyses of the output of several proven Colpitts oscillator designs
> using BJTs (2N2222's), the frequency looks to be approximately as
> expected, but the waveform envelope observed over say, 1000-2000
> cycles, looks more like a badly modulated A.M. signal.

I have seen the exact same "badly modulated A.M. signal".
with two different SPICE programs during transient simulation.

Am I choosing ".tran" command parameters wrong? Step size?

If a SPICE analysis "false alarm", how can we prevent?

73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

1253. 4CX5000A/SOLD/Thanks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990129091133.08387.00000700@ng148.aol.com>
Source record: 74156

4CX5000A/SOLD / Thanks JR

1254. Re: Spice-y Oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: bkizerian@my-dejanews.com
Message-ID: <78sjj7$jt1$1@nnrp1.dejanews.com>
Source record: 74157

Don't have the answer to your specific problem, but after using various versions of Spice for years I have reached a few conclusions.

1. Spice models are generally inadequate. They could make them more accurate
but simulation time would go way up.

2. Spice will often tell you that a circuit won't work that will and a circuit that will work won't.

3. You can tweak with it and get better results. Talk to someone who does IC
design. They are often well versed in the legitimate uses of Spice.

4. Some Spice software converges better than others. Pspice is particularly
good but expensive.

5. I usually use Spice to gain an understanding of how fairly basic circuits
work. I also break up more complicated designs and simulate them in smaller
segments.

6. The best simulation technique is still breadboarding. The is no substitute for it and probably won't ever be. Sooner or later you must do your programming and simulation with solder and wire.

I still enjoy using Spice. I have learned a lot of good things from it, but
I have learned when to log off the computer and pick up a soldering iron.

Hope this helps.

Bruce kk7zz

In article <36b1193a.2695408@news.io.com>,
maddog@io.com (Monty Northrup) wrote:
> I've recently been exploring the value of using Spice Simulation
> programs for developing RF circuits, and so far I've had a lot of fun
> with it. Sure can be a time saver...
>
> But I've had lots of unhappy results with simulating oscillators at HF
> frequencies (mostly 3.5 - 20 MHz). When observing the graphical
> analyses of the output of several proven Colpitts oscillator designs
> using BJTs (2N2222's), the frequency looks to be approximately as
> expected, but the waveform envelope observed over say, 1000-2000

> cycles, looks more like a badly modulated A.M. signal. Some analyses
> programs (like Orcad/Microsim) require that you insert a single short
> pulse to "start" the oscillator, and some (like Electronics Workbench)
> don't need the start pulse, but all seem to have the modulated
> envelope. Has anyone else noticed this phenomenon? Can this be a
> sampling/undersampling phenomenon? Any ideas on how to correct it?
>
> Also, when observing a single cycle of oscillator output, the output
> usually looks assymettrical, as if it's being clipped or limited in
> some way. Would this be indicative of biasing or feedback problems
> that should be corrected, or is this normal (for a practical
> oscillator to start reliably)?
>
> Thanks in advance,
> monty
>
>

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1255. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: yabyum@my-dejanews.com
Message-ID: <78sllj$m28$1@nnrp1.dejanews.com>
Source record: 74158
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Dunno anything about the MFJ tuner. Sounds interesting though. See the
following URL for instructions on how to make a tuner:

http://www.nordicdx.com/antenna/special/broom2.html

Hope it helps. Have fun!

In article <36B0F8DB.258FAED7@tds.net>,
mbeutler@tds.net wrote:
> Anyone have an opinion on the simple 2 knob antenna tuners offered by
> MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
> capability more than sufficient) Can't seem to find much in the way of
> consistent data for building one on the bench.
>
> Would actually prefer to make one but have not found values (inductance
> steps, # of turns of a given wire on a given coil form size, etc)
> anywhere for a tapped or variable inductor.
>
> Any assistance would be greatly appreciated.
> --
> -
> Regards,
> mark beutler
> -
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1256. $800 mini-scope/other test equipment at ebay - low reserve!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: ka4993gg@aol.com
Message-ID: <19990129101809.12928.00000916@ng19.aol.com>
Source record: 74159

Please see all the pictures at Ebay, starting with item #s :

60322103, 60332388, 60384302.

Please check out all of my other items at Ebay.

There are tuners, receivers and other ham related items!

1257. Switching LEDs question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: bogus@supernews.com
Message-ID: <bogus-2901990733230001@dnai-207-181-238-93.dialup.dnai.com>
Source record: 74160
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Very cool idea.

My questions:

1) How much current for each LED should I calculate when choosing series resistors, if the max standard current is 20 mA per LED? I suppose I can use a pot and adjust the brightness, but what current value should I limit the LED to when switching it on and off?

2) If I want to switch a large number (40) of LEDs at once, what transistor would be good in place of a 2n2222 (should be max 1A capability, I think) ?

So, in addition to the components needed to run the 555 timer at 60-140 KHz, all I need is the transistor and one resistor? Anything else?

Any observations and assistance in getting this circuit running would be greatly appreciated.

Sorry for the modified return address, but I hate getting spammed. Correct address is shown below, if you choose to e-mail me directly.

Thanks,
Dave

=====

In article <36b0f91d.3679628@news.atl.mindspring.com>, im@home.now (JD) wrote:

> If you wish to get the max brightness out of an led there is a way of
> doing it that will light it brighter than the max voltage and current
> it can take. Design a small circuit that puts out a squarewave in
> the region of 60khz to 140 khz.. If you use a 555 timer this should
> allow you to make the frequency variable.
>
> Apply the output of the circuit to the base of an npn transistor for
> example a 2n2222. Apply Your dc power including any needed dropping
> resistor to limit the current to the collector of the transistor.
> Connect the anode of the diode to the emitter of the transistor and
> the cathode to ground... ''The transistor is now going to act like a
> simple switch to turn on and off the led...
>
> Tuning the squarewave oscillator you will come to a point when the led
> seems really bright. It will also draw less current as it is been
> switched on and off very fast.

>
> The reason it seems brighter than standard methods is because of the
> memory effect of the human eye... This is an elobrate way of doing
> it but it works very well...

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

1258. Stamp Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Roger <n0yoxNOSPAM@iland.net>
Message-ID: <78stc4$3rb$1@remarQ.com>
Source record: 74161

Stamp II code and schematic for repeater controller now available.

http://www.iland.net/~n0yox

1259. Shack Reduction/ Drake

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990129141513.12057.00001040@ng100.aol.com>
Source record: 74162

For Sale
Shack Reduction
Drake T- 4 XC , R ï¿½ 4B .4, 2.4, 4.8 Filters , MS-4 / power supply
8 on a 1-10 $500.00 + Shipping

Drake T ï¿½ 4 XC , R ï¿½ 4 C , MS ï¿½ 4 / PS.25 CW , .5 CW , 1.5 CW Filters
8.5 on 1-10 $475 + Shipping

Drake T-4X , R ï¿½ 4C , .25CW , .5 CW, 1.5 CW Filters , NB, MS ï¿½ 4 / PS
8 on 1-10 $475.00 + Shipping

Drake TR ï¿½ 4C ,MS- 4 / PS , Blanker
8.5 on 1-10 $375.00 + Shipping

Drake TR ï¿½ 3 , Speaker / PS , 7.5 on 1-10 $250.00 + shipping

Drake MN ï¿½ 4 Matching Network (Antenna Tuner) 9.5 on 1-10
$195.00 + Shipping

Shipping from Austin, Texas

1260. Re: I need a Schematic for a keyer for my homebrew transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <917637876.130546@cs1.sdd.hp.com>
Source record: 74163

Hello Me OM,

I use a TICK keyer chip. SMT part mounts on a PCA about one inch square. I built mine
into the base of a Bencher paddle, which I use on CW mobile. For a few $ you have a memory keyer, which runs off a 3V disc battery for a very long time.

I don't recall their location, but you can find ads for them in the mags.

73,
Don, W6JL

Me wrote in message <917508355.706401@neptune.uniserve.ca>...
>I just built a small non-kit QRP transmitter and would like to put
>a simple keyer in it's case. Does anyone know where
>I can find a schematic for a little homebrew keyer?
>

1261. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <917638300.722409@cs1.sdd.hp.com>
Source record: 74164
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Mark OM,

Matching circuits for matching the transmission line to the rig are found everywhere in
the antenna books. See any ARRL Antenna Book. Have you looked?
I would not recommend purchasing any commercially-made "antenna tuner". Keep in
mind that these tuners, inside the box, are very simple devices. Make your own and
save your money for antennas. Incidentally, "antenna tuners" do not tune the antenna
at all. What they do is to transform the driven end of the transmission line to 50 ohms
to keep solid state transmitters happy. Tube rigs with pi-network outputs do not have this
limitation. If you are feeding the antenna with a coax line, you may still have high SWR
on the line using the matching network, which will increase line losses. But on the lower
HF bands, the difference is negligible, and you won't notice it unless the coax is very
small and/or a very long run length.
It is always a good idea to research the available printed informatioin before posting a
question to a newsgroup. Nothing takes the place of homework, HI.

73 and GL,
Don

m c beutler wrote in message <36B0F8DB.258FAED7@tds.net>...
>Anyone have an opinion on the simple 2 knob antenna tuners offered by
>MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
>capability more than sufficient) Can't seem to find much in the way of
>consistent data for building one on the bench.
>
>Would actually prefer to make one but have not found values (inductance
>steps, # of turns of a given wire on a given coil form size, etc)
>anywhere for a tapped or variable inductor.
>
>Any assistance would be greatly appreciated.
>--
>-
>Regards,
>mark beutler

>-
>
>

1262. Shack Reduction/Drake

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990129145907.01106.00000503@ng-cf1.aol.com>
Source record: 74165

For Sale
Shack Reduction
Drake T- 4 XC , R ï¿½ 4B .4, 2.4, 4.8 Filters , MS-4 / power supply
8 on a 1-10 $500.00 + Shipping

Drake T ï¿½ 4 XC , R ï¿½ 4 C , MS ï¿½ 4 / PS.25 CW , .5 CW , 1.5 CW Filters
8.5 on 1-10 $475 + Shipping

Drake T-4X , R ï¿½ 4C , .25CW , .5 CW, 1.5 CW Filters , NB, MS ï¿½ 4 / PS
8 on 1-10 $475.00 + Shipping

Drake TR ï¿½ 4C ,MS- 4 / PS , Blanker
8.5 on 1-10 $375.00 + Shipping

Drake TR ï¿½ 3 , Speaker / PS , 7.5 on 1-10 $250.00 + shipping

Drake MN ï¿½ 4 Matching Network (Antenna Tuner) 9.5 on 1-10
$195.00 + Shipping

Shipping from Austin, Texas

1263. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Bruce Nepple <brucen@imagenation.extra.com>
Message-ID: <nXos2.141$lp.702@news6.ispnews.com>
Source record: 74166
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

The tests I did (years ago) basically showed that the eye integrated the light and there was no brightness difference over a 10:1 ratio. Have you actually done this? Is there a particular frequency where this effect works?

bruce

JD wrote in message <36b0f91d.3679628@news.atl.mindspring.com>...
>If you wish to get the max brightness out of an led there is a way of
>doing it that will light it brighter than the max voltage and current
>it can take. Design a small circuit that puts out a squarewave in
>the region of 60khz to 140 khz.. If you use a 555 timer this should
>allow you to make the frequency variable.
>
>Apply the output of the circuit to the base of an npn transistor for
>example a 2n2222. Apply Your dc power including any needed dropping
>resistor to limit the current to the collector of the transistor.
>Connect the anode of the diode to the emitter of the transistor and
>the cathode to ground.. ''The transistor is now going to act like a
>simple switch to turn on and off the led....
>
>Tuning the squarewave oscillator you will come to a point when the led
>seems really bright. It will also draw less current as it is been
>switched on and off very fast.
>
>The reason it seems brighter than standard methods is because of the
>memory effect of the human eye..... This is an elobrate way of doing
>it but it works very well...
>
>bfn...jd..
>

1264. Projects & Parts FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990129161420.01198.00000785@ng-fw1.aol.com>
Source record: 74167

For Sale: Parts and Projects for the Builder
RF decks / Final Pas
Motorola
6 Meter RF Deck Pair 8560ï¿½s in push-pull
with 95% of power supply parts
Bud cabinet 14"

2 Meter RF Deck single 8560

RCA
6 Meter pair 4-250ï¿½s in push-pull
Tank coil, filament transformer, Grid coil

6 Meter 4-125"s same as above

Home Brewed projects

6 Meter, 2 X 4CX250B / Power Supply / Cabinet

6 Meter, single 4-400 / Power Supply / Bud cabinet

Tubes, Sockets, RF chokes, Coil stock, Meters, Transformers Filament / Plate

1265. FS: COLLINS 76F-3 SPEAKER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2901991335430001@murphy1.cts.com>
Source record: 74168
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.shortwave

COLLINS 76F-3 SPEAKER:

WEATHER PROOF ENCLOSED, SOLID STATE AMP. OPERATES FROM 28 VDC.

CHOICE OF OD OR CARC PAINT. GOOD COND. $45 EA.

PICT AT:

http://209.239.34.153/murphyjunk/1_SPECIALS_UPDATED_FREQUENTLY

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1266. FS: COLLINS MECH FILTERS SET OF 3 $45

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2901991345490001@murphy1.cts.com>
Source record: 74169
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.shortwave

COLLINS MECH FILTERS MOUNTED IN R-1051 MODULE.

7 KHZ AM

2.4 KHZ LSB

2.4 KHZ USB

FOR 500 HZ IF

3 FOR $45.

PICT AND INFO AT:

http://209.239.34.153/murphyjunk/3_COMM_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1267. WTB: Manual for WIltron 6247D Plug-in

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-29 00:00:00 UTC
From: Stephen Schiller <polytope@prado.com>
Message-ID: <78tc79$7i3$0@209.66.82.22>
Source record: 74170

Hi,
Interested in service manual for the above.
(I have already checked Manuals Plus, Manual Merchant,
Ed Matsuda and others.)
Also interested in a manuals for a Wiltron 610D,
Wiltron 6229D, HP 8754A,
if you happen to have those laying around.
Copies are OK. Willing to pay usual market rates.
(Or maybe even a bit more...)

thanks,
Steve

1268. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B3B481.314B@pop.removethistomailme.net>
Source record: 73973
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Moriarity wrote:
>
> Mark Zenier wrote in message ...
>
> >You are a pathetic fatuous Internet Fashion Victim. A braindead
> >exclusivist brother ...
>
> Mark,
>
> Have you had your medications checked lately?
>
> Peace,
>
> John

LOL. I had guessed from his earlier messages that I could send Mr. Zenier into a nonlinear region of his characteristic curve by dropping the phrase "information superhighway" somewhere in a message to him, and whaddya know, I was right!

Ah, the joys of trolling. <pats self on back>

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1269. Historical Pictures

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Stuart Lipoff <adlsl@delphi.com>
Message-ID: <36B3ACCD.86C014DF@delphi.com>
Source record: 73974

1999 is the 50th aniversity of The Institute of Electronic and
Electrical Engineers (IEEE)
Consumer Electronics Society. At the June International Conference on
Consumer Electronics (ICCE), The Society wishes to display posters of
photographs of antique consumer electronic devices ranging from
photographs, radios, and early TV sets. If you have photo you wish to
donate, please mail any 35mm slides you can donate to the attention of
the conference coordinator.

ICCE Conference Coordinator
67 Raspberry Patch Drive
Rochester, NY 14612-2868

For more information about the conference go to the web site at

http://www.icce.org

1270. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Steve Ellington N4LQ <N4LQ@igLou.com>
Message-ID: <36b3cebf.0@news.iglou.com>
Source record: 73975
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I must take exception with this one statement since it's technically incorrect. Cw is not a MODE. CW stands for continous wave. This is "carrier" produced by a transmitter. It contains no usefull information and is by far the simplest signal one can produce. It can be produced by only one transistor or tube forming a simple oscillator.

Now by turning the carrier off and on we can use it for signaling. A code was developed by Mr. Morse and co. So now we can turn this simple circuit off and on and use it to communicate with people.

Being the simplest form of communications, the powers that be feel it is important to know how to accomplish this. Therefore, they want you to be able to draw or recognize this simple circuit in the written test and be able to send "code" with it so you can communicate.

This is basic radio. Those that feel that code should not be required are overlooking the basics. Anyone can purchase a two way radio, cell phone or pick up their telephone and communicate via voice.

Amateur Radio Operators however, are those who are capable of building and operating the simplest form of radio. This means you must learn theory, circuits and CODE or you are not an Amateur Radio Operator.

I hope I didn't ruffle any feathers here these are the facts. Yes, Amateur Radio is declining due to other interest but that doesn't change the facts.

73 Steve N4LQ
>>
>> CW is a MODE. Nothing more, nothing less. And as such CW should not be
>> given any special consideration over any other mode.
>>

1271. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36B3D3FF.7E9E@ibm.net>
Source record: 73976
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Steve Ellington N4LQ wrote:
>
> I must take exception with this one statement since it's technically
> incorrect. Cw is not a MODE. CW stands for continous wave. This is "carrier"
> produced by a transmitter. It contains no usefull information and is by far
> the simplest signal one can produce. It can be produced by only one
> transistor or tube forming a simple oscillator.

From the ARRL Handbook: "Telegraphy by on-off keying (OOK) of a carrier is
the oldest radio modulation system. It is also known as CW (continuous wave)."
"CW", as used by the ARS/ARRL/FCC is defined as the OOK mode. Others may
use "CW" to mean an unmodulated carrier. The expression "CW" is not context
free. CW/OOK is *relatively continuous* compared to spark.

Many expressions in the English language do double duty. "power", "program",
"fetch", "write", and "bus" come to mind.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

1272. IC230 - CTCSS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Harry and Joyce Johnson <panda@humboldt1.com>
Message-ID: <36B3D92E.D3DFF19E@humboldt1.com>
Source record: 73977

Has anyone ever installed a CTCSS encoder in an ICOM IC230? I'd like to hear how it was done. Please e-mail <panda@humboldt1.com> Thanks for your help.

1273. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: "George T. Baker" <w5yr@swbell.net>
Message-ID: <36B3EE99.3744D893@swbell.net>
Source record: 73978
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Amplifying a bit on Cecil's "relatively continuous carrier" comment, CW historically and technically specifies undamped oscillations as compared with the damped oscillations produced by spark gaps exciting tuned circuits and antennas, etc. Both waveforms can be on/off keyed as a modulation process to convey information.

Paralleling the great SSB vs AM debates of the 50s was the Spark vs CW debate of the teens and 20s. Technical elucidations of damped and undamped oscillations were undertaken in QST and other technical publications of the time.

Exciting times, those days!

72/73, George
Amateur Radio W5YR, in the 53rd year and it just keeps getting better!
AutoPOWER Systems, Fairview, TX (30 mi NE Dallas) Collin County
QRP-L QRP-ARCI FISTS NORCAL ZOMBIE #522 ARS 10-X 33.2 N 96.6 W EM13RE

W6RCecilA wrote:

> From the ARRL Handbook: "Telegraphy by on-off keying (OOK) of a carrier is
> the oldest radio modulation system. It is also known as CW (continuous wave)."
> "CW", as used by the ARS/ARRL/FCC is defined as the OOK mode. Others may
> use "CW" to mean an unmodulated carrier. The expression "CW" is not context
> free. CW/OOK is *relatively continuous* compared to spark.
>
> Many expressions in the English language do double duty. "power", "program",
> "fetch", "write", and "bus" come to mind.
> --
> 73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

1274. FA B&W Coils two sets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B3EEAF.D1BDB50F@uswest.net>
Source record: 73979
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

For BA's or Home brewing.

http://www.signalone.com/kb7ww/2coils.jpg
http://www.signalone.com/kb7ww/5coils.jpg

1275. Power Plugs small twist lock

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B4000F.F37C3C73@uswest.net>
Source record: 73980

I have found a small quantity of new power plugs for the AM-6155/6154 or

other equipment using the small twist lock. (1.125 od)

$5.50 shipped.

Art
KB7WW

1276. Re: Solid State Replacements for the 866 tube-Where to get?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b237ff.4058563@news.online.no>
Source record: 74037

On 29 Jan 1999 06:36:24 GMT, n2ey@aol.com (N2EY) wrote:

>
>In article <36af762f.0@news3.buffnet.net>, "Bruce J. Howes KG2IC"
><bhowes@buffnet.net> writes:
>
>>Subject: Solid State Replacements for the 866 tube-Where to get?
>>From: "Bruce J. Howes KG2IC" <bhowes@buffnet.net>
>>Date: Wed, 27 Jan 1999 16:01:58 -0500
>>
>>Looking for the solid state replacement for the 866 tube.
>>
>>Any suggestions?
>
>Hello Bruce,
>
>Personally, I just LOVE the blue glow of MV rectifiers. But you must have a
>reason to want to replace yours.
>
>First, be aware that there are two tubes that can substitute for the 866. The
>first is the 3B28, which is a xenon gas rectifier of identical ratings. They
>work over a wider temeperature range, have very long life, and no hash noise.
>The 1616 is a high vacuum rectifier of similar ratings (double check the tube
>books first) that can substitute in many applications.
>
>Or, you can build your own replacements. An 866 is basically a 10kV, .5 amp
>diode. Depending on the application, you can use a single silicon diode or a
>string of them. What rig are you planning to use these in? You might want to
>put a resistor across the filter choke (about 3-5 K per henry) to reduce the
>inductive kick on starting and shutoff.
>
>Some folks replace the tube sockets and plate cap arrangement, while others
>make up plug in replacements out of an old 4 pin tube base and cap, and a piece
>of PVC pipe. That way you can always put the tubes back in.
>
>73 de Jim, N2EY

Believe we had some RCA solidstate replacement rectifiers for 866 to be used
with the TV-transmitters, not sure if I kept some

73 Jan-Martin, LA8AK

LA8AK@Online.NO

1277. vhf xtals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: ei208@FreeNet.Carleton.CA
Message-ID: <78tmk8$70c@freenet-news.carleton.ca>
Source record: 74038

I'm looking for xtals that will plug into my old 2m vhf mobile radio.
Are there still companies that make such xtals?
If anyone knows please e-mail this address.
Thanks.
--
Tracy F.Clark
ei208@freenet.carleton.ca

1278. FS 1500 Watt Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990129215440.01149.00000916@ng-fx1.aol.com>
Source record: 74039

For Sale 1500 Watt Antenna Tuner
Roller Inductor/Air Variable
built in 1500W Dry Dummy Load
$450.00 + shipping
From Austin, Texas

1279. 50 amp 12v Rectifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01be4bfc$f1dbaca0$1e8592d0@Bit-Net.bit-net.com>
Source record: 74040

A friend is building a 30-50 amp 12v supply for me.
He has a 4B4B42 bridge but is uncertain of its current
capacity -- any hints?
If this is not an adequate device can someone recommend
a good one please? (Yes, price is an option, surplus would
be great!)
Thanks! & 73,
~~~

\ ~ / .... DavidC K1YP@qsl.net
~~~

1280. Yaesu MH-29a2b

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Chad Robertson <robertso@csc.mc.edu>
Message-ID: <78u973caq1@landrew.mc.edu>
Source record: 74041

I am looking for any pictures of the Yaesu MH-29a2b on the web. Even if the picture has other items in it.

Also, if anyone has any information about it and their thoughts on it.

If I obtain one, I will be using it with the Ft-530.

Thank you!

--

==========
| Chad Robertson | Box 4862 | www.mc.edu/~robertso |
| KC5MFE | Clinton, MS 39058 | robertso@mc.edu |
==========

1281. Re: schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: n7hmf@ucares.org
Message-ID: <78una0$ev7$1@nnrp1.dejanews.com>
Source record: 74042

Get a copy of the "ARRL Handbook for Radio Amateurs" and study it. If you want to go beyond that, contact you local community college for beginning electronics courses.

In article <3.0.1.32.19990129174249.007cda90@agate.net>,
dalejudi@agate.NET (Dale and Judie) wrote:
> Can someone direct me to a good source for learning how
> to read radio schematics ?
>
> Thanks
> Dale n1txw
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1282. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: "Matthew J. Chitiea" <c&c@inforum.net>
Message-ID: <36b2cc68.1@news.inforum.net>
Source record: 74043
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

```
--
Matthew J. Chitiea
C&C Distributing
Tel/Fax: (530) 622-TANK (8265)
EMail: c&c@inforum.net

We have the following available for sale.

(68) cases new Heritage bottles w/ twist tops $7/case
(175) cases used heritage bottles $4/case
Sent UPS ground. Visa/mc/amex

I hope this helps. matt
```

1283. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: brianburke@my-dejanews.com
Message-ID: <78uspd$j2i$1@nnrp1.dejanews.com>
Source record: 74044
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <36B2B051.2147378B@home.com>,
Tony Hwang <2810311762@home.com> wrote:
> Hello,
> Those who are anti-coders, if you master the code like us who like code
> (READ, I may not be pro-code) and say what you're saying, I'd repspect
> you MORE. Otherwise you're all just bunch of whiners.
> 73,
> Tony, VE6CGX, Fists #3919
> (Been ham for 39 years, 99% CW)
>

I don't believe we ever asked for your respect Tony. You either give it or
you don't.

Brian/N0iMD

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1284. Re: The ANTI-CW fights

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: kl0kw@hotmail.com
Message-ID: <78v389nqk1@nnrp1.dejanews.com>
Source record: 74045
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <01be4abd$5bcba660$dc34d4cc@pos-staff>,
"Miles Davis" <MDD327@aol.com> wrote:
> If a CBer (like me) were tired of the fighting on 11 Meters and wanted to
> try amateur radio and saw this mess, he wouldn't want to invest in the code
> anyway. I can pass the technical parts of the tests, need to study the
> rules and want to learn the code (EGO!) maybe I'll like maybe I won't.
>
>

Hi Mike, I didn't think learning the code was a bit of fun, and I was
practicing only to get upgrades. But something happenned, after I humped the
learning curve it got fun, but it takes some determination. I suspect lots
of folks get to Gordon West's second tape or some equivalent and decide code
isn't fun, I had to give it more of a chance than that. So keep with it, we
could always use some more egotisctical hams.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1285. Re: Amplifier (2watts to 20, 35, 40, whatever)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: hinermad@worldnet.att.net
Message-ID: <36b309e9.3896315@netnews.worldnet.att.net>
Source record: 74046

On Fri, 29 Jan 1999 22:58:38 -0800, "Rollins" <rollins@island.net>
wrote:

> Hello. I'm looking at building an amp. for my ht. It puts out around 2
>watts, and i'd like to go up around 20-40 watts. Does anybody have a
>schematic, ive had no luck finding one on the net. Thanks.

Motorola has had a lot of good amplifier designs in their RF compnents
databooks & application notes. They have a lot of their data online
now. There are links to Motorola RF components at

http://mot-sps.com/rf

I don't know if the application notes are online or not. If you can
find an old (70's - 80's) Motorola or RCA RF Transistor Databook it'll
have a lot of these circuits.

Also, I purchsed a 2M amplifier kit about 10 years ago. It had the
difficult-to-find parts and a PC board. I had to provide the box,
connectors, and other common (at Radio Shack) pieces. I -think- the
kits was from Ramsey Electronics (www.ramseyelectronics.com). The kit
at the time was about $30 US, but it was worth it to not have to
mail-order all the parts. Worked pretty well, too - I used it with my
handheld to operate mobile.

Good luck with the search!

Dave

1286. Re: Mighty Midget

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: acie409956@aol.com
Message-ID: <19990130084805.07819.00001479@ng-fr1.aol.com>
Source record: 74047

Look at www.qsl.net/n6ev/Glowbug.html
for a complete reprint.

1287. FS: Projects & Parts for the Builder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990130090352.18870.00000025@ng99.aol.com>
Source record: 74048

For Sale: Parts and Projects for the Builder
RF decks / Final Pas
Motorola
6 Meter RF Deck Pair 8560ï¿½s in push-pull
with 95% of power supply parts
Bud cabinet 14" $300.00

2 Meter RF Deck single 8560 $ 175.00

RCA
6 Meter pair 4-250ï¿½s in push-pull
Tank coil, filament transformer, Grid coil $250.00

6 Meter 4-125"s same as above $225.00

Home Brewed projects

6 Meter, 2 X 4CX250B / Power Supply / Cabinet
Need wiring, Meters, TR switch
Will make about 700 watts P.E.P. $ 380.00

6 Meter, single 4-400 / Power Supply / Bud cabinet
Needs TR switch / LPF / 650 watts P.E.P. $450.00

Tubes, Sockets, RF chokes, Coil stock, Meters, Transformers Filament / Plate

1288. antenna coil dope/helix sealant?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36B31135.97CB993A@asu.uswest.net>
Source record: 74049
Cross-posted to: rec.radio.amateur.antenna,Rec.radio.amateur.homebrew

What is the recommended substance for affixing/sealing helically wound antennas? I am needing to weatherproof/beautify/secure #14 stranded copper wire to PVC/Schedule 80 pipe. I want to use the best stuff I can, that will do the job, and not affect antenna performance characteristics that much.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

1289. Re: surplus "NATO UHF" Bases for 4cx250b

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: geoffg7rmg@aol.com
Message-ID: <19990130100637.19944.00001574@ng144.aol.com>
Source record: 74050

Hello ,
SGS electronics ,Hereford,England usually has them on his stand at
the various
rallies he attends.They are about ï¿½7 -10.If you are interested I will try and
find an address and phone no .

Geoff G7RMG

1290. unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: James.W.ARnold@student.shu.ac.UK
Message-ID: <msg127234.thr-15238b.5b8ff1@amazon.shu.ac.uk>
Source record: 74051

```
unsubscribe Ham-Homebrew
```

1291. "Tayloe Mixer"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: bkizerian@my-dejanews.com
Message-ID: <78vbtjuht1@nnrp1.dejanews.com>
Source record: 74052

Is there anyone out there who can give me some info on the "Tayloe Mixer"? I have a basic description, but that's it.

Thanks

Bruce kk7zz

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1292. Classic KW For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990130104509.01190.00001098@ng-fw1.aol.com>
Source record: 74053

```
Classic KW For Sale
Barker & Williamson Model L-100A
80-10 meters pair 813's
Power Supply and Manual
Scale 1-10 = 9
$575.00 + shipping from Austin, Texas
```

1293. Re: Spice-y Oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <78va3fjgs1@news.onr.com>
Source record: 74054

Yes I noticed it today in Electronics workbench.
I think the timestep is too coarse...hence aliasing occurs.

-Charlie

--
-->Remove the x's from my email address before using <--
Monty Northrup wrote in message <36b1193a.2695408@news.io.com>...
>I've recently been exploring the value of using Spice Simulation
>programs for developing RF circuits, and so far I've had a lot of fun
>with it. Sure can be a time saver...
>
>But I've had lots of unhappy results with simulating oscillators at HF
>frequencies (mostly 3.5 - 20 MHz). When observing the graphical
>analyses of the output of several proven Colpitts oscillator designs
>using BJTs (2N2222's), the frequency looks to be approximately as
>expected, but the waveform envelope observed over say, 1000-2000
>cycles, looks more like a badly modulated A.M. signal. Some analyses
>programs (like Orcad/Microsim) require that you insert a single short
>pulse to "start" the oscillator, and some (like Electronics Workbench)
>don't need the start pulse, but all seem to have the modulated
>envelope. Has anyone else noticed this phenomenon? Can this be a
>sampling/undersampling phenomenon? Any ideas on how to correct it?
>
>Also, when observing a single cycle of oscillator output, the output
>usually looks assymettrical, as if it's being clipped or limited in
>some way. Would this be indicative of biasing or feedback problems
>that should be corrected, or is this normal (for a practical
>oscillator to start reliably)?
>
>Thanks in advance,
>monty
>
>

1294. Re: 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <78va7j$jh2$1@news.onr.com>
Source record: 74055

Consider modifying an old crystal type CB radio
transmitter section. Or use an MC145170 PLL
chip with a 2N5109 power amplifier stage for
about .25 watts out.

-W5CDT

--
-->Remove the x's from my email address before using <--

Dave Becker wrote in message ...
>Looking for a 1 or 2 watt 10 meter cw transmitter
>for a 28.2xx mhz beacon. Need ideas, or offers.
>
>Thanks
>73,
>Dave k7prz@teleport.com
>.
>
>
>

1295. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b30af3.58069950@news.online.no>
Source record: 74056

On Fri, 29 Jan 1999 21:58:12 -0800, "John Moriarity" <k6qq@hdo.net> wrote:

>>...What I'd
>>like to find out is, how sharp are the pages when displayed on your
>>monitor? Do they print out well? Does the index search engine work
>>well? Is it worth $40 for a four-year set? Pros and cons on this are
>>very welcome.
>
>
>Matt,
>
>I bought the 1930's CD. The software interface is somewhat clumsy, but
>once learned is tolerable. The picture quality is very poor. Very
>little detail can be seen. Line drawings such as schematics are very
>good. Pages print very legibly, but photographs look like about four
>level grey scale. It's still better than not having the magazines.
>
>73,
>
>John, K6QQ
>
would say the quality is reasonable, but unfortunately my 17" monitor screen is
not favourable for reading those pages, had they been printed in landscape style
it would have worked better, or ARRL should consider adding a normal facility to
lift the lower side of the page when magnifying, as it - the more magnifying you
need the higher on the page you hit..... hi hi hi!

73
JanMartin
LA8AK

LA8AK@Online.NO

1296. Re: "Tayloe Mixer"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990130124027.25918A-100000@Ocean.CAM.ORG>
Source record: 74057

On Sat, 30 Jan 1999 bkizerian@my-dejanews.com wrote:

> Is there anyone out there who can give me some info on the "Tayloe Mixer"? I
> have a basic description, but that's it.
>
I've never heard of it. Why not post the description you have? You've
mademe curious, and things sometimes have more than one name, so perhaps
it is something I've seen before but not under that name.

Michael VE2BVW

1297. Re: "Tayloe Mixer"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: John Buck KH7T <jrbuck@ilhawaii.net>
Message-ID: <36B34933.1C9C738C@ilhawaii.net>
Source record: 74058

Check the QRP-L archives. It is very interesting.
There is a lot of discussion and test information.

John KH7T

1298. Re: Want: MAX232 Schematic for Icom Computer interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: kf5oj@prodigy.net
Message-ID: <36b34860.2714979@news.prodigy.net>
Source record: 74059
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.swap

Try this web page. http://www.acars.net/ar8200/start.htm

Clifton Turner KF5OJ

On Mon, 25 Jan 1999 17:52:56 GMT, mjgilbert@wcom.net (Matt Gilbert)
wrote:

>It's in an issue of the ARRL handbook, I think 1996 but I know it's
>been since 1995 so you could check there.
>
>On Thu, 21 Jan 1999 16:44:19 GMT, kenf@enter.net (Ken Florence) wrote:
>
>>HI, I'm looking for a schematic for an Icom Radio/PC interface
>>(CT-17). I have in my possession a couple of Max 232A chips which
>>should work. I am looking for schematics that use these chips (or the
>>232). I know there have been a couple in QST, but my issues seem to
>>have been misplaced (april 97 is one). If anyone can scan me a copy of
>>any I would certainly appreciate it. Or if you can point me to a web
>>page, that would be great also. I have a copy of a schematic for one
>>that uses 22uF caps, but the MAX literature says the 232 only needs 1
>>uF and the 232a only needs .5uF. So I don't know if that one would
>>work or not. Any help or info is appreciated. Thanks in advance.
>>
>>De Ken... WA3KF
>

1299. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b331d0.6977139@newshost>
Source record: 74060
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

On Thu, 28 Jan 1999 17:45:03 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:
> [snip]
>I agree that the "better" way is to get a couple of actual Ethernet
>bridges and connect them with a commercial radio link, but considering
>that all I am trying to do is learn a little about high-speed data
>transmission and play a decent game of Quake, I don't think I can
>justify the $6K-$15K budget that the commercial solutions demand. This
>is strictly for personal amusement and telecommuting rather than any
>type of mission-critical commercial application.
> [snip]

Hi John,

The "better" way doesn't have to involve that sort of cost...

You can build routers out of old '486 PCs and some free software (*).
(You might have to pay to get some serial I/O cards capable of
manchester or NRZI for the wan ports. Perhaps even DS1.)
Once you have a serial stream you can use the same sort of FSK modem
you originally intended to use, but now at a manageable baud rate.

(*) There are versions of Linux that can be configured to be
standalone routers that just need a single floppy disk. You don't
even need monitors once the system has been set up.
Do a web search for "linux router project".

====
That 2Mbps radio I mentioned in my other post might interest you. It
was a very cheap design from the mid 1980s, aimed at the low end of
the market, but it worked very well, and made lots of money for the
company. I heard that a company in the UK even illegally copied it.

The data signal was ITU-T G.703 compliant. (For non
telecommunications types, this is a 2.048MHz HDB3 encoded data stream.
HDB3 is sort of like AMI, but with a guaranteed pulse density. It's
used throughout the world (but not much in North America) to carry 30
x 64kbps of voice channels, plus two 64kbps timeslots for framing and
signalling.)

The Tx just took the input G.703 signal, padded it down to the right
level, filtered it a bit to reduce the bandwidth, and then passed it
to what was essentially a fm video transmitter.
This consisted of a directly modulated X band DRO. Long range models
had an afterburner.

The RF channel was 7MHz wide.

[We also did tiny video transmitters that were about half the size of matchbox, including the patch antenna. These also used a directly modulated DRO. These transmitters mostly ended up in security agencies. Some ended up in cricket stumps.]

The Rx was a litle more complicated than the Tx, but still simple. I think it was a single conversion superhet. The LO was a DRO similar to the one in the Tx. I can't remember what the IF was. It would have needed to be at least a few hundred MHz to give good image rejection. The demodulator might have used a part from Plessey. Anyway, the received video signal was squared up with two comparators (one each for positive and negative pulses), and the G.703 signal was made by combining the two comparator outputs with a video opamp. There was no need for any clock recovery or anything complicated like framing.

This sounds like you could make it fairly quickly on the bench, until you realise you need a diplexer (& possibly a circulator as well) for the antenna. Perhaps you have a spare one sitting about...

[If I sound a little vague about some of the details, it's because I didn't design any of the RF stuff in that company - I mostly worked on digital hardware. Plus it was a long time ago.]

Regards,
Allan.

1300. Re: schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <78vofs$911$1@nnrp1.dejanews.com>
Source record: 74061

In article <3.0.1.32.19990129174249.007cda90@agate.net>,
dalejudi@agate.NET (Dale and Judie) wrote:
> Can someone direct me to a good source for learning how
> to read radio schematics ?

How about the VEs who gave you your last exam?

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1301. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Lou Albert <labert@uakron.edu>
Message-ID: <36B35E1B.9F268BBD@uakron.edu>
Source record: 74062
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I am a NO-CODE and a liberal!

Lou WA8PHD
http://ifip.com/wa8phd.htm

WindsorLX wrote:

> "Timm@ComTech" wrote:
>
> > I just finished reading all of the "anti-cw" bla bla bla. Wow, what a mixed
> > bag.
> > But the truth is, morse code is the root of all forms of electronic
> > communication devices. I've been a cw only operator for 30 years, and don't
> > begrudge anyone
> > that wants to talk with their mouth or a modem. But those of you who don't
> > use a key are really missing a unique form of expression. Copying one
> > another's code can be like listening to and creating music.
> > (especially up around 30 wpm).
>
> I don't at all doubt the latter, but some of us just aren't that interested.
> Just because computers communicate in binary doesn't mean I want/need to. Also,
> because of binary being the way computers operate, I do not see CW as "the root
> of all forms of communication". My point being that at one time the way to use
> a telephone was by turning the crank on a generator. Now if there were still a
> cult of people that used phones of this type because that is what they liked and
> prefered for whatever reason would you feel the same way? I'm not anti cw, in
> fact I am learnig code right now, but I think it needs to be put into
> perspective. The only way to get some people interested in code now, is to get
> them interested in radio first.

1302. Re: 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b33a75.70233992@news.online.no>
Source record: 74063

it is so easy that I wouldn't care to use some old rubbish
suggest use 14MHz xo, with 2x1N4148 and BF199 (or other small RF device) doubler with tuned circuit collector circuit, 2N5109 or 2N3553 amplifier for 1W RF with pi-filter output circuit

On 10m the inductances are small, one great advantage is that one can easily make airwound coils, often trimmer capacitors are not neccessary, one only have to squeeze the turns to to adjust for ressonnance.

I made some packet radio and beacon transmitters for 10m, no problem to achieve 10W with readily available components, but for power amplifiers it is always an advantage to use 24 or 28V instead of 12V, the power gain increases

If you are interested to see an active key filter for switching driver (and low power output stage) collector voltage, send me an email, I've used this circuit for two 2m beacons sending very high speed cw at 1200-1500LPM with very little key-clicks, the beacons - LA3VHF and LA6VHF has been in operation for 10-15 years. The gif file size is only 2.81kb.

On Sat, 30 Jan 1999 09:56:13 -0600, "Charlie Thompson" <xctx@onr.com> wrote:

>Consider modifying an old crystal type CB radio
>transmitter section. Or use an MC145170 PLL
>chip with a 2N5109 power amplifier stage for
>about .25 watts out.
>
>-W5CDT
>
>--
>-->Remove the x's from my email address before using <--
>
>
>Dave Becker wrote in message ...
>>Looking for a 1 or 2 watt 10 meter cw transmitter
>>for a 28.2xx mhz beacon. Need ideas, or offers.
>>
>>Thanks
>>73,
>>Dave k7prz@teleport.com
>>.
>>
>>
>>
>
>

LA8AK@Online.NO
Due to severe fault on my PC, please DO NOT - uninvited - send long attachments!!!

1303. Re: Amplifier (2watts to 20, 35, 40, whatever)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b33d79.71006237@news.online.no>
Source record: 74064

SM6ESG visited me one evening, I suggested that his IC202E with halo antenna was too weak for mobile operation. We decided to build a simple linear amplifier, but we only had 3 hours to do it. Another friend gave me som MRF240 , which I wished to test. It was very few problem to build a linear amplifier and linear gain was 13dB, 2W RF input for 40W output measured using Bird model 43
73
Jan-Martin
LA8AK

PS.the circuit diagram was later published in the swedish AR magazin

On 30 Jan 1999 13:44:30 GMT, hinermad@worldnet.att.net (David Hinerman) wrote:

>On Fri, 29 Jan 1999 22:58:38 -0800, "Rollins" <rollins@island.net>
>wrote:
>
>> Hello. I'm looking at building an amp. for my ht. It puts out around 2
>>watts, and i'd like to go up around 20-40 watts. Does anybody have a
>>schematic, ive had no luck finding one on the net. Thanks.
>
>Motorola has had a lot of good amplifier designs in their RF compnents
>databooks & application notes. They have a lot of their data online
>now. There are links to Motorola RF components at
>
>http://mot-sps.com/rf
>
>I don't know if the application notes are online or not. If you can
>find an old (70's - 80's) Motorola or RCA RF Transistor Databook it'll
>have a lot of these circuits.
>
>Also, I purchsed a 2M amplifier kit about 10 years ago. It had the
>difficult-to-find parts and a PC board. I had to provide the box,
>connectors, and other common (at Radio Shack) pieces. I -think- the
>kits was from Ramsey Electronics (www.ramseyelectronics.com). The kit
>at the time was about $30 US, but it was worth it to not have to
>mail-order all the parts. Worked pretty well, too - I used it with my
>handheld to operate mobile.
>
>Good luck with the search!
>
>Dave
>

LA8AK@Online.NO

Due to severe fault on my PC, please DO NOT - uninvited - send long attachments!!!

1304. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <78vquj$h26$1@winter.news.rcn.net>
Source record: 74065

I will second the comments regarding the poor clarity of the
schematics, photos and drawings. Without using magnification,
the pages are hard to read on a 17 inch monitor--although the
the characters themselves on the pages are clear and sharp.
Mostly a limitation of the page size versus the monitor.
One other small problem with the search engine--it is based on the
index as a reference. Early QST product reviews were NOT
indexed! Spent hours tracking down the location of the
1950s product review for the SX-88. Even with the small
nitpicking, the CD sets are well worth the asking price. All
ads and covers are included.

Pete
r
>>Howdy! I'd like to de-packrat the shack a bit and found a circular from
>>a hamfest featuring back issues of _QST_ on CD-ROM. I've checked out
>>the Radio Era Archives web site and like what I read so far. What I'd
>>like to find out is, how sharp are the pages when displayed on your
>>monitor? Do they print out well? Does the index search engine work
>>well? Is it worth $40 for a four-year set? Pros and cons on this are
>>very welcome.
>>
>>Thanks!!!
>>

1305. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <36B371A5.C94CBEBB@netdoor.com>
Source record: 74066
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

The MFJ 986 is a super tuner and you can go up to 3kw. It's a handsome
black box too, looks good in the shack.

Butch KF5DE

m c beutler wrote:

> Anyone have an opinion on the simple 2 knob antenna tuners offered by
> MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
> capability more than sufficient) Can't seem to find much in the way of
> consistent data for building one on the bench.
>
> Would actually prefer to make one but have not found values (inductance
> steps, # of turns of a given wire on a given coil form size, etc)
> anywhere for a tapped or variable inductor.
>
> Any assistance would be greatly appreciated.
> --
> -
> Regards,
> mark beutler
> -

1306. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <36B3724A.B97EF046@netdoor.com>
Source record: 74067
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Have you used it to transmit on? I'm curious about whether or not it will work
at 150 watts or not.

Butch KF5DE

Brian Denley wrote:

> I use the MFJ 16010 antenna tuner which is the one you are referring to (I
> think) and use it to match my coax feedline from my long wire to my
> receivers. It seems to work fairly well although the tuning doesn't seem to
> be very fussy and I usually don't have to retune at all unless I get up
> beyond about 12 Mhz.
> Brian Denley
>
> --
> "There are only two ways to live your life: One is as though nothing is a
> miracle. The other is as if everything is." - Albert Einstein
> m c beutler wrote in message <36B0F8DB.258FAED7@tds.net>...
> >Anyone have an opinion on the simple 2 knob antenna tuners offered by
> >MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
> >capability more than sufficient) Can't seem to find much in the way of
> >consistent data for building one on the bench.
> >
> >Would actually prefer to make one but have not found values (inductance
> >steps, # of turns of a given wire on a given coil form size, etc)
> >anywhere for a tapped or variable inductor.
> >
> >Any assistance would be greatly appreciated.
> >--
> >-
> >Regards,
> >mark beutler
> >-
> >
> >

1307. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36B382BD.1A519EF9@mwci.net>
Source record: 74068

CommQuart wrote:

> Early QST product reviews were NOT
> indexed! Spent hours tracking down the location of the
> 1950s product review for the SX-88.

There are two references to SX-88, June of 54 and June of 55.

Bill W0IYH

1308. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <7903cq$t42$2@208.207.71.139>
Source record: 74069
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
Lou Albert wrote:
>
> I am a NO-CODE and a liberal!
>
>

Strike two.........
```

1309. WTB: 9 MHz. CW filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-30 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <36B3B645.4F68@sympatico.ca>
Source record: 74070

Looking for new or used narrow band filter. Prefer KVG.

John VE3PCN

1310. Re: schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36b5ab8c.14985425@netnews.worldnet.att.net>
Source record: 73981

The ARRL Handbook is a good choice. You can also find good starter books on electronics and basic schematics at RadioShack.

If you can find someone with copies of the original Popular Electronics magazine that is also a good bet.

More suggestions: check a local library or a local vocational school, if there is one nearby.

On 29 Jan 99 22:42:49 GMT, dalejudi@agate.NET (Dale and Judie) wrote:

>Can someone direct me to a good source for learning how
>to read radio schematics ?
>
>Thanks
>Dale n1txw

Ron N1ZHI
roncook@worldnet.att.net
cook@amsa.com
ICQ: 26516311

1311. Dayton shopping list

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: floyd <FJAC@flash.net>
Message-ID: <36B3B4BD.E6A623ED@flash.net>
Source record: 73982

Anyone out there willing to contribute ideas for a homebrewers Dayton
shopping list?
I'd like it oriented toward hf transistorized stuff.
Thanks
Floyd
N5GAL

1312. FS: Roller Inductor *BIG*

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Nick <watchman@tig.com.au>
Message-ID: <36B3C343.F2ADD3C5@tig.com.au>
Source record: 73983

This is a BIG one, can easily handle 10-15 KW !
15 uH - 20 turns of square profile silver plated wire with roller.
Actually all metal parts are silver plated as well.
Weight 3,8 kg. It is (maybe?) too big for amp/ or antenna tuner but
perfect for remote control matching unit for low band vertical or
whatever you need it for.

Bargain at $95 + s/h

Nick, VK2ICV

1313. Re: What op-amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Steve Ratzlaff <sratzlaf@flash.net>
Message-ID: <36B3C80F.2CFF722E@flash.net>
Source record: 73984

Hi Fred,
It's not clear what frequency range you're intending to receive. Your post came out as a higher frequency first, going down to a lower frequency ("100hz to 10hz") is how it showed up on the newsgroup. Usually you list the lower frequency, going to the highest frequency you'll receive. Perhaps it's a typo.
Are you trying to build a vlf receiver, 100hz to 10,000 (10kHz)hz?? It would seem so, as you include a line driver and headphone as the output.

What type of receiver is this, a low impedance loop input or high impedance e-field input?
What type of opamp you wanted to use would depend a lot on the type of sensor input you planned to use.
I have built a number of vlf receivers, both loop and whip. I published a low impedance loop vlf receiver in a past copy of the Long Wave Club of America's newsletter, Lowdown. Various other designs for both loop and e-field have also been printed in this newsletter. My loop design used discrete bipolar transistors and a stepup transformer to convert the 1 ohm loop impedance to a much higher value that matched the transistor. Most e-field designs use a JFET transistor as the input stage.
Steve AA7U

1314. Re: FS: 44 year accumulation of tubes & microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: stefan@*emeraldnet.net
Message-ID: <36b3da31.270472294@news.emeraldnet.net>
Source record: 73985
Cross-posted to: alt.ham-radio.marketplace,misc.industry.electronics.marketplace,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

On Sun, 31 Jan 1999 00:31:29 GMT, "m.pasternack"
<m.pasternack@MCI2000.com> uttered forth the following:

>e-mail to: "m.pasternack@cwix.com" to receive 10 page list. Murray, W6KRC

Maybe you should just post the list, eh?

1315. EBAY- CLEGG 22'r, TECH SPECIAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990130235801.01116.00001366@ng-ce1.aol.com>
Source record: 73986

Hi Guys;
Wanna fool around with an CLEGG 22'r? If nothing else, it would make a great parts rig.
The URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=61480176
Thanks es 73...........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

1316. Re: What op-amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <36B3E80A.435E74DA@up.net>
Source record: 73987
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

You might try :
www.maxim-ic.com

MAC wrote:

> I'm working on a little potable receiver. It works from 100Hz to 10.000Hz.
> (Yes,.Hertz) Since it's working with dual voltage from two 9 Volt battaries,
> i'm looking for very low power opamps.
>
> In the inputstage I'm considering a INA118 of Burr-Brown.
> After that i get my filtering (Lowwpass) followd by a line driver and a
> headphone amp.
>
> Any good tips?.....
>
> Fred
> fbmac@ipr.nl

1317. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Jim Wayda <jwayda@home.com>
Message-ID: <36B41B6F.55146BEA@home.com>
Source record: 73988
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

One of the reasons that Amateur Radio is declining is because of the
code requirement! Amateurs do not build simplistic transmitters anymore.
Code is nothing more than an ancient hazing ritual! It's time to let it
die and increase the amateur population!

Steve Ellington N4LQ wrote:
>
> I must take exception with this one statement since it's technically
> incorrect. Cw is not a MODE. CW stands for continous wave. This is "carrier"
> produced by a transmitter. It contains no usefull information and is by far
> the simplest signal one can produce. It can be produced by only one
> transistor or tube forming a simple oscillator.
>
> Now by turning the carrier off and on we can use it for signaling. A code
> was developed by Mr. Morse and co. So now we can turn this simple circuit
> off and on and use it to communicate with people.
>
> Being the simplest form of communications, the powers that be feel it is
> important to know how to accomplish this. Therefore, they want you to be
> able to draw or recognize this simple circuit in the written test and be
> able to send "code" with it so you can communicate.
>
> This is basic radio. Those that feel that code should not be required are
> overlooking the basics. Anyone can purchase a two way radio, cell phone or
> pick up their telephone and communicate via voice.
>
> Amateur Radio Operators however, are those who are capable of building and
> operating the simplest form of radio. This means you must learn theory,
> circuits and CODE or you are not an Amateur Radio Operator.
>
> I hope I didn't ruffle any feathers here these are the facts. Yes, Amateur
> Radio is declining due to other interest but that doesn't change the facts.
>
> 73 Steve N4LQ
> >>
> >> CW is a MODE. Nothing more, nothing less. And as such CW should not be
> >> given any special consideration over any other mode.
> >>

1318. Re: 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36b48250.55794847@news.erols.com>
Source record: 73989

I've been intrigued by the 10 meter beacon idea and am thinking about building something. I agree that using an old CB rig is overkill. Better to whip up a simple QRP transmitter.

My question is about generating the CW. I have a number of old klunker computers around here. Can someone suggest a good CW program for this application?

I guess you could also do it with a tape recorder, an op amp/relay arrangement and a continuous loop tape.

If I do this project, I think I'll send my e mail address and ask for e-mail reports.

Any ideas or experiences on this?

73 Bill N2CQR

1319. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36B42BF0.FDB0E4B8@asu.uswest.net>
Source record: 73990

Maybe it is nit-picky and digressing, but most colleges have not dropped foreign language requirements, just the engineering schools that broke out of "program" status within physics and chemistry academic departments and became "Colleges of Engineering" within universities, and some of the Colleges of Business (sic), strangely enough.

It is the advent of "professional training", rather than actual education of people that has done this. Engineers and business folk more than most have an actual *application* of say, Japanese, Spanish, Russian, for example.

At ASU, a physics major still needs 3 semesters or more of a foreign language to earn a degree. This is still fairly typical at state universities *and* private colleges.

CommQuart wrote:

> Most colleges have dropped foreign lanquages
> and other "liberal arts" courses in the past 20 years.
> Thats why most enginears cant spel.
>

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

1320. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36B42C83.53D5AEEA@asu.uswest.net>
Source record: 73991

Firebottles?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

1321. Re: 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: "J. Lee Smith" <ckvnfm@mb.sympatico.ca>
Message-ID: <01be4d29$49c381e0$7434c8cd@ckvnfmmb.sympatico.ca.mb.sympatico.ca>
Source record: 73992

Hello Bill and Others:

A few years ago, a buddy had made a neat keying operation made by taking a one RPM clock motor and had it rotate a printed circuit board disk that had the callsign etched on it several times sequentially. Clock motors are made to run continuously for years, and it stood up with just an occaisional cleaning of the wiper arm with spray cleaner.

All the best to all!

73 de
Lee Smith
VE4ANC

Bill Meara <wmeara@erols.com> wrote in article
<36b48250.55794847@news.erols.com>...
> I've been intrigued by the 10 meter beacon idea and am thinking about
> building something. I agree that using an old CB rig is overkill.
> Better to whip up a simple QRP transmitter.
>
> My question is about generating the CW. I have a number of old
> klunker computers around here. Can someone suggest a good CW program
> for this application?
>
> I guess you could also do it with a tape recorder, an op amp/relay
> arrangement and a continuous loop tape.
>
> If I do this project, I think I'll send my e mail address and ask for
> e-mail reports.
>
> Any ideas or experiences on this?
>
> 73 Bill N2CQR
>

1322. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Dave Plowman <dave.sound@argonet.co.uk>
Message-ID: <na.6b18de48cd.a70220dave.sound@argonet.co.uk>
Source record: 73993
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Fascinating stuff! But unless I've missed it, nobody's given Dave the 'rule
of thumb' for LEDs. It is:-

```
Vs-Vf
Rs = -----
I
```

Where Vf is the forward voltage drop, usually 2v.

--
Dave Plowman dave.sound@argonet.co.uk
RIP Acorn

1323. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: localhost@127.0.0.1
Message-ID: <36b57e87.6128298@204.127.36.21>
Source record: 73994
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sat, 30 Jan 1999 17:40:17 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:
//snip
>
>LOL. I had guessed from his earlier messages that I could send Mr.
>Zenier into a nonlinear region of his characteristic curve by dropping
>the phrase "information superhighway" somewhere in a message to him, and
>whaddya know, I was right!
>
>Ah, the joys of trolling. <pats self on back>
>
>-- jm KE5FX

Yes, Mr. Zenier is biased.

1324. WTB: 7 1/2" by 1/2" ferrite rod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: k9uwa@cris.com
Message-ID: <791vn2$4g1@chronicle.concentric.net>
Source record: 73995

Yes I need a rod for filament choke on Homebrew amp....anyone
have one they could spare??

7 1/2" by 1/2" ferrite rod

Thanks
John K9UWA

1325. Steve Ciarcia article(Byte)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990131114446.01213.00001918@ng-ft1.aol.com>
Source record: 73996

The article I am trying to find has a column of Led's on the left and a row of them on the bottom. Supposedly, the computer scans them sequentially and waits for a button press, then scans the bottom row. After the second button press, the letter or word at the intersection of rows and column is entered into memory. I want to use this , or modify the idea, for my wife who has Parkinsons and cannot use the computer keyboard. I think it will be very helpful. I have searched the internet without success. Does anyone recall this article? If so, I would appreciate any information you have. Thanks.
George W3ASE
G345CDE

1326. Re: FS: 44 year accumulation of tubes & microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: quatsein@island.net
Message-ID: <36b48856.57929750@news.cr.island.net>
Source record: 73997
Cross-posted to: alt.ham-radio.marketplace,misc.industry.electronics.marketplace,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

The reason he is not posting the whole list is because he is
CONSIDERATE of other people. If you do not understand
my point, then read up on some posting guidlines.

Steve Carlisle

On Sun, 31 Jan 1999 04:21:25 GMT, stefan@*emeraldnet.net (Stefan
Bishay) wrote:

>On Sun, 31 Jan 1999 00:31:29 GMT, "m.pasternack"
><m.pasternack@MCI2000.com> uttered forth the following:
>
>>e-mail to: "m.pasternack@cwix.com" to receive 10 page list. Murray, W6KRC
>
>
>Maybe you should just post the list, eh?

1327. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: ka9dhz@webtv.net
Message-ID: <79258e$4nu$1@nnrp1.dejanews.com>
Source record: 73998
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Doing away with CW is just another example of the dumb down of America.Outcome based education for example.The average high school grad today has about a 5th grade education.

I agree that the problems on the bands are not the no code types. If you check the call signs of the trouble makers they are mostly advanced and extras with too many years to soak up booze and kill brain cells.

IMHO the novice-extra incentive system is not broken. So lets not fix it

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1328. 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <0_0t2.1521$OS5.1850157@news3.mia>
Source record: 73999

Hi guys,

Thanks for all the previous help. I am still working on my VCO. I am now using HP schottky diodes to provide voltage controlled tuning capacitance. And I found that the ATC capacitors are absolutely necessary. Ordinary caps don't work.

I have encountered a new problem. The oscillator does not tune smoothly as the voltage on the diode is changed. Instead the oscillator jumps in discrete steps. Has anyone heard of this? Thanks greatly.

Bert Douglas

1329. ITR 1000A Manual Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: "Donald E. Smith" <desmith@innercite.com>
Message-ID: <36B4A37E.811AACF2@innercite.com>
Source record: 74000
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.misc,rec.radio.amateur.homebrew

I am in search of a copy or original manual of an IFR 1000A Service Monitor. My unit is an early one and my manual has many pages missing and wrong. Will gladly pay any costs involved. Please email me with your info. Thanks Don KB6GQA.

1330. Re: Steve Ciarcia article(Byte)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Marty <martyk@naples.infi.net>
Message-ID: <36B4A562.E728A713@naples.infi.net>
Source record: 74001

You might be able to get some information through his publishing
company,
with an e-mail to editor@circuitcellar.com

G345CDE wrote:
>
> The article I am trying to find has a column of Led's on the left and a row of
> them on the bottom. Supposedly, the computer scans them sequentially and waits
> for a button press, then scans the bottom row. After the second button press,
> the letter or word at the intersection of rows and column is entered into
> memory. I want to use this , or modify the idea, for my wife who has
> Parkinsons and cannot use the computer keyboard. I think it will be very
> helpful. I have searched the internet without success. Does anyone recall
> this article? If so, I would appreciate any information you have. Thanks.
> George W3ASE
> G345CDE

1331. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Jim Wayda <jwayda@home.com>
Message-ID: <36B4B551.9760F3F1@home.com>
Source record: 74002
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Why is so much importance placed on CW? It is just another mode!!
The testing process should be revised to to permit demonstration
of proficiency in a number of areas rather than CW. For example,
passing a more difficult theory test.

It is time for change. CW is nothing more than a hazing ritual that
facilitates admittance into the "good old boys club".

ka9dhz@webtv.net wrote:
>
> Doing away with CW is just another example of the dumb down of
> America.Outcome based education for example.The average high school grad
> today has about a 5th grade education.
>
> I agree that the problems on the bands are not the no code types. If you
> check the call signs of the trouble makers they are mostly advanced and
> extras with too many years to soak up booze and kill brain cells.
>
> IMHO the novice-extra incentive system is not broken. So lets not fix it
>
> ------------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1332. Info on DC-400Hz design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36B4BB13.D8789EA4@calweb.com>
Source record: 74003
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi folks

I'm interested in any thoughts or ideas on a small DC to 115VAC/400 Hz design. Load varies from 5-20 watts (servos and a tiny blower motor) DC input can be 12- 28 vdc. Output wave form should resemble a sine wave to keep harmonic content (and rfi) to a minimum. Efficiency is not a major consideration. I've puttered with self excited inverters and the results were not that impressive (had to use fairly aggressive L/C filters on the square wave output which increased the bulk of the item (small size is a consideration). My latest thoughts were a simple phase shift R/C oscillator at 400 Hz driving a pair of small power Mosfets in push pull using a small center tapped 25.6 VAC 3 amp transformer and taking my output off the 115VAC primary winding. I am interested in feedback systems to affect some rudimentary voltage regulation scheme.

Thanks for ther read

73,

Bob, KE6f

1333. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36B4BFE3.7090549A@starc.org>
Source record: 74004
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Jim,

Amateur radio is not declining because of the code requirement. Amateur radio is declining because amateurs no longer build "simplistic transmitters"... It is a sad comment but true... I doubt that more than 5 to 10% of amateurs are interested in building anything...

But the really sad part is that the exams for a "General" class license are easier now than the novice license I took 28 years ago... so.. how many of you out there know the difference between a "Hartley's" and a "Collpitts" oscillator?

We need more Amateurs who are willing to put in the effort to learn Electronics, Morse Code and whatever to help advance the art of our hobby... to many are just willing to sit back and enjoy the fruits of the labor of a few... I ask you all.. how many "tower raisings" have you been to.. how many receivers or transmitters have you built (I'm not asking you to design them... just get a schematic, read it and build the device)???

I think the tests should be tougher, more code, more electronics theory, more everything... Amateur Radio does not need to be the next "CB"... we need serious hobbiest's who's ability to communicate is not based on the balance in their checkbooks to buy 10KW amplifiers. The original grant of frequencies to amateurs was because we were adding to the general knowledge base of radio theory... it's about time that we got back to our roots (And I will take the time her to thank all those amateurs who have strived to continue to advance the art of radio communications... :)

For those of you who are no-code fanatics and consider this a "Pro-Code" argument.. here is my message to you:

"-... .. - . -- ."

--Tom
KB1CGA

Jim Wayda wrote:

> One of the reasons that Amateur Radio is declining is because of the
> code requirement! Amateurs do not build simplistic transmitters anymore.
> Code is nothing more than an ancient hazing ritual! It's time to let it
> die and increase the amateur population!
>
> Steve Ellington N4LQ wrote:
> >
> > I must take exception with this one statement since it's technically
> > incorrect. Cw is not a MODE. CW stands for continous wave. This is "carrier"

> > produced by a transmitter. It contains no usefull information and is by far
> > the simplest signal one can produce. It can be produced by only one
> > transistor or tube forming a simple oscillator.
> >
> > Now by turning the carrier off and on we can use it for signaling. A code
> > was developed by Mr. Morse and co. So now we can turn this simple circuit
> > off and on and use it to communicate with people.
> >
> > Being the simplest form of communications, the powers that be feel it is
> > important to know how to accomplish this. Therefore, they want you to be
> > able to draw or recognize this simple circuit in the written test and be
> > able to send "code" with it so you can communicate.
> >
> > This is basic radio. Those that feel that code should not be required are
> > overlooking the basics. Anyone can purchase a two way radio, cell phone or
> > pick up their telephone and communicate via voice.
> >
> > Amateur Radio Operators however, are those who are capable of building and
> > operating the simplest form of radio. This means you must learn theory,
> > circuits and CODE or you are not an Amateur Radio Operator.
> >
> > I hope I didn't ruffle any feathers here these are the facts. Yes, Amateur
> > Radio is declining due to other interest but that doesn't change the facts.
> >
> > 73 Steve N4LQ
> > >>
> > >> CW is a MODE. Nothing more, nothing less. And as such CW should not be
> > >> given any special consideration over any other mode.
> > >>

1334. Re: Steve Ciarcia article(Byte)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36B4C0D2.462D4908@starc.org>
Source record: 74005

Hi George,

I'm very interested in your project, and would be glad to help you with it.. I missed your original posting and do not have your e-mail....

--Tom
KB1CGA

Marty wrote:

> You might be able to get some information through his publishing
> company,
> with an e-mail to editor@circuitcellar.com
>
> G345CDE wrote:
> >
> > The article I am trying to find has a column of Led's on the left and a row of
> > them on the bottom. Supposedly, the computer scans them sequentially and waits
> > for a button press, then scans the bottom row. After the second button press,
> > the letter or word at the intersection of rows and column is entered into
> > memory. I want to use this , or modify the idea, for my wife who has
> > Parkinsons and cannot use the computer keyboard. I think it will be very
> > helpful. I have searched the internet without success. Does anyone recall
> > this article? If so, I would appreciate any information you have. Thanks.
> > George W3ASE
> > G345CDE

1335. Re: 10 meter Beacon Xmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <792flvhbr1@news7.svr.pol.co.uk>
Source record: 74006

use an eprom with cw ident programmed into it as serial data string ,
addresses supplied by cmos 4040 clocked by a 4011.
the eprom can have 8 different messages programmed and select data line for
different message.

concider the eprom as an nK *1bit device, with 8 of them in one package..
simple 3 chip lowcurrent beacon keyer.. 73 G8NXD
~~~~~~
J. Lee Smith wrote in message
<01be4d29$49c381e0$7434c8cd@ckvnfmmb.sympatico.ca.mb.sympatico.ca>...
>Hello Bill and Others:
>
>A few years ago, a buddy had made a neat keying operation made by taking a
>one RPM clock motor and had it rotate a printed circuit board disk that had
>the callsign etched on it several times sequentially. Clock motors are
>made to run continuously for years, and it stood up with just an
>occaisional cleaning of the wiper arm with spray cleaner.
>
>All the best to all!
>
>73 de
>Lee Smith
>VE4ANC
>
>Bill Meara <wmeara@erols.com> wrote in article
><36b48250.55794847@news.erols.com>...
>> I've been intrigued by the 10 meter beacon idea and am thinking about
>> building something. I agree that using an old CB rig is overkill.
>> Better to whip up a simple QRP transmitter.
>>
>> My question is about generating the CW. I have a number of old
>> klunker computers around here. Can someone suggest a good CW program
>> for this application?
>>
>> I guess you could also do it with a tape recorder, an op amp/relay
>> arrangement and a continuous loop tape.
>>
>> If I do this project, I think I'll send my e mail address and ask for
>> e-mail reports.
>>
>> Any ideas or experiences on this?
>>
>> 73 Bill N2CQR
>>
~~~~~~

1336. Re: HF solid state 300w amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Alex Reid <alex@tral.demon.co.uk>
Message-ID: <917817566.5359.0.nnrp-07.c2deb868@news.demon.co.uk>
Source record: 74007
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Tom Hobby wrote in message <78j1lh$k5u$1@remarQ.com>...
>Alex I can't help you; but, discovered that I could only work my
>solid state kit at two thirds of the rated output without burning
>out the transistors; even with two muffin fans mounted on top of
>the heat sink. Which means your rig is probably "safe" at 200
>watts for sustained operation. I have a 600 W kit with two 300W
>boards in it and run it safely at 400W and even more safely at
>300W. You can build a "filter" kit that will work on each band,
>etc. to make it more stable. I have one that was built for me.
>If you strike out on getting help, let me know and I'll put you in
>touch with the guy who built my kits.
>
>Tom
>
>many thanks guys for your replys and info...
cu ltr Alex

1337. Help Re-Portable phone.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: Colin <colin@kingstone5.freeserve.co.uk>
Message-ID: <792l3ipic1@news8.svr.pol.co.uk>
Source record: 74008

Can anyone help.
I'm thinking of buying a digital portable phone for the home. Do they use the same kind of signal as the mobile phones. The kids use the phone a lot, I'm concerned about health risks, brain tumors etc.. Thanks in anticipation, Colin

1338. Re: AM aircraft

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: "Donald E. Smith" <desmith@innercite.com>
Message-ID: <36B4DCA6.25954638@innercite.com>
Source record: 74009

Hi Don I have seen a number of Aircraft HT's for auction on EBAY that were not too much money Don

Don Salo wrote:

> A friend, who is a pilot and a Ham asked me if there is an inexpensive radio
> presumably amateur that he could modify to transmit on AM aircraft
> frequencies. Does aircraft use FM? Anyone aware of such a radio? I think
> his idea is to get away from the $600 for an aircraft band handheld.
>
> tnx, Don
> KB8PEL

1339. Homebrew Transmitter Indent Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: "Donald E. Smith" <desmith@innercite.com>
Message-ID: <36B4DDEF.BB23BE4D@innercite.com>
Source record: 74010
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have just acquired a Amateur Transmitter that I think is Home Brew but

is so well made I would love to get operational again. I hope someone
out there is Boatanchor Land can help me out by sending me a copy of the

article on it.
I will not take up space here for a picture of it but can provide one
for anyone interested.
Anyway it is a tube rig that has 7 miniature tubes and two large tubes.
It uses a 4-65A for the RF Transmit Tube and a 829 as a modulator. The
final uses an Inductituner for impedance matching. The band switch has
five positions and there is a VFO has three ranges 1.7, 3.5 and 7.0. I
would guess it was made in the 40's or 50's. There are a couple of
small tubes missing and I do not have any label's on the sockets. Does
it sound familiar to anybody out there? Thanks Don KB6GQA

1340. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B4F9A6.5843@pop.removethistomailme.net>
Source record: 74011

Bert Douglas wrote:
>
> Hi guys,
>
> Thanks for all the previous help. I am still working on my VCO. I am now
> using HP schottky diodes to provide voltage controlled tuning capacitance.
> And I found that the ATC capacitors are absolutely necessary. Ordinary caps
> don't work.
>
> I have encountered a new problem. The oscillator does not tune smoothly as
> the voltage on the diode is changed. Instead the oscillator jumps in
> discrete steps. Has anyone heard of this? Thanks greatly.
>
> Bert Douglas

Sounds like you are switching "modes," so to speak, instead of actually
tuning the oscillator. (Actually, I didn't know Schottky diodes had a
significant variable-capacitance characteristic. Are you sure you're
using the right type of diode?)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1341. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B4FA02.6AB@pop.removethistomailme.net>
Source record: 74012
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Tommy Lee wrote:
>
> On Sat, 30 Jan 1999 17:40:17 -0800, John Miles
> <jmiles@pop.removethistomailme.net> wrote:
> //snip
> >
> >LOL. I had guessed from his earlier messages that I could send Mr.
> >Zenier into a nonlinear region of his characteristic curve by dropping
> >the phrase "information superhighway" somewhere in a message to him, and
> >whaddya know, I was right!
> >
> >Ah, the joys of trolling. <pats self on back>
> >
> >-- jm KE5FX
>
> Yes, Mr. Zenier is biased.

His father should've put him across his knee a few more times, I'd
guess.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1342. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B5222A.5219@pop.removethistomailme.net>
Source record: 74013

Bert Douglas wrote:
>
> John Miles wrote in message <36B4F9A6.5843@pop.removethistomailme.net>...
> <snip>
> >> I have encountered a new problem. The oscillator does not tune smoothly
> as
> >> the voltage on the diode is changed. Instead the oscillator jumps in
> >> discrete steps. Has anyone heard of this? Thanks greatly.
> >>
> >> Bert Douglas
> >
> >Sounds like you are switching "modes," so to speak, instead of actually
> >tuning the oscillator. (Actually, I didn't know Schottky diodes had a
> >significant variable-capacitance characteristic. Are you sure you're
> >using the right type of diode?)
>
> Ok, so what is the cause of "mode switching" and how do I stop it?
>

It depends on what's really going on. I'm thinking that something is
"taking over" as the main source of capacitance or inductance, taking
the role away from your lumped LC components at certain bias settings.
Mode-switching might be a malapropism in this case, but I know what
you're talking about. Without seeing a schematic of your circuit, it's
hard to guess what's really happening (but see below).

> As for the diodes, there is a graph of capacitance versus reverse voltage
> given in the data sheet. Apparently my application was anticipated.
> Capacitance varies from about 0.7 to 0.3 picofarad over the range of 1 to 4
> volts. This is just in the range I need. It is not particularly linear,
> but neither are other varactors.
>

OK, that sounds cool, but keep in mind just how small 0.3 - 0.7 pF is.
You can't have *any* stray capacitance in the circuit, or it'll swamp
the effect of your tuning diode. To put it in perspective, you can
easily measure a change of 1 or 2 pF of capacitance on a capacitance
meter just by moving the probe leads around in relation to each other.

> It is interesting to see what happens when the diodes get partially forward
> biased. There appears to be a mode that is chaotic (in the mathematical
> sense). I am using a repetitive sampling scope, and there are some
> interesting displays that look just like a flag waving in the wind.

Yep, weird things could happen in such a case. Often people wire two
diodes back-to-back, so that they can't become forward-biased at all.

Here's one thought: are you using that scope's built-in frequency display to measure the oscillator's frequency? Maybe your discrete frequency-stepping problem is really an artifact of the scope's built-in counter not having much effective resolution at those frequencies, especially if the scope relies on sampled waveforms to compute the frequency indirectly. (At 2.5 GHz, you've *gotta* be getting close to Nyquist...)

For a project like this, a spectrum analyzer -- even a relatively old, crude one -- is really the diagnostic tool of choice. Not only will it let you keep an eye on the oscillator's frequency (perhaps with the aid of harmonic markers from a known lower-frequency source), but if strays or other effects are harming your tank circuit Q, you'll tend to see a lot of noise sidebands on the analyzer that won't be easy to visualize on a scope. It is nice to have a scope that will sample that fast (sure wish I did!) but you don't want to fall into the "I have a really awesome hammer, so every problem looks like a nail" trap. :)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1343. Re: ANTI-CW people are liberals and would want to see Clinton go fr...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: electronstream@webtv.net
Message-ID: <9505-36B5348E-421@newsd-241.iap.bryant.webtv.net>
Source record: 74014

I tend to agree with Steve's comments. Knowing the code is an integral part of learning the basics of radio transmission and reception. How can one possibly understand how to adjust and diagnose a ssb transceiver without first knowing how to put a clean cw signal on the air, which is the simplest form of transmission known to me? I guess all of this is irrelevant if all a person wants to do is blather over the air to their buddies about the many controls on that kilobuck rig they just aquired.....and maybe not even knowing how most of those controls work?! So , since no one cares for the technical side of ham radio any more, then how much difference is there than CB? Would that make it obsolete, or just an extension of CB? It's a sad state of affairs. 73's Doug N0WVA

1344. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <69Y9SoAGMNt2Ewcl@jmwa.demon.co.uk>
Source record: 74015
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of newsgroup posts.

<36b57e87.6128298@204.127.36.21>, Tommy Lee <localhost@127.0.0.1> wrote:
>Yes, Mr. Zenier is biased.
But is he in avalanche breakdown or a true Zenier?
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port configuration.

1345. Re: Info on DC-400Hz design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <mtf6m1AbXNt2Ew+x@jmwa.demon.co.uk>
Source record: 74016
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Please note that I prefer **not** to receive an e-mail copy of
newsgroup posts.

<36B4BB13.D8789EA4@calweb.com>, Bob Miller <bmiller@calweb.com> wrote:
>My latest thoughts were a simple phase
>shift R/C oscillator at 400 Hz driving a pair of small power Mosfets in
>push pull using a small center tapped 25.6 VAC 3 amp transformer and
>taking my output off the 115VAC primary winding. I am interested in
>feedback systems to affect some rudimentary voltage regulation scheme.
If you use a 20 W audio amplifier IC, the negative feedback will give
you all the regulation you are likely to need for 5 to 20 W. Choose the
right device and you could make it oscillate at 400 Hz as well.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port
configuration.

1346. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF6HKnv.Lz6@netcom.com>
Source record: 74017
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <36b57e87.6128298@204.127.36.21>,
Tommy Lee <localhost@127.0.0.1> wrote:
>
>Yes, Mr. Zenier is biased.

That's what happens when you find you're wired into being the
regulator for some newsgroups.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1347. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-01-31 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF6HKo1.M14@netcom.com>
Source record: 74018
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <36B3B481.314B@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>LOL. I had guessed from his earlier messages that I could send Mr.
>Zenier into a nonlinear region of his characteristic curve by dropping
>the phrase "information superhighway" somewhere in a message to him, and
>whaddya know, I was right!
>
>Ah, the joys of trolling. <pats self on back>

But you're going to think twice before you're rude enough to post
a blind URL again.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1348. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <50at2.1878$OS5.2126425@news3.mia>
Source record: 73773

John Miles wrote in message <36B5222A.5219@pop.removethistomailme.net>...

>OK, that sounds cool, but keep in mind just how small 0.3 - 0.7 pF is.
>You can't have *any* stray capacitance in the circuit, or it'll swamp
>the effect of your tuning diode. To put it in perspective, you can
>easily measure a change of 1 or 2 pF of capacitance on a capacitance
>meter just by moving the probe leads around in relation to each other.

Ok. Good point. I suppose stray inductance is bad too. But the only source is the bias supply. I am using lambda/4 skinny traces. But there could be some coupling between them, as they have to run fairly close together. Do you think this could be the problem? What is the normal practice on bias supply lines? There seems to be a lot of freedom in the choice of attachment points for the bias lines. I just joined the bias lines to the main 50ohm microstrip as close to the transistor as possible. I suppose I could separate the bias lines more and put a grounded line between them.

>Here's one thought: are you using that scope's built-in frequency
>display to measure the oscillator's frequency?

Yes.

> Maybe your discrete
>frequency-stepping problem is really an artifact of the scope's built-in
>counter not having much effective resolution at those frequencies,
>especially if the scope relies on sampled waveforms to compute the
>frequency indirectly. (At 2.5 GHz, you've *gotta* be getting close to
>Nyquist...)

Perhaps. I will check it out.

>For a project like this, a spectrum analyzer -- even a relatively old,
>crude one -- is really the diagnostic tool of choice. Not only will it
>let you keep an eye on the oscillator's frequency (perhaps with the aid
>of harmonic markers from a known lower-frequency source), but if strays
>or other effects are harming your tank circuit Q, you'll tend to see a
>lot of noise sidebands on the analyzer that won't be easy to visualize
>on a scope. It is nice to have a scope that will sample that fast (sure
>wish I did!) but you don't want to fall into the "I have a really
>awesome hammer, so every problem looks like a nail" trap. :)

Well this is the only tool I have access to. But it does have a fourier transform mode that can simulate a spectrum analyzer. I will check it out and report back.

Regards,
Bert

1349. EBAY- B&W 10 & 40 Mtr JVL Juniors!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990131234348.25811.00002525@ng93.aol.com>
Source record: 73774

Hi All;
If you need these coils, they are not going to be expensive. Thats the way it appears! URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=62113396
Thanks es 73..........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

1350. Re: oscillator phase slope at resonance, + or - ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <36B53FD4.11D75E53@home.com>
Source record: 73775

Hi, Phil
All I know is at resonance
in case of series tuned ckt X=0(Fs)
in case of parallel tuned ckt X=infinity(Fp)
So your graph shows it correctly.
73,
Tony, VE6CGX
Phil Rice wrote:
>
> Previously Bert Douglas asked
> "should the phase slope be positive or negative wrt frequency?"
>
> At the risk of attracting some flames, here's my (27 year old) recollection
> on this.
>
> Fosters reactance theorem states (some thing like) "the derivative of the
> reactance with respect to frequency is always positive". ie. if the
> impedance is represented as R + jX, then as the frequency is raised the
> value of X becomes more positive / less negative. At parallel resonant
> frequencies (infinite impedance), this becomes a little obscure as the sign
> of X suddenly switches from + to -, but the slope is always positive.
>
> Maybe a graph typical of a crystal near its fundamental frequency may help
> illustrate.
>
> | X .
> | .
> | .
> | .
> | Fs . Fp
> |--------------.-------|--------> F
> | . .
> | . .
> | . .
> | . .
> |. .
>
> Regards, Phil Rice VK3BHR

1351. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <Tcbt2.2019$OS5.2161044@news3.mia>
Source record: 73776

>>Here's one thought: are you using that scope's built-in frequency
>>display to measure the oscillator's frequency?
>
>Yes.

>> Maybe your discrete
>>frequency-stepping problem is really an artifact of the scope's built-in
>>counter not having much effective resolution at those frequencies,
>>especially if the scope relies on sampled waveforms to compute the
>>frequency indirectly. (At 2.5 GHz, you've *gotta* be getting close to
>>Nyquist...)
>
>Perhaps. I will check it out.

Well after spending some time with the FFT mode on the scope, I see that it gives significantly different results than the simple frequency measurement of one cycle of the the sampled waveform(which now seems useless to me). A lot of what appeared to be frequency jumps were not really jumps, but minor changes in steepness of the peak in the magnitude/frequency curve.

The -10db width is about 10MHZ. I think this may be near the resolution limit, and not truly indicative of the real width. At 20MHZ it is down 40 dB, and stays below that until the second harmonic which is down 30dB. This is with a 4096 sample FFT(max possible), done at the slowest sample rate that does not produce aliasing (faster sample rates have less frequency resolution).

Basically it appears that, once again, the frequency is not changing at all. When will I ever get out of this rut !!! The diode bias is only making minor (extremely minor) changes in the spectrum. Even the chaotic waveforms (that appear when I forward bias the diodes) have an identical spectrum.

Bert

1352. QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: "Matt J. McCullar" <mccullar@flash.net>
Message-ID: <36B3D042.7B1@flash.net>
Source record: 73777

Nice, balanced set of opinions. Thanks to everyone who responded!!! I still haven't made up my mind yet, but now I know what to watch out for. I can really use the shelf space a CD-ROM would provide, and pix aren't all that important. Schematics are, though. :)

73 de KJ5BA
Matt J. McCullar
Arlington, TX

1353. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <793jkm$206@nnrp1.farm.idt.net>
Source record: 73778

Bert Douglas wrote in message ...
>Basically it appears that, once again, the frequency is not changing at all.
>When will I ever get out of this rut !!! The diode bias is only making
>minor (extremely minor) changes in the spectrum. Even the chaotic waveforms
>(that appear when I forward bias the diodes) have an identical spectrum.

Bert,

Here is one small suggestion for you. Just try pulling out the diodes! If the VCO frequency does not change much then your current layout has way too much stray capacitance in it!! If this is the case then it will not make any difference what you bias the diode at.

Another suggestion would be to pull the diodes out of the circuit and remove the diode bias traces. Next solder in two small wires (short) where the diodes were located. The two wires could then be pushed close together to simulate a tiny capacitor without worrying about the effects the bias supply traces cause. You can then manually adjust the wire spacing to change the VCO frequency for your tests.

I think trying the above may help in identifying the source of the problem.

Just my $0.02 worth of ideas to try. 8-))

Leland C. Scott
KC8LDO

1354. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: pmbail01@spamtrampling-moocow.slug.louisville.edu
Message-ID: <5BFC0442B33049F8.F7E890CA5D97311E.140415A68C19CF56@library-proxy.airnews.net>
Source record: 73779

On Sun, 31 Jan 1999 03:10:24 -0700, Will White <wcw@asu.uswest.net> mooed:
>Maybe it is nit-picky and digressing, but most colleges have not dropped
>foreign language requirements, just the engineering schools that broke out of
>"program" status within physics and chemistry academic departments and became
>"Colleges of Engineering" within universities, and some of the Colleges of
>Business (sic), strangely enough.
>
>It is the advent of "professional training", rather than actual education of
>people that has done this. Engineers and business folk more than most have an
>actual *application* of say, Japanese, Spanish, Russian, for example.
>
>At ASU, a physics major still needs 3 semesters or more of a foreign language
>to earn a degree. This is still fairly typical at state universities *and*
>private colleges.

Actually, this is even true with some engineering schools, too. At
University of Louisville, for instance, in both the "Arts and Sciences"
(liberal arts) and the engineering schools require at least two years of
a foreign language (I honestly don't know if this applies for the
business, legal, or medical schools). Yes, this counts even if you are in
the engineering school, which has higher admittance standards, etc. than
the Arts and Sciences school has. (The basis is so that folks will be
well rounded.)

The *solitary* exception I know to the foreign language requirement at U
of L is in the "Engineering Math and Computer Science" (yes, they make you
take your calculus with your computer programming here :) program (and
MAYBE Information Services in the business school, which is
essentially EMACS without classes above bachelor's level and without
calculus); if you're taking EMACS you may count computer programming
languages as "foreign language" credits. Yes, I think it's a wee bit
funky counting C++ or Java or Fortran as a language credit, but I don't
make the rules here. :)

(Of course, depending on which university you attend, the "foreign
languages" you get to take may be interesting indeed! :) I know at least
University of North Carolina-Asheville offers courses in Cherokee, and
several universities offer actual credit in both Klingon and Quenya (yes,
I mean the invented languages developed by Gene Roddenberry and J. R. R.
Tolkien respectively--though you also get into some language theory in
those classes, too). I am actually sort of surprised that someone has not
hit upon the idea of offering semester-long courses in Morse Code--after
all, if C++ and Klingon are counted as languages, why *not* CW? :)

-moo

1355. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <36B568D0.135F@wt.net>
Source record: 73780
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

m c beutler wrote:
>
> Anyone have an opinion on the simple 2 knob antenna tuners offered by
> MJF? Want a low power tuner for random wire and "L" antennas.(200 watt
> capability more than sufficient) Can't seem to find much in the way of
> consistent data for building one on the bench.
>
> Would actually prefer to make one but have not found values (inductance
> steps, # of turns of a given wire on a given coil form size, etc)
> anywhere for a tapped or variable inductor.
>
> Any assistance would be greatly appreciated.
It'll work. I have had one of those since 1978. Still works, and I use
it mainly these days as a mobile matcher. You would have more fun making
one though. And if you used a quality inductor , would have less losses.
MK

1356. Re: antenna tuners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <36B56A71.2E0B@wt.net>
Source record: 73781
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Butch Magee wrote:
>
> Have you used it to transmit on? I'm curious about whether or not it will work
> at 150 watts or not.
>
> Butch KF5DE

Depends on what you are trying to match. If it's a wild mismatch you are dealing with, you might have to run less than 200w. I've had mine so hot one time that the plastic coating on the toroid inductor was bubbling. I can't remember what it was I was trying to match. But say if you were using one as a line flattener, which I used to do quite a bit on the icom, and the swr wasn't that high, you could probably exceed 200w. Just depends I guess. But for average use on most all antennas with a barefoot rig, no problems. Mine still works fine after 22 years of abuse. MK

1357. Re: Info on DC-400Hz design?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Bill sloman <bill.sloman@ieee.com>
Message-ID: <36B586C8.39D7CE49@ieee.com>
Source record: 73782
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Bob Miller wrote:
>
> Hi folks
>
> I'm interested in any thoughts or ideas on a small DC to 115VAC/400
> Hz design. Load varies from 5-20 watts (servos and a tiny blower
> motor) DC input can be 12- 28 vdc. Output wave form should resemble a
> sine wave to keep harmonic content (and rfi) to a minimum. Efficiency is
> not a major consideration. I've puttered with self excited inverters and
> the results were not that impressive (had to use fairly aggressive L/C
> filters on the square wave output which increased the bulk of the item
> (small size is a consideration). My latest thoughts were a simple phase
> shift R/C oscillator at 400 Hz driving a pair of small power Mosfets in
> push pull using a small center tapped 25.6 VAC 3 amp transformer and
> taking my output off the 115VAC primary winding. I am interested in
> feedback systems to affect some rudimentary voltage regulation scheme.

You should aim for a switching solution - 12V to 28V is a fairly wide
swing,
and if want up to 20W on the regulated side, a linear regulator is going
to
have to dissipate at least 27W, which is enough to be a nuisance.

A fast microcontroller chip with an ADC and PWM output - the Dallas
Semiconductor DS87C550 has all the bells and whistles, and is fast
enough, but probably costs the earth by the time you get set up to
program it - would let you measure your input voltage and you output
voltage and do both feed-forward and feed-back control. No doubt there
is PIC for for the job,
and someone on the user-group will know just which one.

Since a 400Hz cycle is 2500 usec and a decent micro can cycle better
than 10MHz, you can divide up each cycle into say 150 segements, and
adjust the
on-off ratio to one part in 150. With a 28V to 12V range, you would need
to
limit the "on" time at 28V to 65 in 150, which still leaves you able to
generate a 65-level approximation to a sine wave. You'd be chopping at
60kHz which is nothing special, but high enough that your filter
elements before your transformer won't be either big or expensive.

Clearly, you have - at best - only six-bit control over the amplitude of
any
individual segment, but by switching between say an n-out of 65 and an

n-out of 66-bit pattern over the length of a cycle you can up to this to nearer twelve bits. Sounds like fun to program.

Hope this helps.
Bill Sloman, Nijmegen

1358. Re: I need a Schematic for a keyer for my homebrew transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <36b59a60.2907714@news.nemaine.com>
Source record: 73783

Tried that site and got the following message:

THE REQUESTED NETTAXI DESTINATION
WAS NOT FOUND!

Sorry for the caps....cut'n'paste....

Ken

On Fri, 29 Jan 1999 01:36:26 -0000, "Eamon Skelton"
<die.all@spammers.org> wrote:

>
>Me wrote in message <917508355.706401@neptune.uniserve.ca>...
>>I just built a small non-kit QRP transmitter and would like to put
>>a simple keyer in it's case. Does anyone know where
>>I can find a schematic for a little homebrew keyer?
>>
>
>If you have access to a PIC programmer, have a look at:
>
>www.nettaxi.com/citizens/ei9gq/index.html
>
>73, Ed.
>
>
>--
>**********
> Eamon 'Ed' Skelton EI9GQ
> Cork, Ireland
>
> ANTI SPAM RETURN ADDRESS
> Real e-mail address below
>
> ei9gq@nettaxi.com
> www.nettaxi.com/citizens/ei9gq/
>
>**********
>
>

1359. packet with rexxon rl-501

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Johannes Jansen <9825013@surfer.uni-wuppertal.de>
Message-ID: <36B5BDB4.4BD5E567@surfer.uni-wuppertal.de>
Source record: 73784

has anyone an idea or schematic how to do the modifictions for
packetradio (9k6) on the rex(x)on rl 501 or standard c 520/528 (when
it's the same)?
thanks in advance.
73 johannes DO1LJJ

1360. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Stein-Olav Lund <stein@iet.hist.no>
Message-ID: <36B5AC69.FB04A2B2@iet.hist.no>
Source record: 73785
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

Ron Higgs wrote:

> How to fix a drifting radio? Drop an anchor . . .

No, you don't have to...
Remember, those are _boatanchors_, and will stay well put...

Nice article! I have temp.compensated a VFO I built some
years ago, and I quite well remember the many trials with
different N-characteristic caps..

--

*** STEIN-OLAV LUND engineer ***
*** Sor-Trondelag College ***
*** Dept. of Electrical Engineering Tel. +47 73 55 95 99 ***
*** N-7005 Trondheim Fax +47 73 55 95 81 ***
*** NORWAY ***
*** E-:-) LA9QV ***
****
+++ Teacher (in pub): Do you serve headmasters? +++
+++ Barman : We serve anybody, sir. +++
+++ Teacher: Good, a beer for me and a headmaster +++
+++ for my dog, please. +++
+++ J. Taylor: The New English Norwegian Joke Book,1990 +++
++

1361. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: rbmccammon@mmm.com
Message-ID: <36B5BD85.8623D67F@mmm.com>
Source record: 73786
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mark Zenier wrote:
>
> In article <36AD470D.3117@pop.removethistomailme.net>,
> John Miles <jmiles@pop.removethistomailme.net> wrote:
> >Mark Zenier wrote:
> >>
> >> In article <36A90F11.6638@pop.removethistomailme.net>,
> >> John Miles <jmiles@pop.removethistomailme.net> wrote:
> >> >
> >> > http://www.amazon.com/exec/obidos/isbn=0471520195
> >> > http://www.amazon.com/exec/obidos/isbn=0872594920
> >>
> >> AARRRRRRRRGGGGGGGGH. Will you just put the authors and titles here
> >> instead of putting some USELESS URL.

Would it be OK if they put authors, titles, and URL's?

Opinions expressed herein are my own and may not represent those of my employer.

1362. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <794jd8$30b$1@nnrp1.dejanews.com>
Source record: 73787
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

In article <36b331d0.6977139@newshost>,
allan.herriman.hates.spam@fujitsu.com.au (Allan Herriman) wrote:
> On Thu, 28 Jan 1999 17:45:03 -0800, John Miles
> <jmiles@pop.removethistomailme.net> wrote:
> > [snip]
> >I agree that the "better" way is to get a couple of actual Ethernet
> >bridges and connect them with a commercial radio link, but considering
> >that all I am trying to do is learn a little about high-speed data
> >transmission and play a decent game of Quake, I don't think I can
> >justify the $6K-$15K budget that the commercial solutions demand. This
> >is strictly for personal amusement and telecommuting rather than any
> >type of mission-critical commercial application.
> > [snip]
>
> Hi John,
>
> The "better" way doesn't have to involve that sort of cost...
>
> You can build routers out of old '486 PCs and some free software (*).
> (You might have to pay to get some serial I/O cards capable of
> manchester or NRZI for the wan ports. Perhaps even DS1.)
> Once you have a serial stream you can use the same sort of FSK modem
> you originally intended to use, but now at a manageable baud rate.

Unless you're using one with an integrated transceiver, Ethernet
controllers are externally clocked, and can be clocked at rates
other than 10Mbps (such as 2Mbps). Some of the controllers will
even allow you turn off the Manchester encoder, which is ideal.
The Intel 82586, still commonly found on older Ethernet cards
(perhaps you can pick a few up at a swap meet or computer store
used bin), is a fully-featured serial data engine (though writing
drivers for it is not for the faint of heart).

In other words, you can probably scrounge an Ethernet card which
makes a perfectly fine serial data engine.

Dana K6JQ
Dana@Source.Net

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1363. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <794g0b$dd9@news.Hawaii.Edu>
Source record: 73788
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

rec.radio.broadcasting (devoted to the broadcast industry; moderated)
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and the
contents of such a thread drift further and further away from being
"on-topic" in the various NGs that receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, WH6U
(rec.radio.amateur working-group)
```

1364. FS 811 NOS JAN Sylvania electron tubes.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36B5E578.88D564B1@herald.infi.net>
Source record: 73789
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

We have a small quantity of NOS, OB, JAN/Sylvania 811/VT217 military tubes, 1940's mfg. $25.00 ea. + shipping.

Ken Chait
Advantage Tube Services
See products page special offer.

http://www.electron-tubes-audio.com

1365. BYTE article by Steve Ciarcia

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990201124734.01197.00002357@ng-fu1.aol.com>
Source record: 73790

Thanks to all for the help in locating this article. With Steve's E-mail address I found the article is: Build the H-Com Handicapped Communicator" and is in November, 1983 BYTE! Unfortunately, the program source code is no longer in the file at Circuitcellar. A copy of the article is being sent to me. This , I suspect becomes a PIC programming project. An interesting project anyway. Thanks to all. George W3ASE
G345CDE

1366. 232c Interface for TS-850S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Allan Koenigsberg <ae2j@worldnet.att.net>
Message-ID: <36B5E9B8.497276BB@worldnet.att.net>
Source record: 73791
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Does anyone have information about homebrewing a 232C interface for the TS-850S. $120 seems awfully steep for what I imagine is a relatively simple item. I'd appreciate any info . Tnx AE2J

1367. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B5FD97.217E@pop.removethistomailme.net>
Source record: 73792
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Dana H. Myers K6JQ wrote:
>
> In article <36b331d0.6977139@newshost>,
> allan.herriman.hates.spam@fujitsu.com.au (Allan Herriman) wrote:
> > On Thu, 28 Jan 1999 17:45:03 -0800, John Miles
> > <jmiles@pop.removethistomailme.net> wrote:
> > > [snip]
> > >I agree that the "better" way is to get a couple of actual Ethernet
> > >bridges and connect them with a commercial radio link, but considering
> > >that all I am trying to do is learn a little about high-speed data
> > >transmission and play a decent game of Quake, I don't think I can
> > >justify the $6K-$15K budget that the commercial solutions demand. This
> > >is strictly for personal amusement and telecommuting rather than any
> > >type of mission-critical commercial application.
> > > [snip]
> >
> > Hi John,
> >
> > The "better" way doesn't have to involve that sort of cost...
> >
> > You can build routers out of old '486 PCs and some free software (*).
> > (You might have to pay to get some serial I/O cards capable of
> > manchester or NRZI for the wan ports. Perhaps even DS1.)
> > Once you have a serial stream you can use the same sort of FSK modem
> > you originally intended to use, but now at a manageable baud rate.
>
> Unless you're using one with an integrated transceiver, Ethernet
> controllers are externally clocked, and can be clocked at rates
> other than 10Mbps (such as 2Mbps). Some of the controllers will
> even allow you turn off the Manchester encoder, which is ideal.
> The Intel 82586, still commonly found on older Ethernet cards
> (perhaps you can pick a few up at a swap meet or computer store
> used bin), is a fully-featured serial data engine (though writing
> drivers for it is not for the faint of heart).
>
> In other words, you can probably scrounge an Ethernet card which
> makes a perfectly fine serial data engine.
>
> Dana K6JQ
> Dana@Source.Net
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

Possibly so, but one of my requirements is that this project just act like a "virtual 10BaseT cable", with no fiddling around with Ethernet hardware, drivers, or clock rates at either end. It is hard to live with 2 Mbps when you're used to 10 -- this will be used for file sharing and streaming on the LAN as well as Internet access. Messing with the clock rates, disabling Manchester coding, or adapting the design for specific NICs or routers renders the whole thing less general and consequently, less useful. This is 1999, after all -- it is about time someone came up with a truly general-purpose, idiot-proof 10-megabit radio link for modern LAN hardware. :-)

This weekend I successfully ran half of a 10BaseT link through an MC13155, modulating an 800 MHz VCO with an MC10116 line driver and recovering the data at the other end, after downmixing, with another MC10116. It worked the first time, with an almost-randomly-chosen voltage divider determining the deviation at the VCO. Haven't had much time to play with it since, but it appears that it will be straightforward to determine some reasonable transmission parameters empirically.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1368. Re: VCO/varactor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B5FE5D.56EF@pop.removethistomailme.net>
Source record: 73793
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Mark Zenier wrote:
>
> In article <36B3B481.314B@pop.removethistomailme.net>,
> John Miles <jmiles@pop.removethistomailme.net> wrote:
> >LOL. I had guessed from his earlier messages that I could send Mr.
> >Zenier into a nonlinear region of his characteristic curve by dropping
> >the phrase "information superhighway" somewhere in a message to him, and
> >whaddya know, I was right!
> >
> >Ah, the joys of trolling. <pats self on back>
>
> But you're going to think twice before you're rude enough to post
> a blind URL again.
>
> Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

http://www.fatchance.com

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1369. Re: schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <917898309.609130@cs1.sdd.hp.com>
Source record: 73794

Dale OM,

Look in any ARRL handbook or other similar publication. Just reading through an issue
of CQ or QST or other ham radio magazine will familiarize you with schematic symbols
very quickly. Judging by your question, you have not studied any of these sources yet.

73 and GL,
Don, W6JL

P.S. I remember that we used to have to draw and recognize schematics for portions of
transmitter and receiver circuits, etc; for the General Class license exam.

Dale and Judie wrote in message
<3.0.1.32.19990129174249.007cda90@agate.net>...
>Can someone direct me to a good source for learning how
>to read radio schematics ?
>
>Thanks
>Dale n1txw

1370. PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: cmcdonld@thezone.net
Message-ID: <794vi3$o6m$1@nova.thezone.net>
Source record: 73795

I'm planning on building some homebrew gear and I was woundering
- can you make a pic controled oscillator?
- how do those PIC based frequency counter work?
- can you decode cw with a PIC
- can you decode DTMF with a PIC
Also are there any websites with schematics for a 2 meter transciver
or transmitter?
And last but not least are there any websites with infomation on how
to make balum's?

1371. Homemade Paddles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: ka8ded@aol.com
Message-ID: <19990201144859.07819.00003034@ng-fr1.aol.com>
Source record: 73796

Looking for web sites that have construction articals on makeing
paddles for a electronic keyer I'm building.

Thanks

1372. WTB - Plate Relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Bart Berg <bberg@uslink.net>
Message-ID: <36B60604.45F4@uslink.net>
Source record: 73797

Looking for a 10K ohm plate circuit relay - any type OK

Bart K8IRC

1373. transistor information wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <795515$86c$1@plutonium.btinternet.com>
Source record: 73798

Does anyone have any information on any of the following devices:
BF981,BF115,J310 and 40312?.Please E-mail me if you can help.

1374. STC tranciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <79556g$883$1@plutonium.btinternet.com>
Source record: 73799

does anyone have any information on the STC MB7 VHF radio tranciever? please
E-mail me if you do.

1375. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B61583.FE0@pop.removethistomailme.net>
Source record: 73800
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

(sorry for the dupe post, I was trying to restore my original crossposts
so other participants could continue to see the thread, and screwed up
on the newsgroup name separators....)

Gavin Melville wrote:
>
> <snip>

Just found your reply in DejaNews, I guess I missed it in
rec.radio.amateur.digital.misc (or it didn't end up being crossposted
there?)

>>I am just planning to run this link across a ~150-foot parking lot with
>>a couple of K-band Gunnplexers, so I am not horribly concerned about
>>total occupied bandwidth as long as it turns out to be within the
>>13155's limits. I am, however, concerned with the fact that I don't
>>know, and can't seem to find in any textbooks, the theory behind how
>>much frequency deviation should be used for FSK and what the tradeoffs
>>are.
>When the deviation equals the bit rate it is called MSK and gets
>rapidly harder to demodulate. Keep in mind that 10 Mb ethernet uses
>Manchester encoding and the highest frequency involved is 20 Mb ie.
>each bit cell involves a central transition and is either 10 or 01.
>In Practice the deviation should be at least 30 Mhz DC shift -- of
>course the Ethernet needs serious pulse shaping to keep the bandwidth
>under control.

Hmm. What do you mean by "30 MHz DC shift" -- 15 MHz either side of
center for the positive and negative peaks? So, by Carson's rule it
would suggest that the occupied bandwidth for 10-megabit Manchester with
2X frequency headroom would be 2*(15+20) =~ 70 MHz?

>I worked on a low cost short haul 10GHz system a few years back and it
>certainly is not all fun.
>
>1. The 13155 seems to work OK -- I shifted to a new job before
>running extensive tests but it did go..

I got it working the other night, modulating an 800 MHz VCO with one
side of the 10BaseT link and recovering it after downmixing. I was able
to send packets from one machine to the other with no problem, deviating
only about +/- 3-4 MHz to either side of center. (Basically my first
guess worked, it doesn't seem critical).

>2. The filter before the 13155 is a real bitch -- flat, good phase
>response for 30 Mhz, run at 70 Mhz or so. It was easier to move up
>to 135 MHz and do the filter up there. Too wide for a helical, and LC
>filters are too messy. Stripline filters are too big and lossy.
>This filter is critical to the noise performance of the whole system
>-- the best results were from a LC highpass followed by a buffer,
>followed by a low pass, but in the end you have to tolerate some
>excess bandwidth.

Now that is interesting. I would have expected the phase response of any filters in the system to be critical, as you suggest. I did not use any filtering at all in my quick-and-dirty test with the 13155, but I did try inserting a cheap Mini-Circuits 20 MHz LPF in my 10BaseT interface test bed (basically, between two MC10116 line drivers at either end), and the data got through it just fine. I measured the phase shift of that filter at 45 degrees at around 7 MHz in a 50-ohm system, so I don't actually understand how it could possibly have worked. The link even continued to work normally when I cascaded two of these filters in series! That must have caused the phase shift of the leading 10-MHz burst in each packet to exceed 90 degrees, but it didn't seem to bother anything at all.

I have ordered a couple more Mini-Circuits filters, low-pass at 200 MHz and high-pass at 100 MHz, to put in front of the 13155. My guess was that these would be sufficient, operating at a center frequency of 150 MHz. The highpass->buffer->lowpass scheme is identical to N6GN's, and I was planning to stick with it.

>3. Consider changing the data to another modulation eg back to NRZ
>can be done with a few gates and flip flops -- halves the bandwidth.

That might work, but wouldn't it do bad things to the initial 10-MHz clock-sync(?) burst? (Not that my 20 MHz filter *wasn't* doing bad things to that burst...)

>. Get the pulse shaping correct first -- ethernet drivers have FAST
>ansition times -- after all they drive long cables.

The MC10116 line drivers used by Glenn's initial 2 Mbps project seem to work well at 10. I'm using MCL T1-1 broadband transformers for isolation between the 10116s and the 10BaseT jacks.

>. Remember that one direction with a GunnPlexor will be inverted.

True, but I was also surprised to note that at least with the two 3Com EtherLink III cards in my test machines, the polarity isn't important. The cards seem to recognize and compensate for polarity inversions. That does make the testing easier, as it eliminates a potential way to screw things up, but I wonder if it is true of all 10BaseT cards in general or just the model I happen to be working with?

>. The 13155 is not the only way to go -- some of the RF
>discriminator IC's used for earlier satellite TV work well try Mitel
>for the RF discriminators from GEC Plessy. I forget the part number

>but I can look it up.

I'm pretty happy so far with the 13155. My initial test was conducted at a center frequency of 90 MHz, but it should be fine at 150 as well according to the data sheets, and you couldn't ask for a simpler circuit.

>If I can help further email me...

Thanks -- any clues I can get will help. :-) Would rather keep the thread on the newsgroups if possible, though, as email doesn't show up for posterity's benefit in dejanews.

>PS : You can phase lock a Gunn device cheaply using Fujitsu or NEC
>dividers that work at 14GHz -- let me know if you are interested in
>the circuit.

I'm expecting I can just AFC the tuning port with a low-pass filter off the differential output of the MC13155. There'll be an opamp on those lines anyway to drive a tuning meter. One nice thing about a single-conversion design (as opposed to N6GN's) is that AFC needs to happen only at one end of the link!

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1376. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Lou Albert <labert@uakron.edu>
Message-ID: <36B6205A.C33F1CD7@uakron.edu>
Source record: 73801
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> I caught an announcement that the CW SOS is no longer effective for Maritime
> Services effective 0000 GMT 1 February, 1999
>

Lou WA8PHD
http://ifip.com/wa8phd.htm
http://www.nocode.org/

ka9dhz@webtv.net wrote:

> Doing away with CW is just another example of the dumb down of
> America.Outcome based education for example.The average high school grad
> today has about a 5th grade education.
>
> I agree that the problems on the bands are not the no code types. If you
> check the call signs of the trouble makers they are mostly advanced and
> extras with too many years to soak up booze and kill brain cells.
>
> IMHO the novice-extra incentive system is not broken. So lets not fix it
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1377. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <795dra$60r$1@winter.news.rcn.net>
Source record: 73802
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

In the good old days one could
find small differential trimmer caps.
Simply a matter of adding two fixed
caps, a NPO ceramic to one leg, a
Negative coefficient ceramic
cap on the other. The differential allowed
drift compensation without affecting the
oscillator frequency.

Pete

Stein-Olav Lund wrote in message <36B5AC69.FB04A2B2@iet.hist.no>...
>
>
>Ron Higgs wrote:
>
>> How to fix a drifting radio? Drop an anchor . . .
>
>No, you don't have to...
>Remember, those are _boatanchors_, and will stay well put...
>
>Nice article! I have temp.compensated a VFO I built some
>years ago, and I quite well remember the many trials with
>different N-characteristic caps..
>
>--
>
>*** STEIN-OLAV LUND engineer ***
>*** Sor-Trondelag College ***
>*** Dept. of Electrical Engineering Tel. +47 73 55 95 99 ***
>*** N-7005 Trondheim Fax +47 73 55 95 81 ***
>*** NORWAY ***
>*** E-:-) LA9QV ***
>**
>+++ Teacher (in pub): Do you serve headmasters? +++
>+++ Barman : We serve anybody, sir. +++
>+++ Teacher: Good, a beer for me and a headmaster +++
>+++ for my dog, please. +++
>+++ J. Taylor: The New English Norwegian Joke Book,1990 +++
>++
>
>

1378. For Sale - Parts/projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990201185535.01215.00002503@ng-ft1.aol.com>
Source record: 73803

For Sale: Parts and Projects for the Builder
RF decks / Final Pas
Motorola
6 Meter RF Deck Pair 8560ï¿½s in push-pull
with 95% of power supply parts
Bud cabinet 14" $300.00

2 Meter RF Deck single 8560 $ 175.00

RCA
6 Meter pair 4-250ï¿½s in push-pull
Tank coil, filament transformer, Grid coil $250.00

6 Meter 4-125"s same as above $225.00

Home Brewed projects

6 Meter, 2 X 4CX250B / Power Supply / Cabinet
Need wiring, Meters, TR switch
Will make about 700 watts P.E.P. $ 380.00

6 Meter, single 4-400 / Power Supply / Bud cabinet
Needs TR switch / LPF / 650 watts P.E.P. $450.00

Tubes, Sockets, RF chokes, Coil stock, Meters, Transformers Filament / Plate

1379. Re: 232c Interface for TS-850S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Marty <martyk@naples.infi.net>
Message-ID: <36B64AFF.8E071F27@naples.infi.net>
Source record: 73804
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There were two simple, low cost circuits shown in recent ARRL handbooks, one of which would probably work with the 850. I think they used the MAX232 chip. Substituting the MAX233 will eliminate some of the external components

Marty K1FHR

Allan Koenigsberg wrote:
>
> Does anyone have information about homebrewing a 232C interface for the
> TS-850S. $120 seems awfully steep for what I imagine is a relatively
> simple item. I'd appreciate any info . Tnx AE2J

1380. Re: 232c Interface for TS-850S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Marty <martyk@naples.infi.net>
Message-ID: <36B64B3A.6240DE77@naples.infi.net>
Source record: 73805
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There were two simple, low cost circuits shown in recent ARRL handbooks, one of which would probably work with the 850. I think they used the MAX232 chip. Substituting the MAX233 will eliminate some of the external components

Marty K1FHR

Allan Koenigsberg wrote:
>
> Does anyone have information about homebrewing a 232C interface for the
> TS-850S. $120 seems awfully steep for what I imagine is a relatively
> simple item. I'd appreciate any info . Tnx AE2J

1381. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B652E8.3E16@pop.removethistomailme.net>
Source record: 73806
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Allan Herriman wrote:
>
> I'm not sure why you'd want to disable the Manchester encoder. Sure,
> it'll halve the bandwidth, but it'll make clock recovery at the other
> end quite difficult, as ethernet controllers don't scramble the data,
> which means that if you send a packet of 1500 zero bytes, you won't
> receive any data transitions for 1500 x 8 = 12000 bit periods. This
> is (more or less) impossible to decode.
> You'll also lose DC balance, which can upset AFC, etc.
>

That's a good point; the original N6GN design was DC-coupled throughout, but I've taken the liberty of using broadband transformers at both ends of the circuit for isolation purposes, and blocking capacitors between the FM detector and line driver chips. AC coupling simplifies the design considerably over the circuit in Glenn's original article.

I'm not obsessed with optimizing bandwidth usage, anyway, as long as it works.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1382. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36B658BF.4AA7@mail.rsccd.org>
Source record: 73807
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote:
[snip]

> Am I trying to think of the LED as a linear device (current and voltage
> are linearly related), when in reality it is not?

That is correct, it is not. The voltage will stay around 1.6 to 2V no
matter what the current is. So you subtract that voltage from the
supply voltage and divide by the current to get the correct resistance.

> Thanks,
> Dave

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1383. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36B6638A.C20@mail.rsccd.org>
Source record: 73808
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

guess_who@wxs.nl wrote:

> On Sat, 23 Jan 1999 10:52:49 +0100, radio_man@usa.net (radio_man)
> wrote:

> >http://www.xs4all.nl/~barendh

> REDUCE YOUR PRICES!!!! YOU'RE TOO EXPENSIVE!

If they are in U.S. dollars, yeah, but then maybe they're not, they may
be in Dutch guilders or whatever.

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1384. HELP - need matching dimentions for Telrex TH3jr-S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Joe K7JOE <k7joe@yahoo.com>
Message-ID: <36B6656C.9DF1AF7F@yahoo.com>
Source record: 73809
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi,

Picked up a Telrex TH3jr-S via the net a few weeks ago. Antenna
was almost complete -- seems to be missing the matching wire
for the driven element. Looks like a "Y" (hairpin?) match:

```
={}==={}============[ ]================{}==={}=
\ /
\ /
| |
| |
-
```

Need dimentions to build my own, or part number to try to order
for Telrex.

thanks,
Joe K7JOE
Portland OR

1385. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B6629B.6042@pop.removethistomailme.net>
Source record: 73810
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Allan Herriman wrote:
>
> Hi John,
>
> I agree about that last statement. If you could make a cheap
> commercial quality "wireless ethernet bridge", it would sell like
> hotcakes. When I used to work for a microwave comms company, it
> seemed every second customer request would be for such a product. We
> could sell them microwave links for 30 phone channels (this was one of
> our main products), but we had nothing for their computer networks.
>
> The typical customer would be a small or medium sized business that
> had a head office, and a new, small office within a few km of head
> office. They wanted to extend their PABX and their computer network
> to the new site, without having to pay phone company rates on data
> lines.
>

Probably the biggest obstacle to this idea isn't technical or economic, but regulatory. I am not sure what the licensing requirements are, or if even an amateur license allows one to chew up 50, 60, or 70 MHz of prime 24 GHz real estate with something like this. I'll have to look up the relevant FCC regs one of these days. It is not a big deal in my particular case since I only need to run enough ERP to make it across a parking lot, but widespread deployment of such a system would undoubtedly have to be done entirely at the users' risk, legally speaking.

My suspicion is that the ham ID requirement could be easily met by simply keying the carrier in a quick "_.. . _._ . ..._. _.._" pattern every few minutes. That will play hell with my Quake game, though, so I may put it off until I get my first pink slip in the mail from the FCC. :-) In all seriousness, though, the legal aspect of the problem is one reason I want to learn more about what determines things like the minimum usable bandwidth and such.

> I did some market research, and came up with the following
> conclusions:
>
> 1. The box at each end will simply plug into the ethernet and need no
> configuration. Customers don't seem to like configuring bridges.
>

Right. That would be me.

> 2. You really don't need 10Mbps. *No* 10base-anything ethernet can
> equal this figure, even asymptotically. You can get pretty close in
> bursts with a modern server fed from an ethernet switch though. This
> would not be a typical application.
> I contend that your "file sharing and streaming on the LAN as well as
> Internet access" would suffer little subjective degradation at even
> 1Mbps. Well, maybe. There will definitely be times when you notice
> the difference, but most of the time you won't.
> It helps to filter out packets that don't need to traverse the link in
> this case.
> Most business users are just happy to have connectivity.
> [I should point out that my research was done before web browsing
> became a significant part of network traffic. Even so, all Internet
> traffic for a small to medium sized company will get funnelled into a
> single feed of typically < 1.5Mbps. Even ADSL (in practice) doesn't
> get close to 10Mbps.]
>

I dunno. 1 Mbps = about 130 KBytes/second, and I definitely get closer to a megabyte per second just copying files in DOS across Windows boxes on 10BaseT. Our net connection at the office is only a T1, so 2 Mbps would be fine for Internet work by itself. The trouble is, nobody uses 1- or 2-megabit network cards anymore. The ones that sell for $20 at CompUSA are all 10-megabit 10BaseT models. Supporting anything less than 10BaseT is a waste of time, on the grounds that it's obsolete technology.

> 2b. Even if you get 10Mbps, what happens when you connect to a
> 100BaseT network? Will you need 100Mbps then? Repeat argument with
> 1000BaseT.
>

Right now I don't have any interest in supporting 100-megabit or faster standards. 10 Mbps is just an incremental jump over the older 2 Mbps designs floating around, but 100 Mbps is much more than just a faster 10 Mbps link. 100BaseT uses multiple pairs with all kinds of funky multi-level quadrature modulation schemes and such that I don't even want to think about at this point. I am not sure that there are any off-the-shelf radio modem chips like the MC13155 available for 100-megabit service.

> 3. It is desirable to not share collision domains across the two ends
> of the link for three reasons:
> a. A shared collision domain will limit the distance you can
> transmit (due to the maximum delays allowable in the ethernet spec)
> to a few km (IIRC). If you don't share the collision domain, you can
> transmit over any distance.
> b. This saves link bandwidth by not transmitting useless information
> (which only matters if the link rate is < 10Mbps).
> c. The need to send collisions across the link means that when the
> link gets noisy (and they all do, at some time) then you will trash
> the network at each end.

>
> 4. The conclusion was that you need a router, bridge or switch
> (preferably with packet filtering) at each end, regardless of the data
> rate. Since you can build one with a few chips costing perhaps US$40,
> this wouldn't seem to be a problem.
>

Sounds like a very good point; minimize the traffic on the wire, and you end up with fewer retries. The dual-Gunnplexer approach I'm using isn't really "full duplex" -- because each Gunnplexer serves as the other's local oscillator, each station can only receive when it isn't trying to transmit. Consequently I can imagine that excessive net traffic at the "office" end will lead to substantially degraded performance at the "home" end, even when the traffic isn't intended for the remote site!

If this turns out to be *too* big a problem, I will probably just order a couple more Gunnplexers and put half of the link on 10 GHz with the other half on 24. Either that, or use a couple sets of cheap VCOs to put the link somewhere between 1 and 2 GHz. The latter, of course, would eliminate all hope of legitimacy from a regulatory standpoint.

> Venture capital, anyone?

Hmm. Have to tie it in with the "Internet," somehow....

>
> >-- jm KE5FX
>
> Regards,
> Allan.

Note: My E-mail address has been altered to avoid spam

1386. Re: transistor information wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Freeland <Freeland@chickasaw.com>
Message-ID: <a5ut2.675$L5.13211@news.goodnet.com>
Source record: 73811

BF115 161 T-NPN, Si, Vid IF Amp
40312 175 T-NPN, Si, AF PO
David Cunningham wrote in message
<795515$86c$1@plutonium.btinternet.com>...
>Does anyone have any information on any of the following
devices:
>BF981,BF115,J310 and 40312?.Please E-mail me if you can help.
>
>

1387. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36B6846A.7C32@mail.rsccd.org>
Source record: 73812
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

John Miles wrote:

> Allan Herriman wrote:
[snip]

> Mbps link. 100BaseT uses multiple pairs with all kinds of funky
> multi-level quadrature modulation schemes and such that I don't even
> want to think about at this point. I am not sure that there are any
> off-the-shelf radio modem chips like the MC13155 available for
> 100-megabit service.

That's not true. For gigabit ethernet, there's fancy modulation etc.
But for regular 100BaseT there are only two pairs used, and it's
basically the same as 10BaseT.
Manchester encoding is used for 10BaseT.

> > Venture capital, anyone?

Already being done by the same people that make the 10MB chip, and some
others that have been buying this chip from the same mfgr. I forget, it
might be Harris. I've been on their web page, so you should be able to
find it on the net.

> Hmm. Have to tie it in with the "Internet," somehow....

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1388. Test do NOT read

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B69224.480B557F@uswest.net>
Source record: 73813

Test

1389. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Richard Steven Walz <rstevew@armory.com>
Message-ID: <36B69782.6CFC@armory.com>
Source record: 73814
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

John Lundgren wrote:
>
> guess_who@wxs.nl wrote:
>
> > On Sat, 23 Jan 1999 10:52:49 +0100, radio_man@usa.net (radio_man)
> > wrote:
>
> > >http://www.xs4all.nl/~barendh
>
> > REDUCE YOUR PRICES!!!! YOU'RE TOO EXPENSIVE!
>
> If they are in U.S. dollars, yeah, but then maybe they're not, they may
> be in Dutch guilders or whatever.

Even in NLD, which I take to be Dutch Guilders, this guy has everything
priced two to four TIMES the price of everyone else, and I checked three
major catalogs!! 8.50 NDG for a P8031AN ?? This is a sub-US$1.00 part!!
27C256 12.90 NDG ?? I don't think so!! This guy is an opportunistic
rip-off!! I hope people who see his site shop around first!!
-Steve
--
-Steve Walz rstevew@armory.com ftp://ftp.armory.com:/pub/user/rstevew
-Electronics Site!! 1000 Files/50 Dirs!! http://www.armory.com/~rstevew
Europe:(Italy) http://ftp.cised.unina.it/pub/electronics/ftp.armory.com

1390. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B69C15.3074@pop.removethistomailme.net>
Source record: 73815
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

John Lundgren wrote:
>
> John Miles wrote:
>
> > Allan Herriman wrote:
> [snip]
>
> > Mbps link. 100BaseT uses multiple pairs with all kinds of funky
> > multi-level quadrature modulation schemes and such that I don't even
> > want to think about at this point. I am not sure that there are any
> > off-the-shelf radio modem chips like the MC13155 available for
> > 100-megabit service.
>
> That's not true. For gigabit ethernet, there's fancy modulation etc.
> But for regular 100BaseT there are only two pairs used, and it's
> basically the same as 10BaseT.
> Manchester encoding is used for 10BaseT.
>

Wow, that's not what I'd always heard. So it's just two differential
pairs (4 conductors in all), just like 10BT?

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1391. Re: HC-6 Crystals for sale $2.00 each plus usps and Heath Crystal Filter....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: GARY <bierbier@ix.netcom.com>
Message-ID: <7966c3$pur@dfw-ixnews4.ix.netcom.com>
Source record: 73816
Cross-posted to: alt.ham-radio.mods,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

...
>I was a little hasty on the original price since I did not sort the
>crystals, hell it was hard enough reading the frequency off the things and
I
>have 20/20 vision. So I decided to change the price to $2.00 a piece plus
>USPS. On the Heath Crystal Filter make me an offer and it is yours. I
just
>hate to throw these things away.
>7935r1$pb1@dfw-ixnews5.ix.netcom.com>...
>>I have a load of crystals I would like to get rid of. These are the HC-6
>>crystal type with pins. They are pulls from some old Collins aviation
>>equipment (almost positive about that one). I am asking $2.00 (see above)
>a piece plus
>>USPS. I also have a Heathkit Crystal Filter, Part Number 404-548. Specs.
>>are as follows: Cf-3395.7 khz z IN - OUT 2K
>>
>>400 hz @ 6db 2khz @ 60 db
>>
>>Make me and offer on the Heath Crystal Filter.
>>
>>The crystal frequencies for the pulls are as follows:
>>
>>2704.000 khz
>>2179.250 khz
>>3481.500 khz
>>3130.000 khz
>>6612.000 khz
>>3432.000 khz
>>8828.500 khz
>>2995.000 khz
>>5506.500 khz
>>8959.000 khz
>>1932.000 khz
>>3144.000 khz
>>2910.000 khz
>>8913.500 khz
>>3067.000 khz
>>2257.500 khz
>>4696.500 khz
>>4731.500 khz
>>2159.500 khz
>>6557.000 khz

>>6664.500 khz
>>5841.500 khz
>>2643.250 khz
>>2730.000 khz
>>3568.500 khz
>>3080.000 khz
>>8845.300 khz
>>3467.500 khz
>>6758.500 khz
>>3854.000 khz
>>3905.000 khz
>>6567.000 khz
>>11228.000 khz
>>13294.500 khz
>>13354.500 khz
>>13344.500 khz
>>13304.500 khz
>>11180.500 khz
>>13284.500 khz
>>13215.500 khz
>>13314.500 khz
>>13324.500 khz
>>13274.500 khz
>>13334.500 khz
>>
>> Email me if you are interested at bierbier@ix.netcom.com
>>
>> Thanks for your
>time,
>>
>> Gary Caire
>> Brea, CA
>>
>>
>>
>>
>
>

1392. HC-6 Crystals for sale $2.00 each plus usps and Heath Crystal Filter....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: GARY <bierbier@ix.netcom.com>
Message-ID: <795df0$bjg@dfw-ixnews7.ix.netcom.com>
Source record: 73817
Cross-posted to: alt.ham-radio.mods,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I was a little hasty on the original price since I did not sort the
crystals, hell it was hard enough reading the frequency off the things and I
have 20/20 vision. So I decided to change the price to $2.00 a piece plus
USPS. On the Heath Crystal Filter make me an offer and it is yours. I just
hate to throw these things away.
7935r1$pb1@dfw-ixnews5.ix.netcom.com>...
>I have a load of crystals I would like to get rid of. These are the HC-6
>crystal type with pins. They are pulls from some old Collins aviation
>equipment (almost positive about that one). I am asking $2.00 (see above)
a piece plus
>USPS. I also have a Heathkit Crystal Filter, Part Number 404-548. Specs.
>are as follows: Cf-3395.7 khz z IN - OUT 2K
>
>400 hz @ 6db 2khz @ 60 db
>
>Make me and offer on the Heath Crystal Filter.
>
>The crystal frequencies for the pulls are as follows:
>
>2704.000 khz
>2179.250 khz
>3481.500 khz
>3130.000 khz
>6612.000 khz
>3432.000 khz
>8828.500 khz
>2995.000 khz
>5506.500 khz
>8959.000 khz
>1932.000 khz
>3144.000 khz
>2910.000 khz
>8913.500 khz
>3067.000 khz
>2257.500 khz
>4696.500 khz
>4731.500 khz
>2159.500 khz
>6557.000 khz
>6664.500 khz
>5841.500 khz
>2643.250 khz

>2730.000 khz
>3568.500 khz
>3080.000 khz
>8845.300 khz
>3467.500 khz
>6758.500 khz
>3854.000 khz
>3905.000 khz
>6567.000 khz
>11228.000 khz
>13294.500 khz
>13354.500 khz
>13344.500 khz
>13304.500 khz
>11180.500 khz
>13284.500 khz
>13215.500 khz
>13314.500 khz
>13324.500 khz
>13274.500 khz
>13334.500 khz
>
> Email me if you are interested at bierbier@ix.netcom.com
>
> Thanks for your
time,
>
> Gary Caire
> Brea, CA
>
>
>
>

1393. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Richard Carroll <w0ex@scan.missouri.org>
Message-ID: <7933anhbj0@208.207.71.142>
Source record: 74019
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Jim Wayda wrote:
>
> Why is so much importance placed on CW? It is just another mode!!
> The testing process should be revised to to permit demonstration
> of proficiency in a number of areas rather than CW. For example,
> passing a more difficult theory test.
>
> It is time for change. CW is nothing more than a hazing ritual that
> facilitates admittance into the "good old boys club".

[Yawn] 'Nuther trolling CBer scab.......

1394. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-01 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <AJ8t2.1842$OS5.2087329@news3.mia>
Source record: 74020

John Miles wrote in message <36B4F9A6.5843@pop.removethistomailme.net>...
<snip>
>> I have encountered a new problem. The oscillator does not tune smoothly
as
>> the voltage on the diode is changed. Instead the oscillator jumps in
>> discrete steps. Has anyone heard of this? Thanks greatly.
>>
>> Bert Douglas
>
>Sounds like you are switching "modes," so to speak, instead of actually
>tuning the oscillator. (Actually, I didn't know Schottky diodes had a
>significant variable-capacitance characteristic. Are you sure you're
>using the right type of diode?)

Ok, so what is the cause of "mode switching" and how do I stop it?

As for the diodes, there is a graph of capacitance versus reverse voltage
given in the data sheet. Apparently my application was anticipated.
Capacitance varies from about 0.7 to 0.3 picofarad over the range of 1 to 4
volts. This is just in the range I need. It is not particularly linear,
but neither are other varactors.

It is interesting to see what happens when the diodes get partially forward
biased. There appears to be a mode that is chaotic (in the mathematical
sense). I am using a repetitive sampling scope, and there are some
interesting displays that look just like a flag waving in the wind.

1395. "haighway Zapper" radar detector tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Jeremy <fireman13@samnet.net>
Message-ID: <MYit2.3127$Pj4.63141@newsfeed.slurp.net>
Source record: 73818

i'm looking for a radar detector tester... anyone know where i could find one? or even diagrams on how to build one
thanks

fireman13@samnet.net

1396. FS Antenna Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990201190043.01215.00002511@ng-ft1.aol.com>
Source record: 73819

```
For Sale 1500 Watt Antenna Tuner
Roller Inductor/Air Variable
built in 1500W Dry Dummy Load
$450.00 + shipping
From Austin, Texas
```

1397. Re: "haighway Zapper" radar detector tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01be4e44$b9e3a880$ee8492d0@Bit-Net.bit-net.com>
Source record: 73820

> Jeremy <fireman13@samnet.net> wrote in article
> i'm looking for a radar detector tester... anyone know where i could find
> one? or even diagrams on how to build one
> thanks

Try a red sports car on any freeway ... :-)
73, DavidC K1YP

1398. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b64a16.5203825@newshost>
Source record: 73821
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

On Mon, 01 Feb 1999 16:06:06 GMT, Dana@Source.Net (Dana H. Myers K6JQ)
wrote:
>[snip]
>Unless you're using one with an integrated transceiver, Ethernet
>controllers are externally clocked, and can be clocked at rates
>other than 10Mbps (such as 2Mbps). Some of the controllers will
>even allow you turn off the Manchester encoder, which is ideal.
>The Intel 82586, still commonly found on older Ethernet cards
>(perhaps you can pick a few up at a swap meet or computer store
>used bin), is a fully-featured serial data engine (though writing
>drivers for it is not for the faint of heart).
>
>In other words, you can probably scrounge an Ethernet card which
>makes a perfectly fine serial data engine.

Hi Dana,
Yes, I agree about the underclocking. I didn't think you
could still get cards like that anymore, but if you can, go for it!
Modern transceiver chips will have an onboard PLL (or more likely, a
delay locked loop) which will have a limited pulling range.

I'm not sure why you'd want to disable the Manchester encoder. Sure,
it'll halve the bandwidth, but it'll make clock recovery at the other
end quite difficult, as ethernet controllers don't scramble the data,
which means that if you send a packet of 1500 zero bytes, you won't
receive any data transitions for 1500 x 8 = 12000 bit periods. This
is (more or less) impossible to decode.
You'll also lose DC balance, which can upset AFC, etc.

>Dana K6JQ
>Dana@Source.Net

Regards,
Allan.

1399. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b6282c.19242836@news.online.no>
Source record: 73822
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

On Mon, 01 Feb 1999 14:30:17 +0100, Stein-Olav Lund <stein@iet.hist.no> wrote:

>
>
>Ron Higgs wrote:
>
>> How to fix a drifting radio? Drop an anchor . . .
>
>No, you don't have to...
>Remember, those are _boatanchors_, and will stay well put...
>
>Nice article! I have temp.compensated a VFO I built some
>years ago, and I quite well remember the many trials with
>different N-characteristic caps..
>
or you just go and purchase the OXLEY tempatrimmer, which consists of a
differential capacitor with opposite temperature constant capacitors connected

73 jan-martin LA8AK

LA8AK@Online.NO
Due to severe fault on my PC, please DO NOT - uninvited - send long attachments!!!

1400. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b6289d.19355478@news.online.no>
Source record: 73923

On Mon, 01 Feb 1999 05:54:40 GMT, "Matt J. McCullar" <mccullar@flash.net> wrote:

>Nice, balanced set of opinions. Thanks to everyone who responded!!! I
>still haven't made up my mind yet, but now I know what to watch out
>for. I can really use the shelf space a CD-ROM would provide, and pix
>aren't all that important. Schematics are, though. :)
>
Matt!
Please don't let us stop you from buying QST on CD-ROMs, I bought 3 sets
(received them ten days ago), and still - considering the problems experienced,
I wish to buy some more from the period 1945-1990. I found many QST's at work
for the period 1947-1952 at work at Bergen Radio LGN and really enjoy reading
those old magazines as much as the later

73 Jan-Martin
LA8AK

LA8AK@Online.NO
Due to severe fault on my PC, please DO NOT - uninvited - send long attachments!!!

1401. Ceramic resonnators in bandpassfilter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36b65495.30612893@news.online.no>
Source record: 73924

Measured some resonnators tonite, to check the possible use in parallel resonnance application filters.
seems not too bad selectivity with ceramic resonnators instead of xtals for off-frequency standard receiver, but need at least two elements (I have 500 items) for sufficient stop band selectivity.
Measured tonight, see circuit attached. It seems that notch frequency varies with different parallel capacity load, and it is possible to tune parallel resonnance 'over' unloaded series resonnance frequency

The circuit consisted of a terminated input with 0.7pF input coupling capacitor and 0.7pF output coupling capacitor and a very high impedance amplifier to drive the measuring equipment. The device under test is connected between the two capacitors and ground, it is shunted with 0-140pF (100pf fixed and 40pF trimmer capacitor) - 2kB gif file is available to shown the simple block diagram.

Device: CSB250D Murata
tunable range 0-140pF: 249.24-251.15
Notch with 'zero' loading: 250.19kHz
selectivity:
248.0 -40
249.0 -46
249.5 -37.5
249.8 -23dB
250.0 0dB
250.2 -20dB
250.5 -26dB
251.0 -28.5

Device: Murata CSB500E
tunes 0-140pF: 509.59-516.93kHz
notch with 'zero' loading: 500kHz

Device: Murata CSB480E
tunes 477.36-482.94kHz
notch 478.37

Measured using Siemens 3W517 Pegelsender, D2006 Selektive Pegelmesser, frequency counter and 50 ohm RF mV-meter.

next experiment is two element bandpassfilter
I need a 250kHz filter for off-frequency standard receiving longwave broadcast stn, the filter should be as sharp as possible.

73 Jan-Martin LA8AK

LA8AK@Online.NO

Due to severe fault on my PC, please DO NOT - uninvited - send long attachments!!!

1402. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b64d64.6050269@newshost>
Source record: 73925
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

On Mon, 01 Feb 1999 11:16:39 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:
>[snip]
>Possibly so, but one of my requirements is that this project just act
>like a "virtual 10BaseT cable", with no fiddling around with Ethernet
>hardware, drivers, or clock rates at either end. It is hard to live
>with 2 Mbps when you're used to 10 -- this will be used for file sharing
>and streaming on the LAN as well as Internet access. Messing with the
>clock rates, disabling Manchester coding, or adapting the design for
>specific NICs or routers renders the whole thing less general and
>consequently, less useful. This is 1999, after all -- it is about time
>someone came up with a truly general-purpose, idiot-proof 10-megabit
>radio link for modern LAN hardware. :-)

Hi Jim,

I agree about that last statement. If you could make a cheap
commercial quality "wireless ethernet bridge", it would sell like
hotcakes. When I used to work for a microwave comms company, it
seemed every second customer request would be for such a product. We
could sell them microwave links for 30 phone channels (this was one of
our main products), but we had nothing for their computer networks.

The typical customer would be a small or medium sized business that
had a head office, and a new, small office within a few km of head
office. They wanted to extend their PABX and their computer network
to the new site, without having to pay phone company rates on data
lines.

I did some market research, and came up with the following
conclusions:

1. The box at each end will simply plug into the ethernet and need no
configuration. Customers don't seem to like configuring bridges.

2. You really don't need 10Mbps. *No* 10base-anything ethernet can
equal this figure, even asymptotically. You can get pretty close in
bursts with a modern server fed from an ethernet switch though. This
would not be a typical application.
I contend that your "file sharing and streaming on the LAN as well as
Internet access" would suffer little subjective degradation at even
1Mbps. Well, maybe. There will definitely be times when you notice
the difference, but most of the time you won't.
It helps to filter out packets that don't need to traverse the link in
this case.

Most business users are just happy to have connectivity.
[I should point out that my research was done before web browsing became a significant part of network traffic. Even so, all Internet traffic for a small to medium sized company will get funnelled into a single feed of typically < 1.5Mbps. Even ADSL (in practice) doesn't get close to 10Mbps.]

2b. Even if you get 10Mbps, what happens when you connect to a 100BaseT network? Will you need 100Mbps then? Repeat argument with 1000BaseT.

3. It is desirable to not share collision domains across the two ends of the link for three reasons:
a. A shared collision domain will limit the distance you can transmit (due to the maximum delays allowable in the ethernet spec) to a few km (IIRC). If you don't share the collision domain, you can transmit over any distance.
b. This saves link bandwidth by not transmitting useless information (which only matters if the link rate is < 10Mbps).
c. The need to send collisions across the link means that when the link gets noisy (and they all do, at some time) then you will trash the network at each end.

4. The conclusion was that you need a router, bridge or switch (preferably with packet filtering) at each end, regardless of the data rate. Since you can build one with a few chips costing perhaps US$40, this wouldn't seem to be a problem.

Venture capital, anyone?

>-- jm KE5FX

Regards,
Allan.

1403. Re: Amplifier (2watts to 20, 35, 40, whatever)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: djzman@execpc.com
Message-ID: <795q65$2kt$1@nnrp1.dejanews.com>
Source record: 73926

Far Circuits in Dundee, IL also sells printed circuit boards for many of the plans found in the Motorola Application notes. They also sell a wide variety of other printed circuit boards. E-mail at farcir@ais.net. Phone: (847)836-9148

Since many of the cool plans rely on precise printed circuit board paterns for the input and output matching circuits, this is a good way to save a bunch of time and frustration, while getting your hands dirty.

Dan

In article <36b309e9.3896315@netnews.worldnet.att.net>,
hinermad@worldnet.att.net (David Hinerman) wrote:
> On Fri, 29 Jan 1999 22:58:38 -0800, "Rollins" <rollins@island.net>
> wrote:
>
> > Hello. I'm looking at building an amp. for my ht. It puts out around 2
> >watts, and i'd like to go up around 20-40 watts. Does anybody have a
> >schematic, ive had no luck finding one on the net. Thanks.
>
> Motorola has had a lot of good amplifier designs in their RF compnents
> databooks & application notes. They have a lot of their data online
> now. There are links to Motorola RF components at
>
> http://mot-sps.com/rf
>
> I don't know if the application notes are online or not. If you can
> find an old (70's - 80's) Motorola or RCA RF Transistor Databook it'll
> have a lot of these circuits.
>
> Also, I purchsed a 2M amplifier kit about 10 years ago. It had the
> difficult-to-find parts and a PC board. I had to provide the box,
> connectors, and other common (at Radio Shack) pieces. I -think- the
> kits was from Ramsey Electronics (www.ramseyelectronics.com). The kit
> at the time was about $30 US, but it was worth it to not have to
> mail-order all the parts. Worked pretty well, too - I used it with my
> handheld to operate mobile.
>
> Good luck with the search!
>
> Dave
>
>

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1404. 6146B:pair needed!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: erpi@junction.net
Message-ID: <795nut$2ql$6@news.junction.net>
Source record: 73927

Hi! my name is Eric,I am looking for a pair of 6146B new,
if you have those tubes please email me with the price
in canadian $ if possible.also looking for 1 (6D10) and
1 (6AV11) Thanks in advance.....Eric
Net-Tamer V 1.11.2 - Test Drive

1405. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36B66DE8.9AECC909@home.com>
Source record: 73928

Microchip has an excellent website. They are the mfr of the PIC chips. You can download all sorts of software and libraries. Parallax (www.parallaxinc.com) has a good site with links to hosts of STAMP applications. The Basic Stamp I and II are based on Microchip IC's with a built in compiler. Micro-Engineering Labs has an excellent site also with great links. There is also an 8 bit microcontroller news group! All the above are easy to find.

The Stamp is very easy to program, but comparatively slow. This isn't a problem in the types of applications you mentioned and some of the solutions are presented right on their webpage.

For a frequency counter you might be better off using an off the shelf Harris Semi chip like, I believe, the 7217, if all you want to do is count. If, however, you want to use a Voltage to frequency converter as part of an analog to digital converter, then the Stamp can fit the bill. I believe it counts pulses in 10uSec intervals.

Jack Walton

Chris Mcdonald wrote:

> I'm planning on building some homebrew gear and I was woundering
> - can you make a pic controled oscillator?
> - how do those PIC based frequency counter work?
> - can you decode cw with a PIC
> - can you decode DTMF with a PIC
> Also are there any websites with schematics for a 2 meter transciver
> or transmitter?
> And last but not least are there any websites with infomation on how
> to make balum's?

1406. Re: ANTI-CW people are liberals and would want to see Clinton go fr...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36ce8185.1199553855@news.atl.bellsouth.net>
Source record: 73929

On Sun, 31 Jan 1999 22:58:54 -0600 (CST), electronstream@webtv.net (Doug Hancock) wrote:
>I tend to agree with Steve's comments. Knowing the code is an integral
>part of learning the basics of radio transmission and reception. How can
>one possibly understand how to adjust and diagnose a ssb transceiver
>without first knowing how to put a clean cw signal on the air, which is
>the simplest form of transmission known to me?

Huh? A0 is the simplest form of transmission. Generating a clean
carrier requires no knowledge of Morse Code, though it does require
some knowledge of RF circuitry.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1407. RE NEC 1022A demod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: mick@uq.net.au
Message-ID: <36b68475.24095212@news.uq.net.au>
Source record: 73930

Hi anybody got any mod's or kits for the above to rx 1250 ATV?

Mick VK4JHM

1408. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <36B695CA.6C8ECB59@berlin.snafu.de>
Source record: 73931

Bert Douglas wrote:

> Ok. Good point. I suppose stray inductance is bad too. But the only
> source is the bias supply. I am using lambda/4 skinny traces. But there
> could be some coupling between them, as they have to run fairly close
> together. Do you think this could be the problem? What is the normal
> practice on bias supply lines? There seems to be a lot of freedom in the
> choice of attachment points for the bias lines. I just joined the bias
> lines to the main 50ohm microstrip as close to the transistor as possible.
> I suppose I could separate the bias lines more and put a grounded line
> between them.

Backwards tuning is a common symptom in vcos. It happens when parasitic
parts of your circuit get into resonance and your transistor likes this
resonance better.

Make sure that your stripline resonator is the only thing in the VCO
that has a Q worth speaking of. Resonant chokes are an invitation
to desaster.

Try to modify the circuit so that one side of the tuning diode is at
ground
if this is not already the case. This leaves you with one choke to feed
the tuning voltage to the diode. The size of the choke should be like a
"thick"
0805-resistor with 3 or 4 turns of 0.1 mm wire wound closely. Put a 470
Ohms resistor in series to spoil the Q of the coil. Attach the bias
choke at a low impedance point.

Use the smallest de/coupling capacitors possible. 100 nF/1206 has a
series resonance of 7 MHz. Above this frequency it behaves like an
inductor.
You could easily hit the series resonance of an innocent looking
1000 pF capacitor with your VCO.

Avoid back-to-back tuning diodes until you have everything else
under control. While they may help the large signal behaviour they
make biasing more complicated.

Common low cost varactors for this frequency are Siemens BB801 / BB803.
Schottky diodes may work, but are optimized as switches/rectifiers.

regards, Gerhard

--
on the air: DK4XP
in the air: D-8551

1409. FA: 30ea. 6LF6/6MH6 GE Sweep Tubes (NOS)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19990202001237.01107.00001832@ng-cc1.aol.com>
Source record: 73932

30ea NOS GE sweep tubes in original boxes. See Ebay item #62769736. This is a "Dutch" auction so you may bid on any quantity; one or all.

1410. HP SPECTRUM ANALYZER W/BOOKS WKNG

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7965e1bne1@nnrp1.dejanews.com>
Source record: 73933

HP 141T storage mainframe with 8553b RF section and 8552b IF section. unit is fully operational. have repair/operating books for rf/if sections. no book for mainframe. freq range is 0-110mhz. plug ins allowing microwave coverage are available on the surplus markets. $625 plus shpng via USPS. check tuckers price for this unit minus books! thanks robert cruz miami fl

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1411. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: The Captain <cincpac@nightmail.com>
Message-ID: <36B6905D.A8C95A92@nightmail.com>
Source record: 73934
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

HamMan wrote:
>
> No-Code whiners are liberals. They don't like something so they trash other people to make themselves feel better. That is why they like the ARRL proposal too. They can get something they don't have to work for.

HamMan's post is liberally sprinkled with the word liberal.

First, the amaterur radio service is a grant, privilege, license program, whatever you want to call it, established by ALL U.S. citizens through the FCC. If a large number of Americans want to establish a licensing program without Morse Code requirements so be it.

As for Clinton, I don't give two hoots about the man BUT if the President of the US can't get laid, then I don't know who can.;-)

As a no code whiner I am not out to trash other people, only to make the radio amateur program accessible to more U.S. citizens.

Dropping Morse Code doesn't mean you don't have to pass any test. A one hundred question test with more radio theory would be a more appropriate test. Knowing or not knowing code doesn't enhance my knowledge of operating a station safely and competently.

When the FAA made the instrument rating easier to obtain pilots howled how the system would be degraded. Nothing of the sort happened. The requirements for obtaining a ham license can remain stringent without requiring code--IT IS KNOWLEDGE, COMPETENCY, SAFETY AND SKILL THAT SHOULD NOT BE COMPROMISED.

Why not incorporate a "practical" test and have the applicant identify resistors, transistors, a SWR meter, or whatever.

1412. Re: Spice-y Oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: rexa*nospam*@dnai.com
Message-ID: <36bca724.102476277@news.dnai.com>
Source record: 73935

If you can still find it, a good book on the subject:

Inside SPICE
Overcoming the Obstacles of Circuit Simulation

Ron M. Kielkowski
McGraw-Hill, Inc.
1994

ISBN 0-07-911525-X

- Rex

1413. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36B6B743.46BBD79B@teleport.com>
Source record: 73936

I don't know if this bears directly on your problem, but. . .

In virtually all the books and articles I've seen on negative-resistance oscillators, the analysis is blithely done at a single frequency. But my eyes were really opened when I did a Super-Compact sweep of a microwave oscillator I had designed. The input resistance was negative over quite a wide range of frequencies, and a given reactance would resonate it at two or three different frequencies. The combination of the collector load (including DC feed system as well as intended load), transistor parasitics, and emitter circuitry (it was a common-base design) had multiple resonances over the range where the transistor had gain. It took a lot of time and effort to design collector and emitter feed systems which would keep the emitter resistance positive or no more than slightly negative except at or near the frequency I wanted it to oscillate. My model was pretty good -- I could quite accurately predict oscillation at particular frequencies as I modified the circuit.

This is something you might need to look into. In my experience, negative resistance oscillators can be a whole lot trickier than most of the articles and books would lead you to believe.

Roy Lewallen, W7EL

1414. 500Khz Closure - The end of Radio Telegraphy

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Stew <vkz-75@geocities.com>
Message-ID: <89zt2.5$En1.1122@vic.nntp.telstra.net>
Source record: 73937

The website for the closure of 500Khz is now up and running at:

www.geelong.hotkey.net.au/~swilson/500khz_close

Cheers;
Stew

1415. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Emil Blaschek <emil.blaschek@siemens.at>
Message-ID: <36B6C8D0.D29A8871@siemens.at>
Source record: 73938
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Why Bother with FSK .. Take a look at QAM64

Data_rate 10MBit/sec S
Seps/sec 1.6 Symbols/sec
Bandwirh 3.2 MHz

1416. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b6df55.43395393@newshost>
Source record: 73939
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

On Mon, 01 Feb 1999 18:27:39 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:
>[snip]
>Probably the biggest obstacle to this idea isn't technical or economic,
>but regulatory. I am not sure what the licensing requirements are, or
>if even an amateur license allows one to chew up 50, 60, or 70 MHz of
>prime 24 GHz real estate with something like this. I'll have to look up
>the relevant FCC regs one of these days. It is not a big deal in my
>particular case since I only need to run enough ERP to make it across a
>parking lot, but widespread deployment of such a system would
>undoubtedly have to be done entirely at the users' risk, legally
>speaking.
>[snip]
>In all seriousness, though, the legal aspect of the
>problem is one reason I want to learn more about what determines things
>like the minimum usable bandwidth and such.

Hi John,
Do you remember my post of a few days ago which described an
FSK 2Mbps X band full duplex radio? It used a channel spacing of
7MHz, and had -80dBc out of band Tx spectrum. This was legal for that
band in Australia (where it was designed). So you can definitely do
what you want without using too much bandwidth.
(This performance required filtering the baseband Tx signal before the
frequency modulator (an X band DRO). The Rx baseband signal was
cleaned up with comparators.)

I'm not sure what the FCC will allow, but in Australia there are
certain bands which do not require licenses if the transmit power is
below a certain level (something like 0dBm). This much power can get
your signal quite far if the dishes have enough gain. We just
happened to make dishes too, so they were just lying around.
Sometimes you get lucky ;-)

I know that the FCC have allocated some bands for low power spread
spectrum comms, for applications such as lans, etc. The Harris PRISM
chipset will do 11Mbps at 2.4GHz, but it might only just make it
across your 150' parking lot. You might do better with some decent
antennas.
http://www.semi.harris.com/prism/prism.htm
Why don't you get one (pair) of their evaluation boards?

If you don't want to use spread spectrum, I once designed a 38Mbps
full duplex radio modem for 15MHz wide channels. Don't try this at

home, kiddies! If I was doing it again, I would probably use some of the newer digital radio chipsets from Harris, Analog Devices or Graychip. They take all the fun out of the design :-)

Regards,
Allan.

1417. Re: Amplifier (2watts to 20, 35, 40, whatever)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <36b6f581.3517461@news.nemaine.com>
Source record: 73940

On Tue, 02 Feb 1999 03:07:53 GMT, djzman@execpc.com wrote:

>Far Circuits in Dundee, IL also sells printed circuit boards for many of the
>plans found in the Motorola Application notes. They also sell a wide variety
>of other printed circuit boards. E-mail at farcir@ais.net. Phone:
>(847)836-9148
>
See also their website at:

http://www.cl.ais.net/farcir/

Ken

1418. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b6ee7d.47275846@newshost>
Source record: 73941
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Thanks Emil,
This was posted to amateur radio and homebrew newsgroups.
Do you really think John can just whip up a QAM64 modem with a soldering iron and some bits and pieces from around the lab?
QAM-x for x > 4 will require mountains of digital circuitry in both Tx and Rx. To design a "practical" QAM modem from scratch will take a small team at least a few months. Trust me, I've been there.
It will require adaptive equalisers in the receiver to cope with multipath across the carpark. Symbol timing recovery is a pain. You will need some sort of convolutional FEC (trellis coding) as well as Reed-Solomon if you want any sort of useable BER. The designers will need to be familiar with high speed ADC and DAC designs, know how to design high speed digital logic, need a high speed digital CRO for debug, be able to handle high pin count surface mount chips, have an FPGA or CPLD development environment, etc.

FSK has the advantages of robustness, simplicity and low cost. It also interfaces simply to manchester encoded signals.
FSK starts to sound quite attractive when you take this into account.

Emil, I notice you work for Siemens in Austria. Do Siemens make QAM chipsets? I didn't find any on the web.

Allan.

On Tue, 02 Feb 1999 10:43:44 +0100, Emil Blaschek
<emil.blaschek@siemens.at> wrote:

>Why Bother with FSK .. Take a look at QAM64
>
>Data_rate 10MBit/sec S
>Seps/sec 1.6 Symbols/sec
>Bandwirh 3.2 MHz

1419. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Who cares? <oxaspam@xs4all.nl>
Message-ID: <36baf778.11850603@dds.nl>
Source record: 73942
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc,nl.radio.amateur

On Mon, 01 Feb 1999 22:13:22 -0800, Richard Steven Walz
<rstevew@armory.com> wrote:

>John Lundgren wrote:
>>
>> guesswho@wxs.nl wrote:
>>
>> > On Sat, 23 Jan 1999 10:52:49 +0100, radio_man@usa.net (radio_man)
>> > wrote:
>>
>> > >http://www.xs4all.nl/~barendh
>>
>> > REDUCE YOUR PRICES!!!! YOU'RE TOO EXPENSIVE!
>>
>> If they are in U.S. dollars, yeah, but then maybe they're not, they may
>> be in Dutch guilders or whatever.
>---
>Even in NLD, which I take to be Dutch Guilders, this guy has everything
>priced two to four TIMES the price of everyone else, and I checked three
>major catalogs!! 8.50 NDG for a P8031AN ?? This is a sub-US$1.00 part!!
>27C256 12.90 NDG ?? I don't think so!! This guy is an opportunistic
>rip-off!! I hope people who see his site shop around first!!
>-Steve

I agree! We're well up in the matter... In Holland, Barend is also
known as "schrikbarend duur" [appallingly expensive] :))) <grin>
^^^^^^

Oxazepam.
[7-chloro-1,3-dihydro-3-hydroxy-5-phenyl-2H-1,4-benzodiazepin-2-one]

1420. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <36b6f6b4.49379123@newshost>
Source record: 73943
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

On Mon, 01 Feb 1999 17:20:40 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:
>[snip]
>I'm not obsessed with optimizing bandwidth usage, anyway, as long as it
>works.

Hi John (again),

In other posts in this thread, I mentioned that the Tx bandwidth can
be reduced by pre-filtering the baseband signal.

The bandwidth can also be reduced by dropping the baud rate, by
increasing the number of bits per symbol, without the complexities of
a QAM modem. With a simple circuit inside a small GAL, you could
perhaps go to 4 level FSK, which would give 2 bits / symbol, and halve
the bandwidth. (Actually, this would reduce bandwidth by a factor of
4 from the original manchester encoded signal.)
You could go to higher levels of M-ary FSK, but anything beyond 4 will
probably require a digital slicer in the receiver. Four levels can
easily be decoded with a simple analog comparator circuit with
adaptive thresholds.

You will also need to scramble the data, to get around the threshold
drift problem on packets with long runs of 0s or 1s. The receiver
will use a self-synchronising descramber.

Symbol timing recovery will likely use transition detectors on the
comparator outputs and a PLL. You could do this digitally (if you
have a reference clock high enough) or you could do it with an analog
PLL.

Lets compute the baseband bandwidth for 4 levels at 10Mbps.
Assume rolloff factor in RRC filters gives 40% excess bandwidth.
Symbol rate = 5MHz.
Baseband Bandwidth = 3.5MHz

This really is a simple, cheap circuit! Reply if you want more
details.
Actually, I'd love to do the full design. Unfortunately my current
employers would probably not like it if I suddenly stopped designing
frame relay processors and started designing modems.

>-- jm KE5FX

Regards,
Allan.

1421. Re: 6146B:pair needed!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <36B70E4A.167EB0E7@my-dejanews.com>
Source record: 73944

erpi@junction.net wrote:
>
> Hi! my name is Eric,I am looking for a pair of 6146B new,
> if you have those tubes please email me with the price
> in canadian $ if possible.also looking for 1 (6D10) and
> 1 (6AV11) Thanks in advance.....Eric
> Net-Tamer V 1.11.2 - Test Drive

You might want to take a look at Antique Electronic Supply Online!

"http://www.tubesandmore.com/"

They have lots of tubes for sale at what appear to be reasonable
prices.

Martin

--
Martin E. Meserve martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1422. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <zyEt2.2740$OS5.2991552@news3.mia>
Source record: 73945

Roy Lewallen wrote in message <36B6B743.46BBD79B@teleport.com>...
>I don't know if this bears directly on your problem, but. . .

>The combination of the collector load (including DC feed
>system as well as intended load), transistor parasitics, and emitter
>circuitry (it was a common-base design) had multiple resonances over
>the range where the transistor had gain. It took a lot of time and
>effort to design collector and emitter feed systems which would keep
>the emitter resistance positive or no more than slightly negative
>except at or near the frequency I wanted it to oscillate.

Hmm. "DC feed system". That sounds a whole lot more sophisticated than what I have. The text books seem to neglect this. I would love to hear more.

I am not modeling the feed system. But without it, there is only one resonance, and there is negative resistance only near resonance. But clearly my model is not complete.

Thanks,
Bert Douglas

1423. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Loren Coe <lcoe@convex.COM>
Message-ID: <7976uc$nre@phoenix.rsn.hp.com>
Source record: 73946
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <nXos2.141$lp.702@news6.ispnews.com>,
Bruce Nepple <brucen@imagenation.extra.com> wrote:
>The tests I did (years ago) basically showed that the eye integrated the
>light and there was no brightness difference over a 10:1 ratio. Have you
>actually done this? Is there a particular frequency where this effect
>works? > >bruce
>
>JD wrote in message <36b0f91d.3679628@news.atl.mindspring.com>...
>>If you wish to get the max brightness out of an led there is a way of
...>>Design a small circuit that puts out a squarewave in

i remember hanging a probe on an led some 25 years ago and seeing a
pulsed waveform. my reason for looking was that the common story
was the leds were _all_ pulsed, to give a higher apparent brightness.

of course, these device were just coming into common use and quite
expensive, so while the waveform was indeed pulsed, i cannot really
say that it was not for some other purpose, like extending life,
or allowing cheaper total cost by mitigating any effects of 20%
resistors in the bias circuitry.

perhaps the device lasted longer at some level of "perceived" or
absolute brightness with the extra circuitry. one thing for sure,
they didn't add components just to test some design theory. of course,
now, this may be a long past issue...YMMV.

my 2cents

loren respond to lcoe@rsn.hp.com

< do you use KILLFILES? if no, you should. are they fully implemented >
< and easy to use on your system/isp/news reader? if no, you should find >
< out why, complain, change news readers or isp's. rn or trn will add >
< a subject with two keystrokes (^A, j), fully killing all present and >
< future posts to the thread being viewed. now, THAT'S a NEWSREADER !!! >

1424. Re: 2.5ghz VCO progress

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36b738e5.0@news.netwalk.com>
Source record: 73947

Bert Douglas wrote in message <0_0t2.1521$OS5.1850157@news3.mia>...
>>I have encountered a new problem. The oscillator does not tune smoothly
as
>the voltage on the diode is changed. Instead the oscillator jumps in
>discrete steps. Has anyone heard of this? Thanks greatly.
>
What are you controlling the voltage with?

Is it a potentiometer, and does _it_ vary smoothly?

Jim
N8EE

1425. Re: Homemade Paddles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <36B73A9B.446B9B3D@my-dejanews.com>
Source record: 73948

KA8DED wrote:
>
> Looking for web sites that have construction articals on makeing
> paddles for a electronic keyer I'm building.
>
> Thanks

I don't know of any web sites, but, I seem to remember that there were several articles in QST and 73 magazine, years ago, about homebrew paddles. The one's that I remember used blank printed circuit boards for the paddles, because of their stiffness. Mabey someone could look up some articles from the QST CDRom set.

Good Luck,
Martin

--
Martin E. Meserve martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my responses may not be as timely as you, or I, would like them to be. If I seem to be ignoring you, send me another E-Mail to jog my memory. Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1426. FS: LCD BACK LIT COMPUTER DISPLAYS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0202991030350001@murphy1.cts.com>
Source record: 73949
Cross-posted to:
rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.equipment

NEW COND. WITH TECH DATA $12 EA.

INFO AND PIC AT:

http://209.239.34.153/murphyjunk/4_MORE_SURPLUS_STUFF

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1427. Old diode cross reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: adam@onramp.net
Message-ID: <MPG.1121036d6987c35a989695@news.onramp.net>
Source record: 73950
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components,sci.engr.semiconductors

I am looking for replacements for some old diodes. The part
numbers are 1N191, 1N458, and another that is marked only as a 500ma
silicon. Can anyone help me to find a suitable replacement for these,
and let me know the source of the data?

Thanks!

****
Adam Adkins, KM5SS
adam@onramp.net

1428. Re: Test do NOT read

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: tbone107@aol.com
Message-ID: <19990202141641.03592.00001007@ng49.aol.com>
Source record: 73951

>Test do NOT read
>From: Arthur Moe <kb7ww@uswest.net>
>Date: 2/2/99 12:50 AM Eastern Standard Time
>Message-id: <36B69224.480B557F@uswest.net>
>
>Test
>

I did...and I'm glad I did...and if given the chance, I'd do it again.

1429. Re: Old diode cross reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: "Thomas C. Sefranek" <tcs@cmcorp.com>
Message-ID: <36B75B95.4E82248B@cmcorp.com>
Source record: 73952
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components,sci.engr.semiconductors

Adam Adkins wrote:

> I am looking for replacements for some old diodes. The part
> numbers are 1N191, 1N458, and another that is marked only as a 500ma
> silicon. Can anyone help me to find a suitable replacement for these,
> and let me know the source of the data?
>

I have this info at home.
If you want, send me E-Mail
and I'll send you the specs from the (Old) Motorola Semiconductor
Handbook.

>
> Thanks!
>
> ******************
> Adam Adkins, KM5SS
> adam@onramp.net

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

1430. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B765D7.4070@pop.removethistomailme.net>
Source record: 73953
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Allan Herriman wrote:
>
> On Mon, 01 Feb 1999 17:20:40 -0800, John Miles
> <jmiles@pop.removethistomailme.net> wrote:
> >[snip]
> >I'm not obsessed with optimizing bandwidth usage, anyway, as long as it
> >works.
>
> Hi John (again),
>
> In other posts in this thread, I mentioned that the Tx bandwidth can
> be reduced by pre-filtering the baseband signal.
>
> The bandwidth can also be reduced by dropping the baud rate, by
> increasing the number of bits per symbol, without the complexities of
> a QAM modem. With a simple circuit inside a small GAL, you could
> perhaps go to 4 level FSK, which would give 2 bits / symbol, and halve
> the bandwidth. (Actually, this would reduce bandwidth by a factor of
> 4 from the original manchester encoded signal.)
> You could go to higher levels of M-ary FSK, but anything beyond 4 will
> probably require a digital slicer in the receiver. Four levels can
> easily be decoded with a simple analog comparator circuit with
> adaptive thresholds.
>
> You will also need to scramble the data, to get around the threshold
> drift problem on packets with long runs of 0s or 1s. The receiver
> will use a self-synchronising descramber.
>
> Symbol timing recovery will likely use transition detectors on the
> comparator outputs and a PLL. You could do this digitally (if you
> have a reference clock high enough) or you could do it with an analog
> PLL.
>
> Lets compute the baseband bandwidth for 4 levels at 10Mbps.
> Assume rolloff factor in RRC filters gives 40% excess bandwidth.
> Symbol rate = 5MHz.
> Baseband Bandwidth = 3.5MHz
>
> This really is a simple, cheap circuit! Reply if you want more
> details.
> Actually, I'd love to do the full design. Unfortunately my current
> employers would probably not like it if I suddenly stopped designing
> frame relay processors and started designing modems.

>
> >-- jm KE5FX
>
> Regards,
> Allan.

Yes, I'm in the same boat -- my current employer would look dimly on a long-term research project to develop a multi-level FSK modem when I'm supposed to be writing software. :-) That Harris link from your other post looked intriguing, looks like they have a lot of good app notes that might help me out even if I don't cough up the $$$$ for their eval boards.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1431. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36B766BC.1729@pop.removethistomailme.net>
Source record: 73954
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

Allan Herriman wrote:
>
> Thanks Emil,
> This was posted to amateur radio and homebrew newsgroups.
> Do you really think John can just whip up a QAM64 modem with a
> soldering iron and some bits and pieces from around the lab?
> QAM-x for x > 4 will require mountains of digital circuitry in both Tx
> and Rx. To design a "practical" QAM modem from scratch will take a
> small team at least a few months. Trust me, I've been there.
> It will require adaptive equalisers in the receiver to cope with
> multipath across the carpark. Symbol timing recovery is a pain. You
> will need some sort of convolutional FEC (trellis coding) as well as
> Reed-Solomon if you want any sort of useable BER. The designers will
> need to be familiar with high speed ADC and DAC designs, know how to
> design high speed digital logic, need a high speed digital CRO for
> debug, be able to handle high pin count surface mount chips, have an
> FPGA or CPLD development environment, etc.
>
> FSK has the advantages of robustness, simplicity and low cost. It
> also interfaces simply to manchester encoded signals.
> FSK starts to sound quite attractive when you take this into account.
>
> Emil, I notice you work for Siemens in Austria. Do Siemens make QAM
> chipsets? I didn't find any on the web.
>
> Allan.
>
> On Tue, 02 Feb 1999 10:43:44 +0100, Emil Blaschek
> <emil.blaschek@siemens.at> wrote:
>
> >Why Bother with FSK .. Take a look at QAM64
> >
> >Data_rate 10MBit/sec S
> >Seps/sec 1.6 Symbols/sec
> >Bandwirh 3.2 MHz

That would certainly be nice, if somebody had a black box chip to do
it. ECL in -> FM modulation signal out, and vice versa. But as noted
before, I don't get paid for this stuff. I only want a decent game of
Quake, not a doctoral EE research project. :)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1432. FS: MILITARY DA-189 DUMMY LOAD/WATTMETERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0202991337340001@murphy1.cts.com>
Source record: 73955
Cross-posted to: rec.radio.swap,sdnet.forsale,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

DA-189. GOOD COND. $60 EA. 3 FOR $150

PICT AT:

http://209.239.34.153/murphyjunk/6_ANTENNA_COUPLERS_LOADS_MIS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1433. Re: Old diode cross reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Bob Weiss <bweiss@carroll.com>
Message-ID: <36B78043.46BA8D91@carroll.com>
Source record: 73956
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components,sci.engr.semiconductors

Any of those types should be replaceable with the 1N400X series. ! amp forward current at varying PIV. a 1N4007 is good for 1kV, IIRC.

Bob Weiss N2IXK

Adam Adkins wrote:

> I am looking for replacements for some old diodes. The part
> numbers are 1N191, 1N458, and another that is marked only as a 500ma
> silicon. Can anyone help me to find a suitable replacement for these,
> and let me know the source of the data?
>
> Thanks!
>
> ******************
> Adam Adkins, KM5SS
> adam@onramp.net

1434. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <79815o$3o9$1@scotty.tinet.ie>
Source record: 73957

Chris Mcdonald wrote in message <794vi3$o6m$1@nova.thezone.net>...

>And last but not least are there any websites with infomation on how
>to make balum's?
>

Balun's?

www.nettaxi.com/citizens/ei9gq/atu.html

73, Ed. EI9GQ

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/

****

1435. FS: APS-104 radar modulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: nsworley@37hill.com
Message-ID: <36B7C0EB.5F30@37hill.com>
Source record: 73958
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew

I have 3 or 4 mil surplus modulator units from APS-104 search radar (likely from B-52 bomber - 1950s/60s vintage). These were used to fire a large pulse magnetron (in another unit). Contains a 4C35 thyratron, four 3B29 HV rectifiers and a few smaller tubes, oil caps, relays, transformers and other parts all in airtight aluminum canister. Also have copy of service manual. Unused, still in original box, $65 (pick up only - exceeds UPS size limit) from southeast Alabama. 36330 zip. NOTE: Please REMOVE the "ns" AND REPLACE the "37" with "snow" to spell "snowhill" in my email or call 334-347-5281.

1436. FS: X-band pulse magnetrons (used)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: nsworley@37hill.com
Message-ID: <36B7C2D1.12EA@37hill.com>
Source record: 73959
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have several Hughes (Litton) HAC-258025 radar magnetrons, 8.7-9.4 GHz, 100 kW peak, WR-112 flange, with elaborate high pressure hydraulic tuning unit on top, 20+ lbs. $32 each + UPS. All are untested, used with a large
pair of horseshoe alnico magnets. NOTE: Please REMOVE the "ns" AND REPLACE the "37" with "snow" in my email to spell "snowhill" to reply or call 334-347-5281.(no individual magnets f/s).

1437. wanted: Popular Electronics 1975

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: K Schneider <kschneid@pconline.com>
Message-ID: <36B7963F.1C142021@pconline.com>
Source record: 73960

Hi,
I'm interested in obtaining the PE from Jan and Feb 1975. If anyone out there has one PLEASE let me know.

Thanks for your time,
KS

1438. Re: Ernest Turner meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-02 00:00:00 UTC
From: John Wright <john@g3szg.demon.co.uk>
Message-ID: <7xvaRDAOFkt2EwtH@g3szg.demon.co.uk>
Source record: 73961
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

In article <01be4d34$9a44f080$LocalHost@simoncox>, Simon Cox
<simon.cox@breathe.co.uk> writes
>Info please on where I can get an Ernest Turner instrument fixed
>I don't think they exist any longer.
>
>simon.cox@breathe.co.uk
They used to be in High Wycombe run by G4NT I think
G3SZG

John Wright

1439. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Trevor <ironace@tidalwave.net>
Message-ID: <36B87E92.74866692@tidalwave.net>
Source record: 73873
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Steve Leong wrote:

> Does anyone know the availability of any "dummy" AA cells?
> (I've seen them in the past - they are plastic forms the same size of
> an AA cell, with a metal strip connecting the top and bottom contacts -
> basically a specialized jumper!).
>
> I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
> spaces for too many AA cells (excess voltage would damage radio). I need
> to insert two "dummy" AA cells to act as jumpers for these extra spaces.
> Already tried to solder jumpers in place - can't do it due to the metal
> they used for the contacts.
>
> Thanks for any assistance and advice!
>
> Steve KC6IJM

How about using wooden dowels with thumb tacks in the end with wire
connecting the thumb tacks

--
Check Out My WebCam!!

http://tidalwave.net/~ironace/webcam.html

ICQ me 8309550

Where there's a will, I want to be in it!

.

1440. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Greg Halpin <greg@halpin.com>
Message-ID: <36B88D9A.3036496F@halpin.com>
Source record: 73874
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Steve Leong wrote:
>
> Does anyone know the availability of any "dummy" AA cells?
> (I've seen them in the past - they are plastic forms the same size of
> an AA cell, with a metal strip connecting the top and bottom contacts -
> basically a specialized jumper!).
>
> I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
> spaces for too many AA cells (excess voltage would damage radio). I need
> to insert two "dummy" AA cells to act as jumpers for these extra spaces.
> Already tried to solder jumpers in place - can't do it due to the metal
> they used for the contacts.
>

Steve,

Have you checked at a Radio Shack? (Presuming you are located near one)

I have an old RS portable citizen's band radio that uses two dummy cells
when using 1.5V AA batteries instead of 1.2V AA rechargables. They are
a lead-like cast dummy with a thin body and normal sized top and bottom.
Perhaps they can get them for you as a replacement part ... radio is a
TRC-209, #21-1660 if that helps at all.

Greg Halpin

1441. Re: Help Re-Portable phone.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36b8957f.0@news.netwalk.com>
Source record: 73875

Colin wrote in message <792l3ipic1@news8.svr.pol.co.uk>...
>Can anyone help.
>I'm thinking of buying a digital portable phone for the home. Do they use
>the same kind of signal as the mobile phones. The kids use the phone a
lot,
>I'm concerned about health risks, brain tumors etc.. Thanks in
>anticipation, Colin
>
>

The problem is not with the type of signal, but with the frequency and power level.

The power level on a cordless telephone will be so low that it is of no concern. You will get more radiation during a holiday trip to the Swiss Alps!

I do not know what types of phones are available in the UK, but my next cordless phone is going to be a 900 MHz digital spread spectrum phone. They have the best operating range and better privacy than any other.

Jim
N8EE

1442. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: k5dh@rtis.ray.com
Message-ID: <79a4t1$rsl@news.rsc.raytheon.com>
Source record: 73876
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Try Radio Shack. Some of theeir CB walkie-talkies come with
two dummy batteries (so the user can load either ten NiCd's
or eight alkalines + two dummies). They surely don't sell
the dummy batteries over the counter, but I'd bet they can
order them as a service part for the CB W-T's. Try it!

73... Dean, K5DH

In article <MPG.112215054515f6e998969e@news.northgrum.com>,
leongst@mail.northgrum.com says...
>
>Does anyone know the availability of any "dummy" AA cells?
>(I've seen them in the past - they are plastic forms the same size of
>an AA cell, with a metal strip connecting the top and bottom contacts -
>basically a specialized jumper!).
>
>I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
>spaces for too many AA cells (excess voltage would damage radio). I need
>to insert two "dummy" AA cells to act as jumpers for these extra spaces.
>Already tried to solder jumpers in place - can't do it due to the metal
>they used for the contacts.
>
>Thanks for any assistance and advice!
>
>Steve KC6IJM

1443. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <918071367.360615@cs1.sdd.hp.com>
Source record: 73877
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Steve OM,

Why not just make two out of wood, with a jumper? Cost is zero.
I made a "false" battery pack for my portacle VCR and camera (no,
not a 'cam-corder'), by cutting a block of wood the same size and shape
as the sealed battery, complete with two copper contacts and leads.
This enabled me to use the setup off my cigarette lighter jack in the car.
Another zero cost solution (my favorite kind!).

73,
Don, W6JL

Steve Leong wrote in message ...
>Does anyone know the availability of any "dummy" AA cells?
>(I've seen them in the past - they are plastic forms the same size of
>an AA cell, with a metal strip connecting the top and bottom contacts -
>basically a specialized jumper!).
>
>I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
>spaces for too many AA cells (excess voltage would damage radio). I need
>to insert two "dummy" AA cells to act as jumpers for these extra spaces.
>Already tried to solder jumpers in place - can't do it due to the metal
>they used for the contacts.
>
>Thanks for any assistance and advice!
>
>Steve KC6IJM

1444. FA: B&W coils on E-bay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B8B49B.DDB5C9DD@uswest.net>
Source record: 73878
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Old plug in coils.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=62063311

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=62056847

1445. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36B8DB35.5CA6E39F@hevanet.com>
Source record: 73879
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Mustang Maniac! wrote:

> Try Radio Shack. Some of theeir CB walkie-talkies come with
> two dummy batteries (so the user can load either ten NiCd's
> or eight alkalines + two dummies). They surely don't sell
> the dummy batteries over the counter, but I'd bet they can
> order them as a service part for the CB W-T's. Try it!
>
> 73... Dean, K5DH
>
> In article <MPG.112215054515f6e998969e@news.northgrum.com>,
> leongst@mail.northgrum.com says...
> >
> >Does anyone know the availability of any "dummy" AA cells?
> >(I've seen them in the past - they are plastic forms the same size of
> >an AA cell, with a metal strip connecting the top and bottom contacts -
> >basically a specialized jumper!).
> >
> >I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
> >spaces for too many AA cells (excess voltage would damage radio). I need
> >to insert two "dummy" AA cells to act as jumpers for these extra spaces.
> >Already tried to solder jumpers in place - can't do it due to the metal
> >they used for the contacts.
> >
> >Thanks for any assistance and advice!
> >
> >Steve KC6IJM

I've made them before. Take a piece of copper or brass tubing that's the
right size to
make connection at the positive end. Cut it the right length.
Take a piece of wood dowel the right diameter for the battery case and drill a
hole
down the center for the brass tubing. It's tough to get the hole centered, so
make it
oversize and use hotmelt glue to hold the brass in the center.
Can get all the parts at a hobby store. or hardware store or...

You can accomplish the same thing by cutting a slot down the side of the dowel

and running a wire between two thumbtacks.
miker

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

1446. horn antenna for 2.4 / 9.7 ghz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Max <francl@zaz.com.br>
Message-ID: <79akp8$me7$1@srv4-poa.nutecnet.com.br>
Source record: 73880

hi,
im searching instruction on how to design my own horn antennas.
(the waveguide mountable types) for the two freq. 2.4 & 9.7 ghz.
how does length and aperture influence the radiation?
what material is suitable? (low power device)
can you help? thanks in advance, cesco

1447. FA 1625 sockets 7ea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B8E813.73A83CDE@uswest.net>
Source record: 73881
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Look here
thanks

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=62465266

1448. WTB: sk-604 socket

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: WebMonkey <usethelink@below.org>
Message-ID: <36B8FC40.6365@below.org>
Source record: 73882
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

would like to aquire a socket for a 4x150G tube
says it needs an sk-604 or 2350 socket.
thanks for your time
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

1449. FA: Surplus Schematics Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B909F7.D13459B1@uswest.net>
Source record: 73883
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Great Book

Look here thanks

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=62482232

1450. FA: Millen jack bar & plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B92A81.6F29B54C@uswest.net>
Source record: 73884
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Great for that homebrew tuner or xmtr, see at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=62471036

Thanks

1451. Re: Steve Ciarcia article(Byte)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Shawn <cyberhax@thegrid.net>
Message-ID: <36B927D0.7170@thegrid.net>
Source record: 73885

Ciarcia used to run a nice web page...think it was Ciarcia Cellar, sorry
I don't recall the actual address. I wonder if you could expan on the
concept, perhaps we could forge something out here (sounds like a
keyboard decoder arrangement with LED's?).

Shawn WB6JWB

G345CDE wrote:
>
> The article I am trying to find has a column of Led's on the left and a row of
> them on the bottom. Supposedly, the computer scans them sequentially and waits
> for a button press, then scans the bottom row. After the second button press,
> the letter or word at the intersection of rows and column is entered into
> memory. I want to use this , or modify the idea, for my wife who has
> Parkinsons and cannot use the computer keyboard. I think it will be very
> helpful. I have searched the internet without success. Does anyone recall
> this article? If so, I would appreciate any information you have. Thanks.
> George W3ASE
> G345CDE

1452. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Dunedin <jira@clear.net.nz>
Message-ID: <pKGt2.677$F5.7005@news.clear.net.nz>
Source record: 73962
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

US freight costs are the killer to our business. We import
electronic stuff from the US. One package cost USD180 to
airfreight here from the US. It was faulty on receipt and
had to be sent back which cost USD30 equivalent. We deal
with several countries but the US is the disadvantaged
source simply because of its transportation costs.

John Lundgren wrote in message
<36B6638A.C20@mail.rsccd.org>...
>guess_who@wxs.nl wrote:
>

>> REDUCE YOUR PRICES!!!! YOU'RE TOO EXPENSIVE!
>
>If they are in U.S. dollars, yeah, but then maybe they're
not, they may
>be in Dutch guilders or whatever.
>

1453. Re: How to fix a drifting radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: maddog@io.com
Message-ID: <36b7dc8d.11967708@news.io.com>
Source record: 73963
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.antiques.radio+phono

On Tue, 02 Feb 1999 01:39:42 GMT, la8ak@online.no (J.-M. Noeding)
wrote:
>or you just go and purchase the OXLEY tempatrimmer, which consists of a
>differential capacitor with opposite temperature constant capacitors connected

Great idea! Anybody know a source for those in North America?

monty

1454. Re: Old diode cross reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <VKRt2.240$ok4.1028@news5.ispnews.com>
Source record: 73964
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components,sci.engr.semiconductors

Adam Adkins wrote in message ...
+AD4- I am looking for replacements for some old diodes. The part
+AD4-numbers are 1N191, 1N458, and another that is marked only as a 500ma
+AD4-silicon.

The 1N191 is a germanium diode rated for about 100 volts and around 100 mA.
The 1N458 is a silicon diode with a voltage rating of 200 volts. Depending
on how these are used, ordinary 1N4007 silicon (1 KV, 1 A) diodes +AF8-might+AF8-
suffice. The forward voltage of the 1N4007 will be about twice that of the
1N191. And the switching speed of the 1N458 is faster than a 1N4007. If
either of these properties is critical, you will need better replacements
than the 1N4007.

73, Barry L. Ornitz WA4VZQ ornitz+-U+AEA-dpnet.net

1455. Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be4f6c$7a11c600$LocalHost@simoncox>
Source record: 73965
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur

Can anyone point me in the direction of a UK company that could repair / rewind old Ernest Turner moving coil meters as used in Racal RA 17 receivers, thanks.

simon.cox@breathe.co.uk

1456. VHF Quad MOSFET question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36b84e64.0@news.netwalk.com>
Source record: 73966

Are there any quad MOSFETs that will make a good mixer for 144 MHz?

Jim
N8EE

1457. Re: VHF Quad MOSFET question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <36B85801.B5072ABE@arrl.org>
Source record: 73967

I recall the Si8901 literature makes mention of 150 MHz operation
but these devices may be collector's items.--Zack W1VT

Jim wrote:

> Are there any quad MOSFETs that will make a good mixer for 144 MHz?
>
> Jim
> N8EE

1458. FA AM-6154 AMP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36B8635A.8C98CC05@uswest.net>
Source record: 73968
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

See at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=62502331

1459. SB-401 INFO NEEDED!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: erpi@junction.net
Message-ID: <799qqm$u7s$5@news.junction.net>
Source record: 73969

Hi! is there someone who could tell me if I can replace
the 6146B in my SB-401 for tubes who will give me more output
if yes please email me... Thanks in advance
Eric.....73
Net-Tamer V 1.11.2 - Test Drive

1460. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: bshort@speedchoice.com
Message-ID: <B4996439CA8A8F9B.46CAC4B7B72E35C6.050FDBDCAB68DEC7@library-proxy.airnews.net>
Source record: 73970

There is a short review of QST on CDROM at my web page:

http://www.qex.net/k7on/books/qstrew.htm

I hope that you will take time to peruse other parts of the site:

http://www.qex.net/k7on/

73, Brian

In article <36b6289d.19355478@news.online.no>, la8ak@online.no says...
> On Mon, 01 Feb 1999 05:54:40 GMT, "Matt J. McCullar" <mccullar@flash.net> wrote:
>
> >Nice, balanced set of opinions. Thanks to everyone who responded!!! I
> >still haven't made up my mind yet, but now I know what to watch out
> >for. I can really use the shelf space a CD-ROM would provide, and pix
> >aren't all that important. Schematics are, though. :)
> >
> Matt!
> Please don't let us stop you from buying QST on CD-ROMs, I bought 3 sets
> (received them ten days ago), and still - considering the problems experienced,
> I wish to buy some more from the period 1945-1990. I found many QST's at work
> for the period 1947-1952 at work at Bergen Radio LGN and really enjoy reading
> those old magazines as much as the later
>
> 73 Jan-Martin
> LA8AK
> ---
> LA8AK@Online.NO
> Due to severe fault on my PC, please DO NOT - uninvited - send long attachments!!!
>

--
Brian Short 1994 E. Laguna Dr. Tempe, Az 85282
bshort@speedchoice.com >or< http://www.qex.net/
--

1461. Details needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be4f8e$4f70dea0$LocalHost@simoncox>
Source record: 73971
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap,uk.radio.amateur

Many years ago in a little town called Launceston in
Cornwall there used to be an electronics goodies shop.
They used to go to rallies and sell all sorts of interesting
stuff, trouble is I can't remember what they were called
and want to find out if they're still around and pass on the
details to someone I'm trying to help. Any ideas ?

p.s. I don't seem to be very good at finding things with
search engines or Yell UK hence the silly questions.

simon.cox@breathe.co.uk

1462. Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-03 00:00:00 UTC
From: leongst@mail.northgrum.com
Message-ID: <MPG.112215054515f6e998969e@news.northgrum.com>
Source record: 73972
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Does anyone know the availability of any "dummy" AA cells?
(I've seen them in the past - they are plastic forms the same size of
an AA cell, with a metal strip connecting the top and bottom contacts -
basically a specialized jumper!).

I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
spaces for too many AA cells (excess voltage would damage radio). I need
to insert two "dummy" AA cells to act as jumpers for these extra spaces.
Already tried to solder jumpers in place - can't do it due to the metal
they used for the contacts.

Thanks for any assistance and advice!

Steve KC6IJM

1463. Need bandswitch for Yaesu FL-2100B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36ba91ad.0@news1.ibm.net>
Source record: 73823
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Looking for the output side of the bandswitch for the Yaesu FL-2100B.

Lane Zeitler
Ku7i

1464. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF6ozu2.Dn8@netcom.com>
Source record: 73824

In article <36B66DE8.9AECC909@home.com>,
Jeanette D. Walton <jdwalton@home.com> wrote:
>For a frequency counter you might be better off using an off the shelf
>Harris Semi chip like, I believe, the 7217, if all you want to do is
>count. If, however, you want to use a Voltage to frequency converter as
>part of an analog to digital converter, then the Stamp can fit the
>bill. I believe it counts pulses in 10uSec intervals.

If you get down to the bare iron and program the PICs in assembler,
you can get access to all sorts of capability that's used for
other things in the Basic Stamp.

The counter prescaler in a 16c5x PIC is good for (maybe) 50 MHz,
independent of the CPU's timing crystal, (more or less). This divides
by up to 256 and then feeds the 8 bit counter register. So the program
only has to worry about counting the number of times this last counter
overflows, which can happen as slow as 65,536 times slower than the
input at the pin. Slow enough for the sofware to deal with it.

One of the hobby magazines had a PIC based frequency counter as a project
3-6 years ago. I think it was Electronics Now.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1465. Regenerative & super-regen recievers, filters, grid-dip meters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <HC8u2.11877$jd2.27012573@rmnws01.ce.mediaone.net>
Source record: 73886
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I've found a grid dip meter is a very handy tool to have for checking filters and other circuits. The grid dip meter (an oscillator with a sensitive current meter to measure RF absorption peaks) in the ARRL Handbook also functions as a tuned RF field strength meter when oscillator current is cut.

I've read regenerative recievers work on this principal, but suffer from poor dynamic range, noise, and two-handed operation to balance the regeneration which changes with tuning. But for cheap test equipment this could serve very well.

Wouldn't it be nice to use a microcontroller (PIC) to control the tuning and Q (damping) of a filter/oscillator? By pinging the circuit with a step, and timing the ring period, the Q could possibly be adjusted for very high (10,000?) values. It would be very nice for the following applications:

* Spectrum analyzer type oscilloscope probe
* Clean RF sine oscillator, & sweep generator
* Antenna and return loss measurements (grid-dip meter)

The single-chip controller PIC might even count frequencies (under 50MHz without extra prescaler) and send RS-232 data to a computer for detailed analysis & display. I would hope the RF spectrum from 1MHz to 1GHz could be covered with 7 transistor oscillator circuits, each covering a 3:1 frequency band.

As a test I've tried tuning a 1KHz - 500KHz active-filter Biquad's (similar to state-variable) integrator resistors with mosfets. Found I could get over 2 decades of tuning with the same cap, but the mosfet voltage-variable resistors distorted (even with biasing resistors) and caused oscillations at high frequencies. The gain of the loop affects the phase angle of the integrators, so damping and tuning interact.

This was from a test on a breadboard with a ground-plane. I don't know if its the breadboard or the 4007 CMOS mosfets that are making this filter oscillate when my spice model (which is using regular integrator resistors) says it should be stable.

Anyone got a 4000-series CMOS library for Orcad pspice? I need the 4066, 4069, 4049 & 4007 device models bad.

I'm wondering if this is possible, if it has/is being done. Maybe an impossibility because of complex and chaotic frequency-damping control loop, if the relatively tame 2nd-order tuned circuit's response is demonicaly posessed by evil amplifier and varactor reactance and

non-linearity.

My guess is that I'll spiral in and converge on a desired frequency &
Q, unless I use a clever algorithm that tunes a 2-dimensional
pole-zero space, with compensation for varactor or Fet-VVR
non-linearity.

Do you know of any radio's or test equipment commercial products that
use regenerative/super-regenerative filters? Suggestions?
Too lame for a clever sig

1466. transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: kf4dte@aol.com
Message-ID: <19990204011059.03913.00000492@ng23.aol.com>
Source record: 73887

hello,

i am interested in obtaining the build sheets and schematics for a six and two meter homebrew transverter. i would like for it to use the 20 meter band from my hf transciever. i know ten tec makes the kits but i am trying to be very thrifty (cheap!) and carry on the tradition of homebrew.

can anyone point me in the right direction? are there any web pages to support this? anyone interested in being a long distance elmer??

pls reply e-mail tnx
73 de KF4DTE Member of the
Michael D. Prevatt Florida Contest Group
Lake Hendry, Fl. "Contesting is Fun"

1467. Green coating on PC Board Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: xxx@ionet.net
Message-ID: <36b934db.49396744@news.ionet.net>
Source record: 73888

Can anyone tell me what the green coating on Printed Circuit boards
is? Also is this product something that I can buy and apply myself ?
Thank You
Joe

1468. FS: waveguide adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: ns38ley@snowhill.com
Message-ID: <36B96449.18C2@snowhill.com>
Source record: 73889
Cross-posted to: rec.radio.amateur.homebrew,alt.ham-radio.marketplace,rec.radio.amateur.boatanchors

I have two kinds of w.g. transition pieces: WR-90 to WRD-475 (double ridge) adapters, good used, $3.00 ea or 4/$10; and WRD-475 to WR-187, new in box, $4.50 ea. or 4/$15. Drawings available. NOTE: Please REPLACE the "ns38" with "wor" to spell "worley" to reply or call 334-347-5281 day/eve/wknd

1469. Re: Green coating on PC Board Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <1ubu2.1401$Oi1.842@news9.ispnews.com>
Source record: 73890

xxx+AEA-ionet.net wrote in message +ADw-36b934db.49396744+AEA-news.ionet.net+AD4-...
+AD4-Can anyone tell me what the green coating on Printed Circuit boards
+AD4-is? Also is this product something that I can buy and apply myself ?

Solder mask. It is normally printed or silk-screened on. Using it at home
is usually not worthwhile for just a few boards.

Dr. Barry L. Ornitz WA4VZQ ornitz+-U+AEA-dpnet.net

1470. Need SWR Alert circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: sca00135@mail.wvnet.EDU
Message-ID: <020901be502a$0aeceb60$0ee44781@default>
Source record: 73891

Hello to all and thanks for reading.

I am operating a remote controlled HF station and want to add a solid state "Skywalker" amplifier. To protect the amp, I need a way to prevent transmitting into high SWR conditions. My thoughts are to have some type of SWR Alert/shutoff if the SWR exceeds 2:1. Anyone know of a circuit which will fill the bill?? Perhaps there is a commercially produced device available for such application.

Greatly appreciate any advice. Thanks and 73,
Sam--K8WVA--

1471. Re: VHF Quad MOSFET question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <79bvsc$9nf$1@nnrp1.dejanews.com>
Source record: 73892

In article <36b84e64.0@news.netwalk.com>,
"Jim" <jbolinger@lintek.com> wrote:
> Are there any quad MOSFETs that will make a good mixer for 144 MHz?

I do not recall the part number off the top of my head, but I recall
the Yaesu FT-847 uses a single quad FET mixer for LF through UHF.

Dana K6JQ
Dana@Source.Net

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1472. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <79c4atcuf1@nnrp1.dejanews.com>
Source record: 73893
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

In article <36b64a16.5203825@newshost>,
allan.herriman.hates.spam@fujitsu.com.au (Allan Herriman) wrote:
> On Mon, 01 Feb 1999 16:06:06 GMT, Dana@Source.Net (Dana H. Myers K6JQ)
> wrote:
> >[snip]
> >Unless you're using one with an integrated transceiver, Ethernet
> >controllers are externally clocked, and can be clocked at rates
> >other than 10Mbps (such as 2Mbps). Some of the controllers will
> >even allow you turn off the Manchester encoder, which is ideal.
> >The Intel 82586, still commonly found on older Ethernet cards
> >(perhaps you can pick a few up at a swap meet or computer store
> >used bin), is a fully-featured serial data engine (though writing
> >drivers for it is not for the faint of heart).
> >
> >In other words, you can probably scrounge an Ethernet card which
> >makes a perfectly fine serial data engine.
>
> Hi Dana,
> Yes, I agree about the underclocking. I didn't think you
> could still get cards like that anymore, but if you can, go for it!
> Modern transceiver chips will have an onboard PLL (or more likely, a
> delay locked loop) which will have a limited pulling range.
>
> I'm not sure why you'd want to disable the Manchester encoder. Sure,
> it'll halve the bandwidth, but it'll make clock recovery at the other
> end quite difficult, as ethernet controllers don't scramble the data,
> which means that if you send a packet of 1500 zero bytes, you won't
> receive any data transitions for 1500 x 8 = 12000 bit periods. This
> is (more or less) impossible to decode.
> You'll also lose DC balance, which can upset AFC, etc.

Sure, if you're not using some other scrambling/encoding
technique, you may wish to continue using the Manchester
encoder.

Dana K6JQ
Dana@Source.Net

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1473. Re: transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36b9991a.0@news.netwalk.com>
Source record: 73894

KF4DTE wrote in message <19990204011059.03913.00000492@ng23.aol.com>...
>hello,
>
> i am interested in obtaining the build sheets and schematics for a six
and
>two meter homebrew transverter. i would like for it to use the 20 meter
band
>from my hf transciever. i know ten tec makes the kits but i am trying to be
>very thrifty (cheap!) and carry on the tradition of homebrew.
>
> can anyone point me in the right direction? are there any web pages to
>support this? anyone interested in being a long distance elmer??
>
> pls reply e-mail tnx
>73 de KF4DTE Member of the
>Michael D. Prevatt Florida Contest Group
>Lake Hendry, Fl. "Contesting is Fun"

I am interested in the same thing, and have slowly (very slowly) been
collecting parts.

Most of the parts to build a QRP transverter can be obtained from
Minicircuits. You will have to obtain/build a crystal oscillator yourself

There is also Down East Microwave at www.downeastmicrowave.com. They sell
all kinds of parts and kits for everything from 50 MHz up to cosmic rays
(well, not quite I guess)! They also have the power amplifiers and LNAs to
get more performance out of the above mentioned QRP transverter.

Jim
N8EE

1474. Re: Ham-Homebrew Digest V99 #27

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199902041340.IAA11405@pop.uky.edu>
Source record: 73895

At 04:30 AM 2/4/99 PST, you wrote:
>Does anyone have, or know where I can locate, plans for a HF CW transmitter
>using the 100TH tube?
>
>Thank you!
>--
>
>
>73,
The 100TH is not easily used in transmitters.
The transmitter will most likely require plug-in
plate coil with inductive link coupling, a 2 section
plate tuneing capacitor and a neutralizing capacitor.
It is not very well suited for grounded grid operation
like the 572B or 811A.
Are you wanting to make a 1930's style transmitter
or just happen to have a tube you want to use to
build a transmitter? If it is the latter I suggest that
you trade it in on a 4-125 tetrode (similar plate dissipation)
and make a 1950's type of transmitter. If you choose a
big enough filament transformer you can upgrade to
the 4-250 or 4-400 with out changing sockets. Just need a
bigger (more current) B+ supply.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

1475. Re: SB-401 INFO NEEDED!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: C Bauman <cbauman@impulse.net>
Message-ID: <36b9a8f3$0$200@sienna.impulse.net>
Source record: 73896

erpi@junction.net wrote in message <799qqm$u7s$5@news.junction.net>...
>Hi! is there someone who could tell me if I can replace
>the 6146B in my SB-401 for tubes who will give me more output
>if yes please email me... Thanks in advance

Before you get all the headaches of "improving" your unit, check out some alternatives which will do about the same thing with less chance of ruining the resale value. Two items that come to mind are speech compressors and amplifiers.
A friend of mine related a story where he was receiving a S9 signal from a station running a 1KW amp without speech compression. Taking the amplifier out and running 100W the signal was (of course!) much lower. Turning on the speech compressor with 100W the signal was back to S9.

-Carl WB6YFZ

1476. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36B9BC2F.1C0D@mail.rsccd.org>
Source record: 73897
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

Richard Steven Walz wrote:

> John Lundgren wrote:
> > guess_who@wxs.nl wrote:

> > > On Sat, 23 Jan 1999 10:52:49 +0100, radio_man@usa.net (radio_man)
> > > wrote:

> > > >http://www.xs4all.nl/~barendh

> > > REDUCE YOUR PRICES!!!! YOU'RE TOO EXPENSIVE!

> > If they are in U.S. dollars, yeah, but then maybe they're not, they may
> > be in Dutch guilders or whatever.
> ---

> Even in NLD, which I take to be Dutch Guilders, this guy has everything
> priced two to four TIMES the price of everyone else, and I checked three
> major catalogs!! 8.50 NDG for a P8031AN ?? This is a sub-US$1.00 part!!
> 27C256 12.90 NDG ?? I don't think so!! This guy is an opportunistic
> rip-off!! I hope people who see his site shop around first!!
> -Steve
> --

Well, by your standards, then Radio Shaft (heh-heh) should be taken to task for ripping off the public for selling 9 cent transistors for 2 dollars, etc. That's even MORE markup than this Dutch guy!

I see nothing wrong with him charging those prices, because the laws of supply and demand will assure that he won't get any business, plain and simple. What you should be doing instead of naysaying is start your own parts supply and compete against him; just imagine all those Ferengi PROFITZ!. But then, I've never known you to take that road, you're a dyed in the wool naysayer.

--
Please remove NO and SPAM from my email addr to reply.
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@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @

@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1477. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36B9BD7E.7349@mail.rsccd.org>
Source record: 73898
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc,nl.radio.amateur

Who cares? wrote:

> On Mon, 01 Feb 1999 22:13:22 -0800, Richard Steven Walz
> <rstevew@armory.com> wrote:

> >John Lundgren wrote:

> >> guesswho@wxs.nl wrote:

> >> > On Sat, 23 Jan 1999 10:52:49 +0100, radio_man@usa.net (radio_man)
> >> > wrote:

> >> > >http://www.xs4all.nl/~barendh

> >> > REDUCE YOUR PRICES!!!! YOU'RE TOO EXPENSIVE!

> >> If they are in U.S. dollars, yeah, but then maybe they're not, they may
> >> be in Dutch guilders or whatever.
> >>---
> >Even in NLD, which I take to be Dutch Guilders, this guy has everything
> >priced two to four TIMES the price of everyone else, and I checked three
> >major catalogs!! 8.50 NDG for a P8031AN ?? This is a sub-US$1.00 part!!
> >27C256 12.90 NDG ?? I don't think so!! This guy is an opportunistic
> >rip-off!! I hope people who see his site shop around first!!
> >-Steve

> I agree! We're well up in the matter... In Holland, Barend is also
> known as "schrikbarend duur" [appallingly expensive] :))) <grin>
> ^^^^^^

Almost as bad as the hospitals. The past week I saw one news peogram, I
believe it was Dateline, take a hospital to task for charging something
like lebendey-leben thousand percent profit on an 11 cent Tylenol
tablet, for example when they billed the patient. If you like to
complain about ripoffs, then complain about the ones where the victim
doesn't have a choice about it.

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @

@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1478. Re: Green coating on PC Board Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36B9BBC5.71087129@teleport.com>
Source record: 73899

Barry L. Ornitz wrote:
>
> xxx+AEA-ionet.net wrote in message +ADw-36b934db.49396744+AEA-news.ionet.net+AD4-...
> +AD4-Can anyone tell me what the green coating on Printed Circuit boards
> +AD4-is? Also is this product something that I can buy and apply myself ?
>
> Solder mask. It is normally printed or silk-screened on. Using it at home
> is usually not worthwhile for just a few boards.
>
> Dr. Barry L. Ornitz WA4VZQ ornitz+-U+AEA-dpnet.net

In case the person asking the question might not know what solder mask is, it's put on the board to restrict the places that get solder during the automated wave-soldering process. It saves a lot of solder by keeping it off all the areas except where it's needed, and also greatly reduces problems with solder bridging between conductors. It wouldn't be very useful on a hand-soldered board, although some coatings might provide a degree of corrosion protection.

Roy Lewallen, W7EL

1479. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: "G. Baars" <G.Baars@cable.a2000.nl>
Message-ID: <36B9BBED.AF320813@cable.a2000.nl>
Source record: 73900
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote:

> I'm trying to get the maximum brightness from an LED that has these specs:
> 10-20 mA @3v.
>
> I've tried a 650-ohm series resistor which gives me these measurements,
> using a 12.5 volt supply:
> 16 mA, 1.8 v drop across the LED.
>
> If I'm not mistaken, the actually current and voltage aren't important,
> but the total power dissipated by the LED is. I calculate the maximum for
> this LED as 60 mW (20 mA x 3 volts). With the 650-ohm resistor, I
> calculate only 28 mW is being dissipated by the LED, which leaves lots of
> room for improvement.
>

If the LED has to be @ 20mA and its voltage drop is 3V then if you use a 12.5 volt supplythere will be 12.5-3 = 9.5 V over the resistor. Using the formula R=U/I the resistor has to be
9.5/0.020 = 475 Ohm

> My confusion comes when I try to calculate what resistor would be best in
> this circuit. If the LED draws current determined by the value of the
> resistor, and the voltage at the LED depends on the voltage drop across
> the resistor, how can one calculate the correct resistor without actually
> trying some values and taking measurements?
>
> Am I trying to think of the LED as a linear device (current and voltage
> are linearly related), when in reality it is not?
>

you can think of the LED as a 3 Volt voltage source provided theres enough current.

> Any help understanding not only a good resistor value for this LED, but
> how to properly think about the application of ohm's law in this
> circimstance, would be greatly appreciated.
>
> Sorry for the modified return address, but I hate getting spammed. Correct
> address is shown below.
>
> Thanks,
> Dave
>

> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

1480. Re: Old diode cross reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36B9C159.139C@mail.rsccd.org>
Source record: 73901
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components,sci.engr.semiconductors

Adam Adkins wrote:

> I am looking for replacements for some old diodes. The part
> numbers are 1N191, 1N458, and another that is marked only as a 500ma
> silicon. Can anyone help me to find a suitable replacement for these,
> and let me know the source of the data?

The 1N191 is a germanium signal diode, and can be subbed by just about
any of the 1N34 replacements. The 500mA rectifier diode can be subbed
by a 1N4004 for example.

The 1N458 may be a Zener? Or else another small signal diode? I can't
remember. Try www.nteinc.com for sub info.

> Thanks!

> ******************
> Adam Adkins, KM5SS
> adam@onramp.net

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1481. Re: SB-401 INFO NEEDED!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: parnass@marconi.ih.lucent.com
Message-ID: <79cfq8$f2v@ssbunews.ih.lucent.com>
Source record: 73902

In article <799qqm$u7s$5@news.junction.net>, <erpi@junction.net> wrote:

>Hi! is there someone who could tell me if I can replace
>the 6146B in my SB-401 for tubes who will give me more output
>if yes please email me... Thanks in advance
> Eric.....73
>Net-Tamer V 1.11.2 - Test Drive

Be careful you don't over tax the SB-401's power supply.

PS - I built an SB-401 when I was in high school in the 1960s.
It was a better xmtr than the Drake T-4X I owned afterward.
--
==========
Copyright 1999, Bob Parnass, AJ9S parnass@bell-labs.com

Locate & identify transmitters in your area with a color RadioMap(tm)

1482. Re: @@@ LOTS OF RF PARTS & RARE ELECTRONIC COMPONENTS @@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: c.c.tqbssz@XXXXLOTSXO.killspam.us.com
Message-ID: <79ch3d$438$1@samba.rahul.net>
Source record: 73903
Cross-posted to: de.sci.electronics,hacktic.electronics,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc,nl.radio.amateur

References: <MPG.1113ba5abc99558f9896d5@news.xs4all.nl> <36aaaf21.13460808@dds.nl> <36B6638A.C20@mail.rsccd.org> <36B69782.6CFC@armory.com> <36baf778.11850603@dds.nl> <36B9BD7E.7349@mail.rsccd.org>
Organization: a2i network
Distribution:

John Lundgren (NOlundgrejSPAM@mail.rsccd.org) wrote:
: Almost as bad as the hospitals. The past week I saw one news peogram, I
: believe it was Dateline, take a hospital to task for charging something
: like lebendey-leben thousand percent profit on an 11 cent Tylenol
: tablet, for example when they billed the patient. If you like to
: complain about ripoffs, then complain about the ones where the victim
: doesn't have a choice about it.

Hey, next time you're an inpatient maybe you'd like to pop out to Longs trailing your IV's and Foley catheter behind you and buy your own Tylenol?

Stephen

: --
: Please remove NO and SPAM from my email addr to reply.
: --
: @@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@
: @ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
: @ Rancho Santiago Community College District | .rsccd.org @
: @ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
: @ My opinions are mine, NOT my employer's. |PGP key avail on req@
: @ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
: @@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@
: I am a California Resident and ALL California Junk Email laws apply.
: You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
: and search for 17538.4 in the business and professions code.

1483. Re: WTB: sk-604 socket

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <36B9CBA3.EC3276C5@iag.net>
Source record: 73904
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

ARE YOU SURE OF NUMBER?I HAVE SK 640 EIMAC SOCKET THAT I HAVE NO USE FOR
, IF THATS WHAT YOU NEED
LET ME KNOW. WA4OFS 73 HARRY
WebMonkey wrote:

> would like to aquire a socket for a 4x150G tube
> says it needs an sk-604 or 2350 socket.
> thanks for your time
> --
> A.C. Curtis
> KBï¿½WLF
> 53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
> mailto:demoman@rollanet.org
> http://www.rollanet.org/~demoman

1484. BA Classifieds

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Jeff James <jeff@eclipse.net>
Message-ID: <36B9C83A.AD62AA1@eclipse.net>
Source record: 73905

```
Free instant ads at:
The Boatanchor Classifieds
http://www.dealamerica.com/deal/cgi-bin/ads/bcads.cgi
Thanks for your support..
```

1485. Re: Help Re-Portable phone.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <79ckon$116$1@news1.fast.net>
Source record: 73906

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Jim wrote in message <36b8957f.0@news.netwalk.com>...
>
>Colin wrote in message <792l3i$pic$1@news8.svr.pol.co.uk>...
>>Can anyone help.
>>I'm thinking of buying a digital portable phone for the home. Do they use
>>the same kind of signal as the mobile phones. The kids use the phone a
>lot,
>>I'm concerned about health risks, brain tumors etc.. Thanks in
>>anticipation, Colin
>>
>>
>
>The problem is not with the type of signal, but with the frequency and power
>level.

Agreed ...

>
>The power level on a cordless telephone will be so low that it is of no
>concern.

This is true for the analog (FM) 900 MHz phones and the digital 900 MHz
phones which are not spread spectrum. They are constrained by Part
15.249 of the FCC rules to a field strength of 50 mV/m at 3m ... which
works out to about 1/2 a milliwatt of output power with "normal" antennae.

Spread spectrum phones, on the other hand, *can* under certain
circumstances legally output as much as 1 Watt ... though the vast
majority of phones in production only use 100mW or so maximum,
as a trade-off between range and battery life.

Some of the "high-end," longer range phones put out 250mW to
400 mW when they are in their highest power mode (most do power
control, reducing power to what is needed, again to maximize battery
life, so they only go into their highest power output mode when you are
far from the base and need the additional power to get the range.)

However, I wouldn't be concerned ... even a max power, the flux density
from SS cordless phones does not consitute a health risk ... otherwise, the
FCC would not have authorized those power levels.

- --
Carl - wa6vse
wa6vse@fast.net
```

http://www.users.fast.net/~wa6vse
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Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

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Version: PGP for Personal Privacy 5.5.3

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x/uDdJg3DQwyRtgeT/6iRmmp
=3roO
-----END PGP SIGNATURE-----

1486. Re: Green coating on PC Board Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <79cks5$12a$1@news1.fast.net>
Source record: 73907

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

xxx@ionet.net wrote in message <36b934db.49396744@news.ionet.net>...
>Can anyone tell me what the green coating on Printed Circuit boards
>is? Also is this product something that I can buy and apply myself ?
>Thank You
>Joe
>

It's solder mask, to preventsolder from sticking to places where
it's not needed ... this reduces solder consumption and also
helps to prevent unwanted solder bridges (shorts), improving
process reliability and reducing manufacturing costs.

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
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Version: PGP for Personal Privacy 5.5.3

iQA/AwUBNrnWa5e+N6+q84HiEQLovACeMpZqkOMfXrO+UPqfQcGeGFIUlZgAoOob
1R+l3MmAqH/Q6fu4ghfdnEYk
=hFJe
-----END PGP SIGNATURE-----

1487. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: kenk@primenet.com
Message-ID: <79cl6rsdg1@nnrp02.primenet.com>
Source record: 73908
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

In article <36B87E92.74866692@tidalwave.net>, Trevor <ironace@tidalwave.net> wrote:
>Steve Leong wrote:
>
>> Does anyone know the availability of any "dummy" AA cells?
>> (I've seen them in the past - they are plastic forms the same size of
>> an AA cell, with a metal strip connecting the top and bottom contacts -
>> basically a specialized jumper!).
>>
>> I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
>> spaces for too many AA cells (excess voltage would damage radio). I need
>> to insert two "dummy" AA cells to act as jumpers for these extra spaces.
>> Already tried to solder jumpers in place - can't do it due to the metal
>> they used for the contacts.
>>
>> Thanks for any assistance and advice!
>>
>> Steve KC6IJM
>
>How about using wooden dowels with thumb tacks in the end with wire
>connecting the thumb tacks
>
>
I just use dead AA cells and wrap them with aluminum foil.

Ken W9NPP

1488. Re: Green coating on PC Board Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36b9daf4.0@news.netwalk.com>
Source record: 73909

Roy Lewallen wrote in message <36B9BBC5.71087129@teleport.com>...
>In case the person asking the question might not know what solder mask
>is, it's put on the board to restrict the places that get solder
>during the automated wave-soldering process. It saves a lot of solder
>by keeping it off all the areas except where it's needed, and also
>greatly reduces problems with solder bridging between conductors. It
>wouldn't be very useful on a hand-soldered board, although some
>coatings might provide a degree of corrosion protection.
>
>Roy Lewallen, W7EL

I have built a number of HeathKits that had a bluish coating instead of
green.

I found it highly comforting regarding the solder bridge problem.

Jim
N8EE

1489. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: "Greg Jones", WD5IVD <wd5ivd@tapr.org>
Message-ID: <79cr1e$c16$2@hornet.fibr.net>
Source record: 73910
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <795ag4$5bp@enews4.newsguy.com> Charles Brabham, n5pvl@texoma.net writes:
>Clowns like Greg Jones, who actually PROMOTE "amateur telephone" are
>directly responsible for our present situation here. Don't think so? Take a
>look at the result of Greg's policies here in Texas, where the TexNet
>high-speed Packet net is now kaput and is slated to be replaced by ***
>Internet connections *** in preference to Amateur Radio. The TexNet folks
>have gone so far as to say that TexNet node SYSOPs without Internet
>connections will be edged out of the "network". - A real proud day for Ham
>Radio when that was announced, huh?
>

Sorry Charlie (or is it Baby Huey?)

There are no "amateur telephones" used on TexNet or any other networks that I am involved with.

We don't use any 'telephone' modems on any of the TexNet nodes. You know that.

You harp on these issue because others who don't know the facts might listen to you and that it isn't about what is good for amateur radio, but all about personal attacks against a few that you believe did you wrong at some point in the distant past.

I sure wish you would get your facts straight.

The networking technology that TAPR is currently working on doesn't utilize 'telephone' modems. It is all RF based. Radios talking to other radios. We aren't building telephone modems into any of our projects. No sir Huey.

Like the Spread Spectrum Radio Projects
http://www.tapr.org/tapr/html/taprfhss.html

or like some of the future 56K-3Mbps stuff that is in the pipeline.

or the PIC-Encoder project
http://www.tapr.org/tapr/html/pice.html

All RF based stuff.

But then again, when did you ever really worry about what is right over what sounds good to those that don't know what the real history or facts are.

Cheers - Greg Jones, WD5IVD

1490. Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: electronstream@webtv.net
Message-ID: <25178-36B9F0B2-62@newsd-241.iap.bryant.webtv.net>
Source record: 73911

Having constructed several homebrew receivers with discreet parts and ic's, I think it would be very interesting to build one with homebrew amplifying devices. I thought a triode would be the simplest to try , even if it worked only for a short time. But im not a glass blower, so thinking the next most feasible device would be a point contact transistor, I took apart some germanium diodes (1N34) and tried to get some amplification. I fooled around placing the two cat-whiskers very close together on a single piece of germanium while using the germanium as base. Using a volt ohm meter for my test instrument (I dont own a scope) , I couldnt seem to get any amplifying effect. Even tried changing polarities and cat-whisker pressure.
Now from what Ive read, the newer point contact transistors seem to have been fused together , creating holes or electrons. But I dont think the first ones were.
I would like to know if any one out there has experience with this , any other amplifying device useful at rf,or any suggestions. Thanks.
Doug N0WVA

1491. FS: MILITARY PRC-25 WITH ACC $295

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0402991241510001@murphy1.cts.com>
Source record: 73912
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,misc.survivalism,alt.military.collecting

RT-505/PRC-25 WITH ANTENNA, HANDSET, BATTERY.

TESTED, GOOD COND. $295 EA.

PICT AT:

http://209.239.34.153/murphyjunk/3_COMM_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1492. FS: PRC 8,9,10 BAGS AND BASES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0402991244170001@murphy1.cts.com>
Source record: 73913
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,misc.survivalism,alt.military.collecting

AT-272A GOOSE NECK BASE FOR PRC SETS NEW, PACKAGED: $8 EA. 5 FOR $25

CW-216 ACC BAG FOR PRC SETS. LIKE NEW COND. $5 EA. 3 FOR $12

PICT AT:

http://209.239.34.153/murphyjunk/4_MORE_SURPLUS_STUFF

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1493. Want to HB a 6m horiz loop

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Jim Nielson <jnielson@bresnanlink.ns>
Message-ID: <36BA16D7.5FF5@bresnanlink.ns>
Source record: 73914
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I'm looking to build a horizontal loop antenna for 6 meters, something along the lines of the commercially available loops from M2 or PAR. My thought is to use a loop made of 1/2" or larger hardline (75 ohm-I work for CATV Company) but I'm looking for a starting place as far as loop length, feed connection and type, etc...

Any info anyone can provide would be most appreciated.

73,

Jim KB9RQD

1494. Want to HB a 6m horiz loop

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Jim Nielson <jnielson@bresnanlink.ns>
Message-ID: <36BA16F9.3D95@bresnanlink.ns>
Source record: 73915
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I'm looking to build a horizontal loop antenna for 6 meters, something along the lines of the commercially available loops from M2 or PAR. My thought is to use a loop made of 1/2" or larger hardline (75 ohm-I work for CATV Company) but I'm looking for a starting place as far as loop length, feed connection and type, etc...

Any info anyone can provide would be most appreciated.

73,

Jim KB9RQD
Please change the .ns to .net to reply

1495. Re: Green coating on PC Board Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <36BA18FF.3E7E@lsid.hp.com>
Source record: 73916

xxx@ionet.net wrote:
>
> Can anyone tell me what the green coating on Printed Circuit boards
> is? Also is this product something that I can buy and apply myself ?

As several others have told you, it's solder mask. Though some are put on with printing processes (screened, etc.), there's also photo solder mask. Wish I knew where I could get some! But supplies like this aren't very commonly available to the hobby market. I'd like to find a source of liquid photoresist appropriate for etching boards, but the supplier I used to use "dried up." I used to get it for about $200 per quart (back when I was using over a quart a year making photoengraved equipement front panels). Now the same stuff is available from a different supplier for $1000/5 liters: a similar per-ml price, very little inflation in 15 years, but dang, 5 liters is a 5-lifetime supply for me these days, and $1000 is a bit steep for my tastes.

Cheers,
Tom

1496. 2Meter Antenna Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: xxx@ionet.net
Message-ID: <36ba2546.18353301@news.ionet.net>
Source record: 73917

I have a small 2meter transmitter that I built from a Ramsey
Electronics kit. Kit No. FM-6.
My question is : The antenna is about 18"long. I will be putting it in
a small rocket . Is it possible to make a small rubber ducky antenna
to reduce the length to around 1,2,3 inches , or is a electronic
antenna plan available for this?
Thank You for your help
joe

1497. bleeder resistors/teflon wire HELP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <36BA3204.E0ACAED6@bellsouth.net>
Source record: 73918
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.cb,rec.radio.amateur.boatanchors

need 100 k @ 100 watt or 200k would work not over 5 inches long.
looking for 400k total. space is big consideration dont have much.
thanks every one for the info on the other resistors.
need 10 feet #10 teflon wire with die electric hv

1498. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: kelly <ksvoma@marcus-online.net>
Message-ID: <79dgl1$f7t$1@news-1.news.gte.net>
Source record: 73919
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

G. Baars wrote in message <36B9BBED.AF320813@cable.a2000.nl>...
>
>
>DaveC wrote:
>
>> I'm trying to get the maximum brightness from an LED that has these
specs:
>> 10-20 mA @3v.
>>
>> I've tried a 650-ohm series resistor which gives me these measurements,
>> using a 12.5 volt supply:
>> 16 mA, 1.8 v drop across the LED.
>>
>> If I'm not mistaken, the actually current and voltage aren't important,
>> but the total power dissipated by the LED is. I calculate the maximum for
>> this LED as 60 mW (20 mA x 3 volts). With the 650-ohm resistor, I
>> calculate only 28 mW is being dissipated by the LED, which leaves lots of
>> room for improvement.
>>
>
>If the LED has to be @ 20mA and its voltage drop is 3V then if you use a
12.5
>volt supplythere will be 12.5-3 = 9.5 V over the resistor. Using the
formula
>R=U/I the resistor has to be
>9.5/0.020 = 475 Ohm

Driving more current through the LED will not significantly change the
output.
I suggest using a LED that has the desired intensity level.
Look for an Iv Typ(mcd) rating of greater than 1000. Most LEDs have ratings
of less than 100.
The high intensity ones have ratings 1000 - 6000. See www.digikey.com
catalog number L12005
(you can search their site for this number). Radio Shack also carries
higher rated LEDs. I would give
you the number but their web site does have anything on it but their monthly
flyer.
Kelly

1499. Re: [Q] FSK bandwidth for 10-megabit Ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36BA4E00.520E@mail.rsccd.org>
Source record: 73920
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,rec.radio.amateur.digital.misc

John Miles wrote:

> John Lundgren wrote:

> > John Miles wrote:

> > > Allan Herriman wrote:
> > [snip]

> > > Mbps link. 100BaseT uses multiple pairs with all kinds of funky
> > > multi-level quadrature modulation schemes and such that I don't even
> > > want to think about at this point. I am not sure that there are any
> > > off-the-shelf radio modem chips like the MC13155 available for
> > > 100-megabit service.

> > That's not true. For gigabit ethernet, there's fancy modulation etc.
> > But for regular 100BaseT there are only two pairs used, and it's
> > basically the same as 10BaseT.
> > Manchester encoding is used for 10BaseT.

> Wow, that's not what I'd always heard. So it's just two differential
> pairs (4 conductors in all), just like 10BT?

> -- jm KE5FX

The 100BaseT that HP came up with that runs over cat3 wire uses all four
pairs, but _no_one_ uses this, everyone uses the 100BaseTX I believe
it's called, which is just the same two pairs as 10BaseT.

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1500. What's a UG-1051?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: rexstout@uswest.net
Message-ID: <rexstout-0402991934250001@dialupd236.ptld.uswest.net>
Source record: 73921

Strange little thing, some sort of push-on connector? Pulled it off of an old Tek portable VHF radio that I scrapped. I haven't been able to find anything about it anywhere.

| http://members.tripod.com/~jrollins/index.html - Computers |
| http://www.geocities.com/Area51/Lair/1681/ - Star Trek |
| OrHam@qth.net list admin KD7BCY |

1501. FS COLLINS 32V2 PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-04 00:00:00 UTC
From: Dee Almquist <w4pnt@rica.net>
Message-ID: <Iguu2.398$D_.6593@newsfeed.slurp.net>
Source record: 73922
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

Give you an opportunity if you need some of this equipment before putting on auction. Parting out (painfully) a Nice Collins 32V2 tx. Just not enuf time to finish it.

1- 32V2 cabinet fresh re-powder coated (black), looks like new......$200. obo

1- 32V2 panel match with cab & freshly silk screened..$100. obo

Have a number of reproduced clear slide rule dials for 32V
$10. ea

The chassis I will part out & it is real clean, transformers, sub assemblies, all. Might do some trading. Want NOS certain tx & audio tubes. All the above + shipping. Terms: I prefer MC/Visa or MO.

73 es Dee
w4pnt@rica.net
In Virginia

1502. Tech. Help with fine tune mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: rickw999@aol.com
Message-ID: <19990204210745.26741.00000764@ng-ca1.aol.com>
Source record: 73825

I have been trying to figure out a way to get 1khz resolution with
the YB305's tuning steps. Currently, it has 5khz steps on shortwave. I
remember the YB400 had a button below the tuning buttons so you could choose 1
or 5 khz. I am adding a bfo circuit to the YB305 and would like to get the
1khz resolution on the 305 if at all possible. If you have any ideas on this I
sure would
appreciate. Thanks, Rick

1503. Re: Old diode cross reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Laurier Gendron <laurier@vancouver.quik.com>
Message-ID: <36BA7742.CBBA0437@vancouver.quik.com>
Source record: 73826
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,sci.electronics.components,sci.engr.semiconductors

The 1N458 is a silicon 100 ma switching diode PIV 200 forward current
100ma

John Lundgren wrote:
>
> Adam Adkins wrote:
>
> > I am looking for replacements for some old diodes. The part
> > numbers are 1N191, 1N458, and another that is marked only as a 500ma
> > silicon. Can anyone help me to find a suitable replacement for these,
> > and let me know the source of the data?
>
> The 1N191 is a germanium signal diode, and can be subbed by just about
> any of the 1N34 replacements. The 500mA rectifier diode can be subbed
> by a 1N4004 for example.
>
> The 1N458 may be a Zener? Or else another small signal diode? I can't
> remember. Try www.nteinc.com for sub info.
>
> > Thanks!
>
> > ******************
> > Adam Adkins, KM5SS
> > adam@onramp.net
>
> --
> Please remove NO and SPAM from my email addr to reply.
> --
> @@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
> @ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
> @ Rancho Santiago Community College District | .rsccd.org @
> @ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
> @ My opinions are mine, NOT my employer's. |PGP key avail on req@
> @ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
> @@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
> I am a California Resident and ALL California Junk Email laws apply.
> You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
> and search for 17538.4 in the business and professions code.

1504. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: ckrin.nospam@Iamerica.net
Message-ID: <36b907af.20285745@news.iamerica.net>
Source record: 73827
Cross-posted to: misc.emerg-services,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Wed, 3 Feb 1999 16:11:27 GMT, leongst@mail.northgrum.com (Steve
Leong) wrote:

>Does anyone know the availability of any "dummy" AA cells?
>(I've seen them in the past - they are plastic forms the same size of
>an AA cell, with a metal strip connecting the top and bottom contacts -
>basically a specialized jumper!).
>
>I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
>spaces for too many AA cells (excess voltage would damage radio). I need
>to insert two "dummy" AA cells to act as jumpers for these extra spaces.
>Already tried to solder jumpers in place - can't do it due to the metal
>they used for the contacts.
>
>Thanks for any assistance and advice!
>
>Steve KC6IJM

Bunch of groups snipped. What you have is a battery pack designed for
use with NiCad cells- 10x1.2 volts. Radio Shack used to have a simple
aluminum form that would replace same that was used in several of
their CB walkie talkies. The idea of the dowel and the thumbtack
should work nicely.

ck
--
Charles S. Krin, DO FAAFP,Member,PGBFH,KC5EVN
Email address dump file for spam: reply to ckrin at Iamerica dot net
F*S=k (Freedom times Security equals a constant: the more
security you have, the less freedom! Niven's Fourth Law)

1505. MOTOROLA/POLYPHASER NEW IN BOX LIGHTNING ARRESTER FOR 860-980MHZ on ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <79e5nh$5pt$1@nnrp1.dejanews.com>
Source record: 73828

moto/polyphaser 860-980mhz lightning arrester new in moto box. part number RL-ISPT50HN-B, unit is new, never installed. has "N" conectors for in/out. unit is on ebay.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=63919799
thanks
robert
ke4mcl

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1506. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: KH <kh34@hotmail.com>
Message-ID: <79e7ma$7pr$1@msunews.cl.msu.edu>
Source record: 73829
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I received a RadioShack DX-398 for Christmas, and am new to shortwaves. I live in an apartment and I'm guessing that the reception could be better. I went to the Shack and they suggested either their standard external antenna that you can tack to your wall or whatever, or better yet, they said I should get their battery-operated antenna so that I can just about pick up transmissions from the Voyager. I have had some bad experiences with the Shack guys not knowing what they were talking about in the past, so I'd like to run this by you experts first.

Would you go with either of the Shack antennas for this model, or would you recommend an after-market unit? Should I expect a large improvement in reception with a different antenna? Sorry if this is a standard question. Please direct me to a web page if you have heard this one too often.

Thanks,
Kevin

1507. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: KH <kh34@hotmail.com>
Message-ID: <79eag5$f1l$1@msunews.cl.msu.edu>
Source record: 73830
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I received a RadioShack DX-398 for Christmas, and am new to shortwaves. I live in an apartment and I'm guessing that the reception could be better. I went to the Shack and they suggested either their standard external antenna that you can tack to your wall or whatever, or better yet, they said I should get their battery-operated antenna so that I can just about pick up transmissions from the Voyager. I have had some bad experiences with the Shack guys not knowing what they were talking about in the past, so I'd like to run this by you experts first.

Would you go with either of the Shack antennas for this model, or would you recommend an after-market unit? Should I expect a large improvement in reception with a different antenna? Sorry if this is a standard question. Please direct me to a web page if you have heard this one too often.

Thanks,
Kevin

1508. Re: Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36bb08b9.35441125@news.erols.com>
Source record: 73831

On Thu, 4 Feb 1999 13:10:42 -0600 (CST), electronstream@webtv.net
(Doug Hancock) wrote:

> Having constructed several homebrew receivers with discreet parts and
>ic's, I think it would be very interesting to build one with homebrew
>amplifying devices. I thought a triode would be the simplest to try ,
>even if it worked only for a short time. But im not a glass blower, so
>thinking the next most feasible device would be a point contact
>transistor, I took apart some germanium diodes (1N34) and tried to get
>some amplification. I fooled around placing the two cat-whiskers very
>close together on a single piece of germanium while using the germanium
>as base. Using a volt ohm meter for my test instrument (I dont own a
>scope) , I couldnt seem to get any amplifying effect. Even tried
>changing polarities and cat-whisker pressure.
> Now from what Ive read, the newer point contact transistors seem to
>have been fused together , creating holes or electrons. But I dont think
>the first ones were.
> I would like to know if any one out there has experience with this ,
>any other amplifying device useful at rf,or any suggestions. Thanks.
>Doug N0WVA
>
Doug: FB OM! Now there's an intrepid homebrewer! I think you should
check out a recent book entitled "Crystal Fire" by Riordan and
Hoddeson. They go into a lot of detail on how the first point contact
devices were made. (It is not a "how to" book - you'll proably need
more info.)
I've been interested in the theory behind the operation of the
point contact devices. I'm not sure if it was ever really
definitively explained. They moved on to the junction devices and the
point contact things sort of got left in the dust.
You should take some encouragement from the fact that many hams
have homebrewed their own point contact solid state rectiifiers...
with galena and cat's whisker! Also, when you get the rig running,
you'll be able to ridicule all the other "homebrewers" who are using
"store bought" transistors. Appliance Operators!
Please let us know how this works out.
73 Bill N2CQR

1509. Re: Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <8ECA44DDA660348E.92C255DAAB16048C.98BAD79546EC1EFB@library-proxy.airnews.net>
Source record: 73832

hello..if you do a search on bell labs 1947 transistors you might get a
little info....remember seeing pictures and the engineers on the web
somewhere
Doug Hancock wrote in message
<25178-36B9F0B2-62@newsd-241.iap.bryant.webtv.net>...
Having constructed several homebrew receivers with discreet parts and
ic's, I think it would be very interesting to build one with homebrew
amplifying devices.

1510. WTB Swing chooke, Oil Filled

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Keith Brigode <brigode@ibm.net>
Message-ID: <36BAE40D.FA6639D6@ibm.net>
Source record: 73833

I am looking for source for swing chokes and capacitors for a 4,000 volt power supply. What is out there?

Thanks in advance

1511. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: yabyum@my-dejanews.com
Message-ID: <79evufqum1@nnrp1.dejanews.com>
Source record: 73834
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I use a slinky antenna which is extremely cheap (and pretty easy too) to build and it gives very good results. Much better than the whip. The past couple of days I've been experimenting with 2 slinkys connected together and a cut off stereo plug. For a basic set up:

Get a metal sliny at Walmart for instance ($1.89 I believe). Connect (solder) 20 to 25 ft of wire to one end of the slinky. Then solder the other side of the wire to a 1/4" mono plug. Stretch out the slinky vertically with the wire at the bottom end. Put the slinky up outside for best performance (I have mine on the porch). The wire shouldn't be too thin. I noticed a remarkable performance decrease when I used very thin speaker wire. I think I use #20 wire now.

Thanks to the orgininal poster of this slinky antenna.

Don't be afraid to ask questions. There's not such thing as a question asked too many times. :)

In article <79e7ma$7pr$1@msunews.cl.msu.edu>,
"KH" <kh34@hotmail.com> wrote:
> I received a RadioShack DX-398 for Christmas, and am new to shortwaves. I
> live in an apartment and I'm guessing that the reception could be better. I
> went to the Shack and they suggested either their standard external antenna
> that you can tack to your wall or whatever, or better yet, they said I
> should get their battery-operated antenna so that I can just about pick up
> transmissions from the Voyager. I have had some bad experiences with the
> Shack guys not knowing what they were talking about in the past, so I'd like
> to run this by you experts first.
>
> Would you go with either of the Shack antennas for this model, or would you
> recommend an after-market unit? Should I expect a large improvement in
> reception with a different antenna? Sorry if this is a standard question.
> Please direct me to a web page if you have heard this one too often.
>
> Thanks,
> Kevin
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1512. HELP: Trying to turn my home into a brewery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: heath_filtered@s2i2.com
Message-ID: <36bafd07.48870191@news.ncal.verio.com>
Source record: 73835

A few years ago a friend asked me if I wanted to take a class for the Ham Radio Technician License. My first question was, "What is a Ham?" My second question was, "Why?" So he told me what a ham was and my reasons for being a ham have been changing ever since.

I am really interested in learning more about electronics but I have very little foundation for it. Until I became a ham I didn't know the difference between a resistor, a capacitor, and a diode. I think I did know that an IC was that little black thing with the silver legs. :-)

I am past that stage a bit but still learning. I have built a few little items and enjoy doing these projects.

What is a good source for projects for someone at my level of knowlege?

Is there an "Electronics for Dummies" handbook or other good source of information that I should have in my library?

Just looking for a few suggestions... Thanks.
--
KF6EAL, Christopher

1513. Ramsey chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Freeland <Freeland@chickasaw.com>
Message-ID: <6MDu2.416$45.7743@news.goodnet.com>
Source record: 73836

Hello, I'm looking for a 7207A, oscillator controller, for Ramsey
CT-70 frequency counter. Anybody know where I can find one?

--
If you really must know, talk to my lawyer!!
My web page,
http://www.members.theglobe.com/Freeland/default.html
73 de KD5FES

1514. FS: 1 Mhz OCXO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36BB1A32.33E609CE@calweb.com>
Source record: 73837
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.swap

For Sale: 1 Mhz OCXO, removed from HP 8844A counter/tracking oscillator. Mfgd by Vectron, Vectron model number CO-216-3. Has coarse and fine mechanical adjustments. Power is 24VDC. compact 1.5 inches by 1.5 inches by 3 inches. Excellent condition and tested against calibrated HP 5370A. Originally posted at toooo high a price ($90)! Shame on me. Now $50 post paid conus

Tnx for the read

Bob, KE6F

1515. HELP: The Triple Trickler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: heath_filtered@s2i2.com
Message-ID: <36bb1c84.56931192@news.ncal.verio.com>
Source record: 73838

I am building the trickle charger from the article in QST, December 1997, pp.36. I got stuck because I didn't know what voltage rating to use for the two .1uF capacitors located on either side (in circuit) of the Q1 regulator. Based on the other capacitors, I figured it would be at least 16V but no more than 25V.

All I could find was 50V capacitors. My understanding is that a higher voltage rating is okay. Is that true?

--
KF6EAL, Christopher

1516. Re: bleeder resistors/teflon wire HELP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: JC <jcab01@magicnet.net>
Message-ID: <36AA0E75.402A3922@magicnet.net>
Source record: 73839
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.cb,rec.radio.amateur.boatanchors

Skycraft Parts and Surplus in Orlando, FL should have all you need.
Tel. # is 407-628-5634.

KC4JCX

NI4L wrote:

> need 100 k @ 100 watt or 200k would work not over 5 inches long.
> looking for 400k total. space is big consideration dont have much.
> thanks every one for the info on the other resistors.
> need 10 feet #10 teflon wire with die electric hv

1517. AMP PROJECT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: JC <jcab01@magicnet.net>
Message-ID: <36AA100A.5B7009CE@magicnet.net>
Source record: 73840

Can anyone provide some information using pin diodes as a T/R switch?
I am converting a final output stage of a commercial mobile in to a 2M
amp for my HT. I curently have one operational using 2 diodes to detect
the RF from the HT to bias 2 2N2222a's in a Darlington configuration to
operate a relay. I really want to get away from using relays. Please
send schematics and parts lists.

TNX, KC4JCX

1518. Simple Magnetometer idea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <fcQLyBAaoxu2EwCg@g3uda.demon.co.uk>
Source record: 73841

Hello All

Thumbing through the January 99 Scientific American Magazine, I
was interested in the article "Taking the Earth's Magnetic Pulse" by
Shawn Carlson. In it he describes a rather novel idea for measuring
small changes in the Earth's magnetic field by making use of a laser
pointer (the sort of tool used in lectures for highlighting screens) and
reflection of the light off a modified torsion balalnce. It could be
quite a useful instrument for all VHF buffs for checking out Aurorae
etc. In the future I might have a go at this arrangement as I have a few
old "Mirror-spot" galvonometers that could be modified.

For more details about the project the article suggests consulting Roger
Baker's Web site:

http://www.eden.com/~rcbaker

Or the Web forum hosted by the Society for Amateur Scientists at :

http://web2.thesphere.com/SAS/WebX.cgi

... Ken

1519. Re: Want to HB a 6m horiz loop

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36bb3182.0@news.netwalk.com>
Source record: 73842
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Jim Nielson wrote in message <36BA16D7.5FF5@bresnanlink.ns>...
>I'm looking to build a horizontal loop antenna for 6 meters, something
>along the lines of the commercially available loops from M2 or PAR. My
>thought is to use a loop made of 1/2" or larger hardline (75 ohm-I work
>for CATV Company) but I'm looking for a starting place as far as loop
>length, feed connection and type, etc...
>
>Any info anyone can provide would be most appreciated.
>
>73,
>
>Jim KB9RQD

A good starting place would be to make it 1 wavelength in circumference.

In other words, about 19 feet.

When located away from the ground the impedance of this will be about 100 ohms. Bend the cable into a circle, connect the inner and outer conductors together, and connect your feed line across the gap. Best performance will require a balun. SWR will be about 1.3 to 1.

Jim
N8EE

1520. Re: Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36bb33e6.0@news.netwalk.com>
Source record: 73843

I don't think you will have any luck with this. Diodes are single junction devices (NP). Bipolar transistors have two junctions (NPN or PNP). N stands for excess electrons and P stands for excess 'holes' (or a lack of electrons.

Don't give up hope.

I have read that there were, at the time--back before WW2, reports of some people who had 'amplifying diodes'.

What you should do is get yourself a small chunk of natural Germanium and repeat your experiment. Other minerals may also work.

Don't expect much performance, however.

If this was me, I would learn simple glass blowing and vacuum pump operation, and start out by modifying light bulbs.

You could also build an 'external anode' tube, with a metal tube for the outside which is also the anode. That way any non metalic vacuumm proof plug could be used to seal the ends. Have you considered having the tube(s) permantely connected to the vacuum pump? That way you would not have to keep a perfect seal on them...just turn the pump on for a while before applying filament.

Jim
N8EE

1521. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <79fft1$9jl$1@nnrp1.dejanews.com>
Source record: 73844
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <79evufqum1@nnrp1.dejanews.com>,
yabyum@my-dejanews.com wrote:

> Don't be afraid to ask questions. There's not such thing as a question asked
> too many times. :)

Are we there yet?

Sorry, I couldn't resist. But you're right.

"The only stupid question is the one that isn't asked."

Dave

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1522. Re: HELP: The Triple Trickler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <79fg2k$9nh$1@nnrp1.dejanews.com>
Source record: 73845

In article <36bb1c84.56931192@news.ncal.verio.com>,
heath_filtered@s2i2.com wrote:
> I am building the trickle charger from the article in QST, December
> 1997, pp.36. I got stuck because I didn't know what voltage rating to
> use for the two .1uF capacitors located on either side (in circuit) of
> the Q1 regulator. Based on the other capacitors, I figured it would be
> at least 16V but no more than 25V.
>
> All I could find was 50V capacitors. My understanding is that a higher
> voltage rating is okay. Is that true?

Fifty volt capacitors should be fine for a circuit like that.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1523. Re: horn antenna for 2.4 / 9.7 ghz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36bb35b6.0@news.netwalk.com>
Source record: 73846

Max wrote in message <79akp8$me7$1@srv4-poa.nutecnet.com.br>...
>hi,
>im searching instruction on how to design my own horn antennas.
>(the waveguide mountable types) for the two freq. 2.4 & 9.7 ghz.
>how does length and aperture influence the radiation?
>what material is suitable? (low power device)
>can you help? thanks in advance, cesco
>
>
>
>

Kraus' Antennas
Radio Engineer's Handbook
RSGB VHF and Microwave Handbook
Antenna Engineers Handbook

Check at a well stocked Library or book store near a University.

As for materials, copper or brass sheet can be used. You can even use
copper printed circuit board material (double sided type). Aluminum could
be used but it can not be soldered.

Jim
N8EE

1524. ARRL Radio Designer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36BB2B1B.695066D4@mwci.net>
Source record: 73847

If anyone wants to discuss applications of ARRL Radio Designer,
that is a subject that I am interested in.

Bill W0IYH

1525. Any ideas: use for 8.192 MHz TCXO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36BB39FC.13126776@certco.com>
Source record: 73848

I've got a bunch (5, actually) of surplus vectron TCXO's that run at 8.192 MHz. The cans have a screw-covered port which allows access to a trimmer screw inside. Twaddling it didn't produce any noticeable change in frequency on my scope or 5 digit (sigh) counter, but of course I assume it's a fine tuning adjustment.

Anyone have any interesting ideas for using these? Note that the frequency is a power of two. I guess I could divide it down/mix it up and use the products to synthesize arbitrary frequencies.

I got these things cheap, on a whim at a flea market and they're really hammers looking for a nail.

Any input appreciated!

73

-ncc kb1dej

1526. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36d73a4e.177237476@news.atl.bellsouth.net>
Source record: 73849
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Fri, 5 Feb 1999 02:42:02 -0500, "KH" <kh34@hotmail.com> wrote:
>I received a RadioShack DX-398 for Christmas, and am new to shortwaves. I
>live in an apartment and I'm guessing that the reception could be better. I
>went to the Shack and they suggested either their standard external antenna
>that you can tack to your wall or whatever, or better yet, they said I
>should get their battery-operated antenna so that I can just about pick up
>transmissions from the Voyager. I have had some bad experiences with the
>Shack guys not knowing what they were talking about in the past, so I'd like
>to run this by you experts first.

Remember that Radio Shack guys were asking "You want fries with that?"
last week. An amplified antenna is virtually useless on shortwave. What
you need is wire, as long as practical, as high as practical, and *outside*.
An antenna coupler/tuner can be useful in some situations, but a preamp
is worthless.

>Would you go with either of the Shack antennas for this model, or would you
>recommend an after-market unit? Should I expect a large improvement in
>reception with a different antenna? Sorry if this is a standard question.
>Please direct me to a web page if you have heard this one too often.

You want a wire antenna. Wire is wire, and can be bought cheaper at places
other than Radio Shack. Your local electrical supply house (or Home Depot,
Lowes, etc) is a better source. There are all sorts of designs for wire antennas.
There are end fed ones, center fed ones, phased ones, parasitic ones, etc, etc.
Get a book. The ARRL Antenna Book is one good source. Antennas have the
property of being reciprocal. That means an antenna that transmits well will
also receive well, so the designs used by amateurs (for transmitting) will also
work well for you for receiving.

Center fed antenna designs are nice becasue they require no ground connection
in order to work properly. End fed designs always need a good RF ground at the
feedpoint. That's often hard to provide properly. But the demands on a SWL
antenna aren't that stringent, the amplification in the radio can make up for a
multitude of sins. A simple end fed random wire, perhaps with an antenna
coupler/tuner, can be just fine worked against a simple ground rod or your
household cold water pipes. The 70 foot wire Radio Shack sells, used with
an L network tuner/coupler, can give good results if you get it up high and in
the clear outside. If you're stuck using an indoor antenna, your options will
be much more severely limited. Then you might want to try a tuned box loop.
Those are fairly easy to build too.

Antennas can be tempting targets for lightning. If you install an outside
antenna, take all the usual precautions to prevent conducting lightning
inside the house to your radio, or you. There's a current thread on lightning

protection going on here. Read it. It goes beyond what you'll likely need, but lightning is serious stuff, be aware of the potential hazards.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1527. FS: FUJINON LESNSE TV ZOOM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0502991059440001@murphy1.cts.com>
Source record: 73850
Cross-posted to: rec.radio.amateur.homebrew,rec.photo.marketplace,rec.video.marketplace

FUJINON TV ZOOM LENSES>

1:1.8 20-100 MM

CLEAN COND. $35 EA.

PICT AT:

http://209.239.34.153/murphyjunk/4_MORE_SURPLUS_STUFF

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1528. Re: Green coating on PC Board Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: billgmoore@aol.comrad
Message-ID: <19990205142401.28049.00000008@ng59.aol.com>
Source record: 73851

You are probably speaking of a solder mask, which is usually put on boards when they are flow soldered, so the solder will not stick where you don't want it to. 73 BillGMoore K5HTF

1529. Re: HELP: The Triple Trickler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: heath_filtered@s2i2.com
Message-ID: <36bb4898.4396702@news.ncal.verio.com>
Source record: 73852

Thanks.

On Fri, 05 Feb 1999 19:16:46 GMT, hinermad@my-dejanews.com wrote:

>In article <36bb1c84.56931192@news.ncal.verio.com>,
> heath_filtered@s2i2.com wrote:
>> I am building the trickle charger from the article in QST, December
>> 1997, pp.36. I got stuck because I didn't know what voltage rating to
>> use for the two .1uF capacitors located on either side (in circuit) of
>> the Q1 regulator. Based on the other capacitors, I figured it would be
>> at least 16V but no more than 25V.
>>
>> All I could find was 50V capacitors. My understanding is that a higher
>> voltage rating is okay. Is that true?
>
>Fifty volt capacitors should be fine for a circuit like that.
>
>Dave
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

--
KF6EAL, Christopher

1530. FS:HF amp parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36BB509D.119E032A@calweb.com>
Source record: 73853
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.boatanchors,rec.radio.swap

For Sale: Most of the Parts for a dual 4CX250 HF amplifier

4 each 4CX250FG (25.2v fils) tested pulls 100 percent (two for the amp and two spares)

2 each Eimac SK 630A sockets and Eimac 358 chimnys (From GRC-106 PA)

1 each 25.2 vac/ct fil xfmr for 4CX250FGs (new)

1 each three section 400 pf/sec load capacitor (new)

1 each Split Stator EF Johnson Plate Tuning capacitor 100 pf per section 3KV + spacing

6 each 540ufd/450 volt computer grade filter caps (tested, like new)

2 each 304 volt/600 ma CCS potted plate transformers (secondary series to voltage doubler for 1600-1700vdc
supply for easy icas KW. (Mil spec from TI Radar System)

20 each 2N5408 1KV/3 amp si diodes and turrent contact mounting assemblies (new)

6 each 25K/25 watt ww resistors for filter cap voltage distribution (new)

1 each Meter, 10 Ma basic movement, Square design like Collins S line meters only a bit larger (Honeywell)

1 each 2p/6 pos ceramic switch for metering etc. (new)

2 each 500 PF High Voltage Ceramic Door Knob caps (new)

2 each Large Amidon -2 powerderd Iron toroids for lower frequency part of tank system (new)

1 each Collins 8 uhy roller coil from 618T Power Amp (can be used for 20-10 meter portion of tank coil

1 each 6 postion tank switch, very heavy duty from BC-375

2 each VR-150 regulators for screen supply

2 each DPDT relays/ 12VDC coils for antenna T/R switching (new)

1 each 12VDC modular power supply for control relay usage

1 each DPDT relay and matching terminal screw octal socket base for primary AC control (new)

1 each Amperite Time Delay Relay for soft start sequence system (new) (with socket)

1 each 15 amp AC line filter

2 each Fuse Holders (new)

1 each Home brew plate choke (not grid dipped for hot spots)

2 each SO-239 coaxial connectors (new)

1 each 3X10X17 inch Hammond aluminum chassis and bottom cover (nib)

That's about it. Add a front panel, a blower, and a bunch of creative labor and you will have a nice amplifier. I spent a lot of time collecting the stuff, and now I don't where I will get the time to finish the project. $225 plus UPS on about 45 lbs. W/O power transformers $175 and UPS on about 20 lbs from zip 95827

Tnx for the read.

73
Bob, KE6F

1531. ADV: Hello...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: tcpenn@careerbuildermail.COM
Message-ID: <750.329962.848476@nj.net>
Source record: 73854

Are You Paying More Than You Have To...
For Long Distance & Phone Services ???

Most People Are Over-Paying - And Getting Less...

Are You Getting A Deal Like This From YOUR Carrier ?

*8.9 Cents/Min (24 Hours/Day) (Lower Rates Below)
*Receive 30 Minutes Of F-R-E-E Calling For Signing Up
*6 Second Billing (Saves 20% More)
*NO Sign-Up Fees
*NO Monthly Billing Fees
*NO Minimum Usage
*No Gimmicks

Toll-Free Numbers Are Also Only 8.9 Cents/Min
With 6 Second Billing & No Set-Up/Transfer Fee

Callings Cards - Just 14.9 Cents/Min
6 Second Billing - NO " Bong " Charges

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Get 30 Minutes Of FREE Calling For EACH Person That You
Refer Who Signs Up For Service - Refer 3 People Who Sign
Up & YOUR Rate Lowers To 7.9 CENTS/MIN - PERMANENTLY !

A-N-D

EVERYONE That You Refer, Who Signs Up For Service, ALSO
Gets 30 Minutes Of FREE Calling !

Get Your Final Cost Per Minute Down To 5 Cents/Min,
3 Cents/Min, Even Down To ZERO - With Our Referral
Program - It's Totally FREE To You & The People That
You Refer !

When We Get A Lower Rate - YOUR Rate Goes DOWN
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Are Busy - Keep Trying. This Is An Information
And Sign-Up Line.If You Sign-Up For The Service,
You Will Have The Direct Toll-Free Numbers For
Our Customer Service & Billing Departments.

1532. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <79fovp$i37$1@nnrp1.dejanews.com>
Source record: 73855

In article <mzenierF6ozu2.Dn8@netcom.com>,
mzenier@netcom.com (Mark Zenier) wrote:

> (snip...)
> One of the hobby magazines had a PIC based frequency counter as a project
> 3-6 years ago. I think it was Electronics Now.

Among others, try Elektor for February 1998, which had a PIC-based
counter/Huff and Puff. There is also code floating around the web.

Microchip were the ones who started it all. Check their app notes.
The key innovation (which everybody now uses) was a sneaky way of
reading the 8 bit prescaler, so you can combine it with the 8 bit
counter in the microcontroller to make a 16 bit counter.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1533. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Oscar <oscarrben@worldnet.att.net>
Message-ID: <36BB7953.7D803E58@worldnet.att.net>
Source record: 73856
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Clinton, didn't you know? Oh yes, Clinton has nothing to do with this thread.

Clinton has a lot to do with this and every thread on the Internet as he is the one who pushed the *Information Superhighway.* He got at least one thing right. Right or wrong he wtill represents the American Presidency, C-in-C, etc. and probably a better president that Oliver North could ever hope of becoming...someone else who lied under oath.

1534. Re: ANTI-CW people are liberals and would want to see Clinton go free too!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Oscar <oscarrben@worldnet.att.net>
Message-ID: <36BB7958.8AAFA695@worldnet.att.net>
Source record: 73857
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

This fact is evident by looking at the decline of new amateur licenses
being granted. Also, the median age of hams is getting significantly
older. The ARRL figures that by doing away with the code requirements
----
>This poster made excellent comments. Before the Internet became popular I was studying feverishly for an amateur license not because I was interested in electronics but because I wanted to communicate with people from other parts of the world and US. With ICQ, MIRC, e-mail, and internet chat channels, communication by dits and dahs seems quite antiquated---now I enjoy "chatting" via my computer and don't have to wrack my brain about whether I heard a U or S. My ear is not that discriminating at my age(50+).
> Why is Amateur Radio dying? Because people such as yourself are carrying on a "holier than though" attitude towards those who don't yet know the code. Your attitude disgusts them, and they have no desire to become what you already are.

>>>AMEN!!!! BTW you code lovers, what are you doing chatting via telephone in this NG when you should be oscillating your key (BIG GRIN).

Whatever direction amateur radio takes, it's still a great service,
albeit it may become a threatened species.

1535. Basic Stamp FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <eanYV1VU#GA.49@nih2naad.prod2.compuserve.com>
Source record: 73858

For those of you who are interested, there is now a Basic Stamp FAQ at
http://www.al-williams.com/wd5gnr/stampfaq.htm

73,

Al WD5GNR
AWC

1536. Re: Need SWR Alert circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.3.96.990205201336.3938A-100000@cluster2>
Source record: 73859

i am blind, and would like one of those also. if you find one, let me
know.
http://www.randomc.com/~dana

On 4 Feb 1999, Sam Hall wrote:

> Date: 4 Feb 99 10:05:56 GMT
> From: Sam Hall <sca00135@mail.wvnet.EDU>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: Need SWR Alert circuit
>
> Hello to all and thanks for reading.
>
> I am operating a remote controlled HF station and want to add a solid
> state "Skywalker" amplifier. To protect the amp, I need a way to prevent
> transmitting into high SWR conditions. My thoughts are to have some type of
> SWR Alert/shutoff if the SWR exceeds 2:1. Anyone know of a circuit which
> will fill the bill?? Perhaps there is a commercially produced device
> available for such application.
>
> Greatly appreciate any advice. Thanks and 73,
> Sam--K8WVA--
>
>
>
>
>

1537. Amplifier Help Needed 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Scott Gordon <kq8rp@primenet.com>
Message-ID: <36BBA694.7DF4E667@primenet.com>
Source record: 73860

Here is some background. The amp is running two 3-500Z. I just changed
out the power supply from 100v to 220v.
Let's take 40 meters into a dummy load:
I thought I may have a soft tube, but now I don't think so..
1 - Tube installed driving from the Kenwood TS-570 100 watts of power
using the auto tuner for my tuned inputs.. 1100 Watts out on 40 m
I can put the other tube in and replace this one and get the same
thing. I key down and talked for 20 min in the dummy load on each tube
and they hung in there at 1100 watts. I have since tried each tube
seperatley in both sockets. Same thing 1100 Watts.
If I put two tubes in there retune the the auto tuner and the amp, I get

nearly 1500 Watts out. But this never last very long. It keeps falling

back to 1000 to 1100 watts with two tubes.
Now I understand I am really driving that one tube with 100 watts less
some percent of loss via the auto tuner. And when I put two tubes in
there impedence changes and now I am only driving each tube half the 100

watts or so.
So straighten me out? Why am I seeing 1400 to 1500 at the beginning and

then it falls back with two tubes? But with one tube it stays pretty
constant at 1100?
Any info would be appreciated,

1538. WTB: NOS TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <36BBAEA3.3B47CC96@erols.com>
Source record: 73861

Looking for the following NOS (preferably in
original boxes) tubes.

6V6GT, 6L6GC, 5AR4, 5Y3GT, 5R4, 6CA7/EL34, 6BQ5/EL84, 7189A, 7027,
7591A, 7581A, 12AX7A , 5751, 12AY7, 7025, 12AT7, 7199, 5881, 6550,
7868, KT-66,77,88.

Also, octal socket extenders/savers.

Please list brand, price, qty available, and whether in
original box.

Thanks,
Mike
703-430-8713
bluestat@erols.com

1539. FS. Johnson Tx Var Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36BBB8B3.EB16E1C7@calweb.com>
Source record: 73862
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors

For Sale:

Two each Johnson 153-24-4 Air Variable transmitting caps. 800 PF max, 50 Pf min (measured). spacing is 0.080 inches (measured with dial caliphers). Units are new and clean. no cracked ceramic and no corrosion. 1/4 inch shaft approximately 2" long with stub 1/4 inch shaft out the rear, approximately 1/2 inch to use pair in split stator configuration for the Antenna Tuner for 160 Meters? $90 for the pair post paid conus. $50 each post paid conus.

Thanks for the read es 73

Bob, KE6F

1540. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Curtis Lee Chambers <kb9mum@soltec.net>
Message-ID: <36BBB5B3.ED9F639@soltec.net>
Source record: 73863
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

RadioShack has them avail from the RSU order system, have them check for
older handheld cb 8 alk/ 10 rechag type. They are only a couple of bucks.

Curt

Steve Leong wrote:

> Does anyone know the availability of any "dummy" AA cells?
> (I've seen them in the past - they are plastic forms the same size of
> an AA cell, with a metal strip connecting the top and bottom contacts -
> basically a specialized jumper!).
>
> I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
> spaces for too many AA cells (excess voltage would damage radio). I need
> to insert two "dummy" AA cells to act as jumpers for these extra spaces.
> Already tried to solder jumpers in place - can't do it due to the metal
> they used for the contacts.
>
> Thanks for any assistance and advice!
>
> Steve KC6IJM

1541. Re: Any ideas: use for 8.192 MHz TCXO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-05 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <36BBC93C.AC772CB7@mlecmn.net>
Source record: 73864

8.192 MHz reference oscillators are neat because you can get down to 1kHz with a single IC like the 74HC4060, and when followed by a 74HC390 dual decade counter, there are additional outputs at 100 Hz and 10 Hz (plus others along the way). I've used 8.192 MHz oscillators as the reference for frequency synthesizers in my homebrew LowFER transmitters and receivers. If you can't come up with a good use for your TCXO's, quote me a price. I might be quite interested.

Lyle, K0LR

nicholas charles caruso wrote:

> I've got a bunch (5, actually) of surplus vectron TCXO's that run at
> 8.192 MHz. The cans have a screw-covered port which allows access to a
> trimmer screw inside. Twaddling it didn't produce any noticeable change
> in frequency on my scope or 5 digit (sigh) counter, but of course I
> assume it's a fine tuning adjustment.
>
> Anyone have any interesting ideas for using these? Note that the
> frequency is a power of two. I guess I could divide it down/mix it up
> and use the products to synthesize arbitrary frequencies.
>
> I got these things cheap, on a whim at a flea market and they're really
> hammers looking for a nail.
>
> Any input appreciated!
>
> 73
>
> -ncc kb1dej

1542. Re: Regulated Power Supply Experts out there?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Terry Anderson <tlan0@runestone.net>
Message-ID: <79g3mp$54q$1@news.mr.net>
Source record: 73723

Hehehe Order yourself a Pyramid power supply for half the price of astron
and forget about
ever having to fix again!
Good quality too!!

N0XHC

Harry wrote in message <369AD5A3.D664CBC9@iag.net>...
>I ORDERED COMPLETE CIRCUIT BOARD FROM ASTRON FOR 20 BUCKS AFTER TRYING TO
>FIX MY 20A AND PULLING WHAT HAIR I HAVE LEFT OUT IT NOW WORKS FINE HOPE YOU
>GET IT FIXED 73 HARRY
>
>Doug Snowden wrote:
>
>> I have been intermittently working on an older Astron RS-20A power
>> supply that folds back at about 1/2 current (about 10 amps). I started
>> intelligently troubleshooting this p/s and have now resorted to
>> wholesale
>> parts replacement. It still folds back and the output voltage drops to
>> around
>> 11.5 volts at this time. I replaced the 2N3771 pass transistors with
>> 2N3055
>> xsistors (they have about 1/2 the current rating of the 2N3771). I
>> figure
>> they should still be able to handle 18 amps of current at full load
>> (right?).
>> Over a period of time I have replaced all of the active components and
>> one
>> 1N4002 diode. I don't know if a bit of RF might be getting into the p/s
>> and
>> causing problems, or if one or more of the resistors that determine the
>> foldback
>> current is out of range. That is a question I have - which resitors are
>> involved
>> in determining this? I have removed the SCR that is for overvoltage
>> protection
>> temporarily just to take it out of the picture. If I measure the
>> voltages on
>> the 723 regulator when the p/s is operating until less load, things seem
>> normal
>> according to the voltage chart on the schematic... Any ideas ?
>>
>> Doug Snowden
>

1543. looking for old laptops?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.3.96.990206032731.6476C-100000@cluster2>
Source record: 73724
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

i am blind, and looking for old 386's old laptops, or any laptop that
that the screen has gone out on. i don't need the screen, just a lap top
that works. e-mail back, or go to my web
page at
http://www.randomc.com/~dana

1544. Re: Simple Magnetometer idea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <5N6SWDA0OAv2Ewep@g3uda.demon.co.uk>
Source record: 73725

In article <fcQLyBAaoxu2EwCg@g3uda.demon.co.uk>, Ken Linney
<ken@g3uda.demon.co.uk> writes
>Hello All
>
> Thumbing through the January 99 Scientific American Magazine, I
>was interested in the article "Taking the Earth's Magnetic Pulse" by
>Shawn Carlson. In it he describes a rather novel idea for measuring
>small changes in the Earth's magnetic field by making use of a laser
>pointer (the sort of tool used in lectures for highlighting screens) and
>reflection of the light off a modified torsion balalnce. It could be
>quite a useful instrument for all VHF buffs for checking out Aurorae
>etc. In the future I might have a go at this arrangement as I have a few
>old "Mirror-spot" galvonometers that could be modified.
>
>For more details about the project the article suggests consulting Roger
>Baker's Web site:
>
> http://www.eden.com/~rcbaker
>
>
>Or the Web forum hosted by the Society for Amateur Scientists at :
>
> http://web2.thesphere.com/SAS/WebX.cgi
>
>... Ken

Just another address - this time the Scientific American article
relating to the above:

http://www.sciam.com/1999/0199issue/0199amsci.html

The SAS (Society for Amateur Scientist's WEB Bull/Board works
fine once you lave logged on. (See previous post for addr)

73es

... Ken

1545. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Thesis <tarkan_shahho@hotmail.com>
Message-ID: <CgUu2.43$C14.745@nsw.nnrp.telstra.net>
Source record: 73726
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

are you sure that there is a 1.8V drop across the LED? seems a bit high?

> I've tried a 650-ohm series resistor which gives me these measurements,
> using a 12.5 volt supply:
> 16 mA, 1.8 v drop across the LED.

1546. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.99Feb6081017@colossus.stdavids.picker.com>
Source record: 73727
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <36be260e.36616612@news2.psn.net> dreadavis@see.sig (Drew Davis) writes:

> more basic questions - What effect does a 555 going directly into the base
> of an NPN and with a diode connected emitter to ground? Is the 555 current
> limited so this is not a problem?

Yeh, to something like 200 mA or more - use a resistor! Their cheap, really!

:-)

--- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
+Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
| Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html

1547. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.99Feb6082156@colossus.stdavids.picker.com>
Source record: 73728
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

In article <CgUu2.43$C14.745@nsw.nnrp.telstra.net> "Thesis" <tarkan_shahho@hotmail.com>
writes:

> are you sure that there is a 1.8V drop across the LED? seems a bit high?

Compared to what? Sounds pretty darn normal to me for a visible LED (IR
would be lower).

--- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
+Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
| Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html

> > I've tried a 650-ohm series resistor which gives me these measurements,
> > using a 12.5 volt supply:
> > 16 mA, 1.8 v drop across the LED.

1548. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <79hgj9$jm0$1@news.interlog.com>
Source record: 73729
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

```
In sci.electronics.design Thesis <tarkan_shahho@hotmail.com> wrote:
> are you sure that there is a 1.8V drop across the LED? seems a bit high?

"Typical" forward voltages across LED's:

1.7/1.8/2.0/2.1 V @ 20mA depending on colour and technology. If it is 1.8V
at 20mA it virtually has to be red, though some reds are higher voltage
(GaP, GaAsP/GaP)

--
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
Spehro Pefhany "The Journey is the reward"
speff@interlog.com
Fax:(905) 271-9838 (small micro system devt hw/sw + mfg)
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
```

1549. Drakes FS / Sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990206094615.23965.00000451@ng30.aol.com>
Source record: 73730

Drake Rigs Sold / Thanks JR

1550. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36BC5493.7D4A@pop.valley.net>
Source record: 73731

Grogancat wrote:
>
> The reason BJT's work is the magic happening at the depletion regions which
> is also why basic electronics textbooks point
> out the futility of attempting this with back to
> back discrete diodes etc...
>
> I dont want to dissappoint you, but keep
> trying! I think all hams should do this kind
> of tinkering. It's fun! I build my own AM
> tube radios from scratch including winding my
> own rf, osc and IF transformers etc...
Hello--
I vaguely recall reading an article in an ancient issue of QST(?)
re: someone who built a point-contact transistor using a galena slug
and two cat's whiskers.

Perhaps someone who has a QST index could locate the reference?
73,
Brad AA1IP

1551. Re: HELP: Trying to turn my home into a brewery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: m c beutler <mbeutler@tds.net>
Message-ID: <36BC5BFC.361DEE8A@tds.net>
Source record: 73732

Christopher Heath wrote:

> What is a good source for projects for someone at my level of
> knowlege?
>

Popular Electronics is still around on the news stands. QST also carries projects as well.

As far as increasing knowledge, would suggest starting with something like "Basic Mathematics for Electronics" by Cooke & Adams (this one gives some real world examples) or another tech school type text. Once you understand the math behind the smoke and mirrors, you can pretty much figure out anything. Then the more advanced stuff you run across will sink in better.
--
-
Regards,
mark beutler
-

1552. NEED 6 PIN TUBE BASES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <17086-36BC54A8-4@newsd-153.iap.bryant.webtv.net>
Source record: 73733

I NEED SOME 6 PIN TUBE BASES, NOT THE TUBES THEMSELVES. IF YOU HAVE ANY DEFUNCT, OPEN FILAMENT, MISSING THE GRID CAP TUBES I WOULD BE HAPPY TO BUY THEM FROM YOU. WA0ABI

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1553. FS: 44 year accumulation of tubes & microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: "m.pasternack" <m.pasternack@MCI2000.com>
Message-ID: <01be51f5$770b01c0$641337a6@pavilion>
Source record: 73734
Cross-posted to: alt.ham-radio.marketplace,misc.industry.electronics.marketplace,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

e-mail to: "m.pasternack@cwix.com" to receive 10 page list. Murray, W6KRC

1554. Haw to put up my X-Yagi antenna to Right circulated polarisation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <79hu4r$f2d$1@news3.Belgium.EU.net>
Source record: 73735
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hello.

This is an question to a HAM whoes have experiance whit this !

I have a 2M 9elements X- YAGI antenna, I can use it vertical or horizontal
polarized.
Now I like to configure my antenna righthand circulated.

I t is a TONNA antenna he have open dipoles (not closed).

THANKS TO YOU ALL !

kind regards, 73'

Geert Pirens

1555. Re: Amplifier Help Needed 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <79iei4$egb@nnrp2.farm.idt.net>
Source record: 73736

Can you supply any more data such as plate voltage, plate current, grid drive etc.? Are the 3-500Z's matched pairs? Is the layout of the power circuit the same physically for each tube? Can you find a way to measure the plate current for each tube separately when the power starts to fall off?

Leland C. Scott
KC8LDO

Scott Gordon wrote in message <36BBA694.7DF4E667@primenet.com>...
>If I put two tubes in there retune the the auto tuner and the amp, I get
>
>nearly 1500 Watts out. But this never last very long. It keeps falling
>
>back to 1000 to 1100 watts with two tubes.

1556. FT-707 Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <79if27$td4$1@news5.svr.pol.co.uk>
Source record: 73737

I'm desperate for a schematic for Yaesu FT-707 so that I can repair mine.

Anyone help out here ?

John G3UGY

1557. Four Square Antenna phasing box?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <79ii5n$1nb$1@scotty.tinet.ie>
Source record: 73738

Has anybody got details of a phase control
system for a 4 Square antenna for 80Mtrs?

Thanks.
Ed. EI9GQ

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/

****

1558. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: seleong@gte.net
Message-ID: <79ill9$n76$1@news-2.news.gte.net>
Source record: 73739
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

In article <36BBB5B3.ED9F639@soltec.net>,
kb9mum@soltec.net says...
> RadioShack has them avail from the RSU order system, have them check for
> older handheld cb 8 alk/ 10 rechag type. They are only a couple of bucks.
>
> Curt
>
> Steve Leong wrote:
>
> > Does anyone know the availability of any "dummy" AA cells?
> > (I've seen them in the past - they are plastic forms the same size of
> > an AA cell, with a metal strip connecting the top and bottom contacts -
> > basically a specialized jumper!).
> >
> > I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
> > spaces for too many AA cells (excess voltage would damage radio). I need
> > to insert two "dummy" AA cells to act as jumpers for these extra spaces.
> > Already tried to solder jumpers in place - can't do it due to the metal
> > they used for the contacts.
> >
> > Thanks for any assistance and advice!
> >
> > Steve KC6IJM
>
>
Thanks very much to everyone for the leads and tips on
the dummy AA battery request. I did check with our
local Radio Shack, and the crazy dummy AA batteries are
$3.99 each in their replacement parts list. I may try
the wooden or aluminum dowel method too. Much cheaper
than the pre-made RS part! Thanks again! Steve
KC6IJM.

1559. Re: Four Square Antenna phasing box?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36BD07C9.65DB814E@teleport.com>
Source record: 73740

There's information about this in Chapter 8 of the _ARRL Antenna Book_. You might also be interested in "The Simplest Phased Array Feed System -- That Works" in the _ARRL Antenna Compendium_, Vol. 2.

Roy Lewallen, W7EL

Eamon Skelton wrote:
>
> Has anybody got details of a phase control
> system for a 4 Square antenna for 80Mtrs?
>
> Thanks.
> Ed. EI9GQ
>
> --
> **********
> Eamon 'Ed' Skelton EI9GQ
> Cork, Ireland
>
> ANTI SPAM RETURN ADDRESS
> Real e-mail address below
>
> ei9gq@nettaxi.com
> www.nettaxi.com/citizens/ei9gq/
>
> **********

1560. Re: Any ideas: use for 8.192 MHz TCXO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: See sig for reply <ndema@astrax.nospam>
Message-ID: <Pine.LNX.3.95.990206170854.223D-100000@astrax.snafu.de>
Source record: 73741

On Fri, 5 Feb 1999, nicholas charles caruso wrote:

> I've got a bunch (5, actually) of surplus vectron TCXO's that run at
> 8.192 MHz. The cans have a screw-covered port which allows access to a
> ...
> Anyone have any interesting ideas for using these? Note that the

What about using them as oscillator for a selfmade 15-digit frequency
counter?

;-)

Cheers,
Detlef, DH3DM.

PS: Yes, I know, you would have to temperature-stabilize etc. ...

+++
no archive: yes

--
Detlef Marxsen at 53 27 N 09 57 E.
Due to bad spam experience, my header is faked. To send email to me
remove the ".no" from dema@astrax.snafu.de.no
Sorry for the inconvenience.
May the bugs and computer-viruses eat the spammers alive!

1561. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36BCFC4F.123@pop.valley.net>
Source record: 73742

Brad Thompson wrote:
>
> Grogancat wrote:
> >
> > The reason BJT's work is the magic happening at the depletion regions which
> > is also why basic electronics textbooks point
> > out the futility of attempting this with back to
> > back discrete diodes etc...
> >
> > I dont want to dissappoint you, but keep
> > trying! I think all hams should do this kind
> > of tinkering. It's fun! I build my own AM
> > tube radios from scratch including winding my
> > own rf, osc and IF transformers etc...
> Hello--
> I vaguely recall reading an article in an ancient issue of QST(?)
> re: someone who built a point-contact transistor using a galena slug
> and two cat's whiskers.
>
> Perhaps someone who has a QST index could locate the reference?
> 73,
> Brad AA1IP

Hello again--

Before I get the antivivisectionists on my case (I really do like
cats!), the whiskers in question consist of stiff segments of fine-gauge
wire.

73,
Brad AA1IP

1562. need plans for a home made amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Charles McCurdy <chas1@wt.net>
Message-ID: <36BD298A.6FA@wt.net>
Source record: 73743

Hi all i need some plans to put together a 6mtr amp for 10watts in 100 out.

i have a 6mtr amp but the tr switch stays keyed all the time when you transmite or not.
if any body has any plans in jpg format please email them to me at chas1@wt.net or visit my web site at www.qsl.net/kc5cxu
73s kc5cxu

1563. WTB 10MHZ OXCO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <36bcf16e.0@208.138.40.126>
Source record: 73744

I am looking for a couple of 10Mhz ovenized crystal oscillators. Ideally
I am looking for a couple of units that will fit in a 1 rack unit high
chassis.

norman@pcseng.com

1564. Build An Inexpensive Repeater Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: Roger <n0yoxNOSPAM@iland.net>
Message-ID: <79ijahjkt1@remarQ.com>
Source record: 73745

I have many different controller project at this site.
http://www.iland.net/~n0yox/n0yox.html
http://www.iland.net/~n0yox

If you have a controller or ham related project send it to me and I will try to post it.

1565. FS; Parts / Projects for the Builder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990205203639.23964.00000178@ng30.aol.com>
Source record: 73865

For Sale: Parts and Projects for the Builder
RF decks / Final Pas
Motorola
6 Meter RF Deck Pair 8560ï¿½s in push-pull
with 95% of power supply parts
Bud cabinet 14" $300.00

2 Meter RF Deck single 8560 $ 175.00

RCA
6 Meter pair 4-250ï¿½s in push-pull
Tank coil, filament transformer, Grid coil $250.00

6 Meter 4-125"s same as above $225.00

Home Brewed projects

6 Meter, 2 X 4CX250B / Power Supply / Cabinet
Need wiring, Meters, TR switch
Will make about 700 watts P.E.P. $ 380.00

6 Meter, single 4-400 / Power Supply / Bud cabinet
Needs TR switch / LPF / 650 watts P.E.P. $450.00

Tubes, Sockets, RF chokes, Coil stock, Meters, Transformers Filament / Plate

1566. For Sale Drake Radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990205204348.23964.00000184@ng30.aol.com>
Source record: 73866

For Sale
Shack Reduction
Drake T- 4 XC , R ï¿½ 4B .4, 2.4, 4.8 Filters , MS-4 / power supply
8 on a 1-10 $500.00 + Shipping

Drake T ï¿½ 4 XC , R ï¿½ 4 C , MS ï¿½ 4 / PS.25 CW , .5 CW , 1.5 CW Filters
8.5 on 1-10 $475 + Shipping

Drake T-4X , R ï¿½ 4C , .25CW , .5 CW, 1.5 CW Filters , NB, MS ï¿½ 4 / PS
8 on 1-10 $475.00 + Shipping

Drake TR ï¿½ 4C ,MS- 4 / PS , Blanker
8.5 on 1-10 $375.00 + Shipping

Drake TR ï¿½ 3 , Speaker / PS , 7.5 on 1-10 $250.00 + shipping

Drake MN ï¿½ 4 Matching Network (Antenna Tuner) 9.5 on 1-10
$195.00 + Shipping

Shipping from Austin, Texas

1567. Classic KW For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990205204712.23964.00000188@ng30.aol.com>
Source record: 73867

```
Classic KW For Sale
Barker & Williamson Model L-100A
80-10 meters pair 813's
Power Supply and Manual
Scale 1-10 = 9
$575.00 + shipping from Austin, Texas
```

1568. Antenna Tuner For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990205205156.23964.00000198@ng30.aol.com>
Source record: 73868

For Sale 1500 Watt Antenna Tuner
Roller Inductor/Air Variable
built in 1500W Dry Dummy Load
$450.00 + shipping
From Austin, Texas

1569. Re: Current limit resistor for LED (basic question)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: dreadavis@see.sig
Message-ID: <36be260e.36616612@news2.psn.net>
Source record: 73869
Cross-posted to:
sci.electronics.repair,sci.electronics.basics,sci.electronics.design,sci.electronics.misc,rec.radio.amateur.homebrew

Fri, 29 Jan 1999 00:06:12 GMT, JD: (>8 various snips >8)

>Apply the output of the circuit to the base of an npn transistor for
>example a 2n2222. Apply Your dc power including any needed dropping
>resistor to limit the current to the collector of the transistor.
>Connect the anode of the diode to the emitter of the transistor and
>the cathode to ground.. ''The transistor is now going to act like a
>simple switch to turn on and off the led....

more basic questions - What effect does a 555 going directly into the base
of an NPN and with a diode connected emitter to ground? Is the 555 current
limited so this is not a problem?

-Drew

__dreadavis_at_psn_dot_net__oOOo_(.)(.)_oOOo__hang'n_there__

1570. Re: bleeder resistors/teflon wire HELP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <36BBB11A.8D6DDF47@bellsouth.net>
Source record: 73870
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.cb,rec.radio.amateur.boatanchors

thank you.

JC wrote:

> Skycraft Parts and Surplus in Orlando, FL should have all you need.
> Tel. # is 407-628-5634.
>
> KC4JCX
>
> NI4L wrote:
>
> > need 100 k @ 100 watt or 200k would work not over 5 inches long.
> > looking for 400k total. space is big consideration dont have much.
> > thanks every one for the info on the other resistors.
> > need 10 feet #10 teflon wire with die electric hv

1571. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: bschwabe@ionet.net
Message-ID: <79gfri$2gb$1@ionews.ionet.net>
Source record: 73871
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

In article <79cl6rsdg1@nnrp02.primenet.com>, kenk@primenet.com (Ken Knecht) wrote:
>In article <36B87E92.74866692@tidalwave.net>, Trevor <ironace@tidalwave.net>
> wrote:
>>Steve Leong wrote:
>>
>>> Does anyone know the availability of any "dummy" AA cells?
>>> (I've seen them in the past - they are plastic forms the same size of
>>> an AA cell, with a metal strip connecting the top and bottom contacts -
>>> basically a specialized jumper!).
>>>
>>> I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
>>> spaces for too many AA cells (excess voltage would damage radio). I need
>>> to insert two "dummy" AA cells to act as jumpers for these extra spaces.
>>> Already tried to solder jumpers in place - can't do it due to the metal
>>> they used for the contacts.
>>>
>>> Thanks for any assistance and advice!
>>>
>>> Steve KC6IJM
>>
>>How about using wooden dowels with thumb tacks in the end with wire
>>connecting the thumb tacks
>>
>>
>I just use dead AA cells and wrap them with aluminum foil.
>
>Ken W9NPP

Similar to the "wooden dowel approach above....

..use an Aluminum dowel with a vinyl tube slid over the dowel.

__/__/__/__/__/__/__/__/__/__/__/__/

Beau Schwabe (Electronic Design Engineer)

E-mail: bschwabe@ionet.net
AIM Screen Name: Bum 1969
WebPage: http://www.ionet.net/~bschwabe/index.html

Sabolich Research & Development
4301 N. Classen Blvd.
Oklahoma City, Oklahoma 73118
-- -- -- -- -- -- -- -- -- -- -- -- --

/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \/ \

1572. Re: Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-06 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990205233001.11017.00000288@ng140.aol.com>
Source record: 73872

The reason BJT's work is the magic happening at the depletion regions which
is also why basic electronics textbooks point
out the futility of attempting this with back to
back discrete diodes etc...

I dont want to dissappoint you, but keep
trying! I think all hams should do this kind
of tinkering. It's fun! I build my own AM
tube radios from scratch including winding my
own rf, osc and IF transformers etc...

1573. TEN METER DIPOLE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: PAPA <paulin@patrol.i-way.co.uk>
Message-ID: <36be222f.0@news.i-way.co.uk>
Source record: 73575

Can anyone help with dimensions etc for a 10mtr dipole which is unavoidable
due to space restrictions.
Have 75ohm and 50ohm coax available.
Do I need a balum?

Paul

1574. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <79ld05$lo8$1@winter.news.rcn.net>
Source record: 73576

When I was seven I clocked the whiskers off
of several cats trying to make a damn detector work.

Pete

Brad Thompson wrote in message <36BCFC4F.123@pop.valley.net>...
>Brad Thompson wrote:
>>
>> Grogancat wrote:
>> >
>> > The reason BJT's work is the magic happening at the depletion regions
which
>> > is also why basic electronics textbooks point
>> > out the futility of attempting this with back to
>> > back discrete diodes etc...
>> >
>> > I dont want to dissappoint you, but keep
>> > trying! I think all hams should do this kind
>> > of tinkering. It's fun! I build my own AM
>> > tube radios from scratch including winding my
>> > own rf, osc and IF transformers etc...
>> Hello--
>> I vaguely recall reading an article in an ancient issue of QST(?)
>> re: someone who built a point-contact transistor using a galena slug
>> and two cat's whiskers.
>>
>> Perhaps someone who has a QST index could locate the reference?
>> 73,
>> Brad AA1IP
>
>Hello again--
>
>Before I get the antivivisectionists on my case (I really do like
>cats!), the whiskers in question consist of stiff segments of fine-gauge
>wire.
>
>73,
>Brad AA1IP

1575. Help with BUD BOXES ....for Collins Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Joe K7JOE <K7JOE@yahoo.com>
Message-ID: <36BD582B.8AAC62D9@yahoo.com>
Source record: 73577

Hi,
Anyone know the going rate for the bud boxes (I think that was
the name brand) that matched the Collins S-line and KWM2 line
of equipment.

Apparently, they made these cabinets to match the station look of
the vintage Collins gear. Trying to figure what the going rate is
today for these boxes (The big transmitter/receiver size ones, not
the little speaker/station console ones).

Many thanks,
Joe
K7JOE

1576. W6PO AMP. PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <36BE4E6D.C875F444@iag.net>
Source record: 73578

FOR SALE PARTS FOR W6PO TYPE AMPS.--SHORTING BLOCKS--2 TANK LINES AND CAP SUPPORTS 8 1/2" LONG,SPRING TUNING ASSY ANODE,OUTPUT DISC ASSY N TYPE CONNECTOR,SOCKET MOUNT 4"X4" WITH AIR RELIEF,ANODE CLAMP ASSY&TEES,BRACKET FOR CATHODE CAP MOUNT. $135 I SHIP, WA4OFS@IAG.NET OR CALL 1 407 892 5610

1577. EIMAC VAC VAR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: marty <martyg@mindspring.com>
Message-ID: <36BE5365.5F75@mindspring.com>
Source record: 73579

can anyone tell me the voltage and min. and max. cap. rating on a
eimac vvc-60-20 vac. var. cap?thanx marty

1578. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: kilroy <kilroy@fuse.net>
Message-ID: <79j7j3$8re$1@remarQ.com>
Source record: 73580
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

O bull!
How long have _you_ been on the INet? We have been playing with WWW since long before SickWillie even met Monica.
Clintoon had NOTHING to do with our internet, other than to suggest a tax on its use.
Wake up.

Oscar wrote in message <36BB7953.7D803E58@worldnet.att.net>...
>Clinton, didn't you know? Oh yes, Clinton has nothing to do with this
>thread.
>-------
>Clinton has a lot to do with this and every thread on the Internet as he
>is the one who pushed the *Information Superhighway.* He got at least
>one thing right. Right or wrong he wtill represents the American
>Presidency, C-in-C, etc. and probably a better president that Oliver
>North could ever hope of becoming...someone else who lied under oath.

1579. TEST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: adusa@juno.com
Message-ID: <79l144eht1@remarQ.com>
Source record: 73581

This is a test message.

1580. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: cmagers@sprynet.com
Message-ID: <MPG.11281eb05eaa8cb798968f@news.sprynet.com>
Source record: 73582
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
>
> Oscar wrote in message <36BB7953.7D803E58@worldnet.att.net>...
> >Clinton, didn't you know? Oh yes, Clinton has nothing to do with this
> >thread.
> >-------
> >Clinton has a lot to do with this and every thread on the Internet as he
> >is the one who pushed the *Information Superhighway.* He got at least
> >one thing right. Right or wrong he wtill represents the American
> >Presidency, C-in-C, etc. and probably a better president that Oliver
> >North could ever hope of becoming...someone else who lied under oath.
>
>
>

The democrats like this kind of individual. So unaware of the world that
he will believe anything that he is told. It's hard to believe that there
are people this dense out there but apparently there are a lot of them.
Well you say that "he at least got one thing right". Considering the fact
that he had nothing to do with that "one thing" I guess you would have to
say that he is batting a zero.
CW
KC7NOD
```

1581. FS: Drake RR3 communications receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: ying <ying@skyinet.net>
Message-ID: <79ii2qalv1@news.skyinet.net>
Source record: 73746
Cross-posted to: rec.radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

```
Selling in mint condition Drake RR-3 generage coverage HF receiver, $1000.00
Pls. email direct to ying@skyinet.net
```

1582. 2N3414

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36BD2D53.C34D4D01@bellsouth.net>
Source record: 73747

I have in my junkbox a whole bunch of 2N3414s. They're TO-92 transistors - I'm pretty sure they're small-signal NPN silicon.

I need to know the pinouts; are they E-B-C, B-C-E, or what? Am I correct about them being NPN silicon small-signal transistors? (anyone know the Ft?) I can find a bunch of Web sites that'll sell me more, but none that'll tell me what they are!
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

1583. Will the IC706MKII cross band repeat?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: John in Roseville CA 95678 <nospam@nospam.net>
Message-ID: <Cu5v2.741$Oa3.9632229@nnrp2.ni.net>
Source record: 73748

Will the IC706MKII cross band repeat from HF to 2M?

To avoid SPAM I changed the first letter of my
e-mail address, It should be r not j.

73 John in Roseville CA 95678
jtwod2@ns.net

1584. Re: 2N3414

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <79it12auq1@news8.svr.pol.co.uk>
Source record: 73749

from "Towers International Transistor Selector, 1st edition"

2n3414
npn silicon,
TO98 package (flat side with a round base, TO92 has just a flat side)
vcb 25v
vce 25v
veb 5v
Ic 500mA
Tj 175 C
P tot 360 mwf
hfe 75/225
hfe bias 2mA
equiv... BCW36 and 23704
uses .. audio, medium current, general purpose
pinout.. with the pins facing you and the flat to your left D like

B -
\
C ---D
/
E --

ok?. cheers Mike G8NXD

Doug Smith wrote in message <36BD2D53.C34D4D01@bellsouth.net>...
>I have in my junkbox a whole bunch of 2N3414s. They're TO-92
>transistors - I'm pretty sure they're small-signal NPN silicon.
>
>I need to know the pinouts; are they E-B-C, B-C-E, or what? Am I
>correct about them being NPN silicon small-signal transistors? (anyone
>know the Ft?) I can find a bunch of Web sites that'll sell me more, but
>none that'll tell me what they are!
>--
>Doug Smith W9WI
>Pleasant View (Nashville), TN EM66
>
>

1585. Shure mic 885TT wiring info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be5247$3c1de3a0$38eee6ce@kovar.inav.net>
Source record: 73750

I need wiring diagram for a SHURE MODEL 885TT hand mic microphone.
RJ 45 style plug with 6 pins in connector at mic.
I gave up on bugging it out?
Can someone get me going again?

thanks,
--
Jack Kovar
k0var

--
Jack Kovar
k0var
Iowa

1586. WANTED: mid-1970s Popular Electronics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: padawer <padawer@mindspring.com>
Message-ID: <padawer-070219990127368520@user-37kbp08.dialup.mindspring.com>
Source record: 73751

WANTED: mid-1970s Popular Electronics

Looking for mid-79s Popular Electronics mags, will pay top dollar.
Email with what you've got. Thanks!

Randy, WA4FJF

1587. Pinout of an SBL-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: pnarozny@c2i.NET
Message-ID: <36BD3620.65D9BF0F@c2i.net>
Source record: 73752

Hi There.
I have sevral (35) of MCLSRA-1H this stuff is very like SBL-1 as is
maybe most used.
My question is: What is the pin out on a SBL-1? This is a nice little
fellow of a
balanced mixer witch could be used to a DC. I need to know the correct
pinout. When
looking at the "pin side", i have one pin with blue around and the rest
is green. I
guess then that the "blue" pin is one (1).

Is the pinout like this?
1234
8765

Or like this?
1357
2468

Most of the circuit i have seen use "pair" of pin for out, in, and
loc.osc.
--
Paul-Erik Narozny
P.O.Box 209
N-1540 Vestby
Norway
Tlf: +47 6495 2778
Fax: +47 6495 2777
E-Mail: la5hja@repairman.com

1588. Re: Pinout of an SBL-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <36BD3C39.D7D46381@att.net>
Source record: 73753

Try http://www.minicircuits.com -they have most data sheets
in PDF format. _Woody
========
Paul-Erik Narozny wrote:
>
> Hi There.
> I have sevral (35) of MCLSRA-1H this stuff is very like SBL-1 as is
> maybe most used.
> My question is: What is the pin out on a SBL-1? This is a nice little
> fellow of a
> balanced mixer witch could be used to a DC. I need to know the correct
> pinout. When
> looking at the "pin side", i have one pin with blue around and the rest
> is green. I
> guess then that the "blue" pin is one (1).
>
> Is the pinout like this?
> 1234
> 8765
>
> Or like this?
> 1357
> 2468
>
> Most of the circuit i have seen use "pair" of pin for out, in, and
> loc.osc.
> --
> Paul-Erik Narozny
> P.O.Box 209
> N-1540 Vestby
> Norway
> Tlf: +47 6495 2778
> Fax: +47 6495 2777
> E-Mail: la5hja@repairman.com

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

1589. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: "Sean Mc." <nospam@nul.nul>
Message-ID: <79jjon$1r3i$1@news.gate.net>
Source record: 73754
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I too have a RS DX-398 as well and live in a steel & poured concrete condominium building as well. I too am not fond of the knowledge (mainly lack thereof) of the local RS staff. I first tried RS' reel-up external antenna and it worked quite well when I strung it across the top of my windows. I am currently using a metal Slinky (yes, the toy that goes down stairs, chairs etc) and an alligator-clip to 1/8" plug wire. The plug wire can be bought at your local RS store (can be assembled & soldered much cheaper, but the RS deal is always there if you're travelling and forget or break your wire) and the Slinky can be bought at probably any department or toy store. I've only been using the Slinky for a few weeks and currently have it hanging vertically from the top of my window. It certainly looks a lot better than the stringy reel-up antenna wire and it works considerably better. I haven't tried it horizontally yet, but will probably do that later on this week. The only tips I can give with the slinky is to *make sure* that it's not touching the metal window frame or any other metal. I originally had it hanging by two paper clips but was getting some really strange (heavy overload on FM, weaker signals on MW/SW) results until I isolated the Slinky from the paper clips with scotch tape. Good luck & happy hunting... so far the Slinky has netted me quite a few more signals compared to the built-in antenna and better results than the reel-up antenna as well. On the FM band, I'm consistently & clearly picking up radio stations that are at least 250 miles away from me. On SW & MW, I've been picking up quite a few things from the Pacific Rim & Australlia and I'm in Florida.

Sean Mc.

1590. Re: Any ideas: use for 8.192 MHz TCXO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: davem@zeppo.cs.ubc.ca
Message-ID: <79jp89$924@zeppo.cs.ubc.ca>
Source record: 73755

nicholas charles caruso <caruson@certco.com> writes:
>I've got a bunch (5, actually) of surplus vectron TCXO's that run at
>8.192 MHz. The cans have a screw-covered port which allows access to a
>trimmer screw inside. Twaddling it didn't produce any noticeable change
>in frequency on my scope or 5 digit (sigh) counter, but of course I
>assume it's a fine tuning adjustment.

The trimmer probably has only a few parts per million tuning range.
You'll need a better counter to see any effect.

Dave

1591. Re: Any ideas: use for 8.192 MHz TCXO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Rob Turk <"rob.turk gelrevision.nl">
Message-ID: <79jq2i$255$1@thor.wirehub.nl>
Source record: 73756

Dave Martindale wrote in message <79jp89$924@zeppo.cs.ubc.ca>...
>nicholas charles caruso <caruson@certco.com> writes:
>>I've got a bunch (5, actually) of surplus vectron TCXO's that run at
>>8.192 MHz. The cans have a screw-covered port which allows access to a
>>trimmer screw inside. Twaddling it didn't produce any noticeable change
>>in frequency on my scope or 5 digit (sigh) counter, but of course I
>>assume it's a fine tuning adjustment.
>
>The trimmer probably has only a few parts per million tuning range.
>You'll need a better counter to see any effect.
>
> Dave

... And he could build one with one of these TCXO's. Too bad he mucked with
the adjustments, now he needs to find a frequency reference once he's
completed
his 12-digit counter ;-)

Rob PE1KOX

1592. Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: ddoss@i1.net
Message-ID: <bchv2.503$VQ5.9145146@news1.i1.net>
Source record: 73757

Can anyone explain the procedure for using a grid dip meter for checking resonances in amplifier tank circuits, chokes, etc? I know a little about the principle of the dipper, but need some clarification on the exact procedure.

TIA - Dan

1593. Re: Pinout of an SBL-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: geo@lnot.com
Message-ID: <vkhv2.6244$rO1.5705145@newsgate.direct.ca>
Source record: 73758

Try

http://qrp.pops.net/qrp/scheme.htm

they have one on this page
geo

In article <36BD3620.65D9BF0F@c2i.net>, pnarozny@c2i.NET says...
>
>Hi There.
>I have sevral (35) of MCLSRA-1H this stuff is very like SBL-1 as is
>maybe most used.
>My question is: What is the pin out on a SBL-1? This is a nice little
>fellow of a
>balanced mixer witch could be used to a DC. I need to know the correct
>pinout. When
>looking at the "pin side", i have one pin with blue around and the rest
>is green. I
>guess then that the "blue" pin is one (1).
>
>Is the pinout like this?
>1234
>8765
>
>Or like this?
>1357
>2468
>
>Most of the circuit i have seen use "pair" of pin for out, in, and
>loc.osc.
>--
>Paul-Erik Narozny
>P.O.Box 209
>N-1540 Vestby
>Norway
>Tlf: +47 6495 2778
>Fax: +47 6495 2777
>E-Mail: la5hja@repairman.com
>

1594. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Gilbert Yu <gilbert1@netvigator.com>
Message-ID: <79k878$a3h$1@imsp009a.netvigator.com>
Source record: 73759
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Hello Steve
can you tell me what type of AA cell you are looking for?
I think there is something I can help.
try my email: battery@pantene.com.hk
Rgs,
Derek
Steve Leong wrote in message ...
>Does anyone know the availability of any "dummy" AA cells?
>(I've seen them in the past - they are plastic forms the same size of
>an AA cell, with a metal strip connecting the top and bottom contacts -
>basically a specialized jumper!).
>
>I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
>spaces for too many AA cells (excess voltage would damage radio). I need
>to insert two "dummy" AA cells to act as jumpers for these extra spaces.
>Already tried to solder jumpers in place - can't do it due to the metal
>they used for the contacts.
>
>Thanks for any assistance and advice!
>
>Steve KC6IJM

1595. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <90iv2.12064$jd2.28735520@rmnws01.ce.mediaone.net>
Source record: 73760

ddoss@i1.net (DanD) wrote:

>Can anyone explain the procedure for using a grid dip meter for
>checking resonances in amplifier tank circuits, chokes, etc? I know a
>little about the principle of the dipper, but need some clarification
>on the exact procedure.

>TIA - Dan

The meter's dial is turned and the frequency swept through the region of interest while you watch the meter dial for a dip (or peak) caused by absorption. I turn the sensitivity of the meter up and sweep back & forth. I prefer to use inductive coupling if possible. Otherwise a small value cap can be used with a wire to couple the circuits.

If your not carefull, you can create unintentional tuned circuits this way. Your very act of measuring tuning will affect the circuit your testing. A frequency counter is nice to have nearby so you can monitor the exact frequency.

1596. Re: VX-5R accesories big help needed! =)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Ted Matsumura <tedm@cet.com>
Message-ID: <36bdc7ec.1@news.tsoft.net>
Source record: 73761
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I got mine at HRO, I don't know about Canada, or the accessories you mention, but it does come with a belt clip, antenna, (ant. extender), schematics, and a wall wart to charge the Li batt. which plugs in to the base of the radio.

The battery seems to last forever, I haven't had to charge it after the initial charge. The case is rugged metal, the keys are tiny, and the manual and unit are very complicated.

Even without the optional barometric pressure unit, you can have the unit display the temp when powered off.

Alex <firewave@REMOVE.videotron.ca> wrote in message news:firewave-270199234404000l@192.168.1.4.....

>
>First of all, what is the VX-5R comming with? i heard it was charger/
>battery/ antenna/ clip...Is that all? the charger is the radio right? or
>is it an external one? and does it comes with a DC cable?

1597. Re: Pinout of an SBL-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Rod Kirkhart <pratch@postoffice.pacbell.net>
Message-ID: <36BDD962.6CA42796@postoffice.pacbell.net>
Source record: 73762

I found that the pin-out information is incorrect at
http://qrp.pops.net/qrp/scheme.htm the say the IF pins are 5,6 which are in
fact case ground.
The correct pin-out is:
PIN8=LO
PIN1=RF
PIN3,4=IF
The rest=case ground.

Rod-KF6SXC

geo wrote:

> Try
>
> http://qrp.pops.net/qrp/scheme.htm
>
> they have one on this page
> geo
>
> In article <36BD3620.65D9BF0F@c2i.net>, pnarozny@c2i.NET says...
> >
> >Hi There.
> >I have sevral (35) of MCLSRA-1H this stuff is very like SBL-1 as is
> >maybe most used.
> >My question is: What is the pin out on a SBL-1? This is a nice little
> >fellow of a
> >balanced mixer witch could be used to a DC. I need to know the correct
> >pinout. When
> >looking at the "pin side", i have one pin with blue around and the rest
> >is green. I
> >guess then that the "blue" pin is one (1).
> >
> >Is the pinout like this?
> >1234
> >8765
> >
> >Or like this?
> >1357
> >2468
> >
> >Most of the circuit i have seen use "pair" of pin for out, in, and
> >loc.osc.
> >--
> >Paul-Erik Narozny

> >P.O.Box 209
> >N-1540 Vestby
> >Norway
> >Tlf: +47 6495 2778
> >Fax: +47 6495 2777
> >E-Mail: la5hja@repairman.com
> >

1598. Re: Any ideas: use for 8.192 MHz TCXO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: davem@zeppo.cs.ubc.ca
Message-ID: <79koei$erb@zeppo.cs.ubc.ca>
Source record: 73763

"Rob Turk" <rob.turk(@)gelrevision.nl> writes:

>... And he could build one with one of these TCXO's. Too bad he mucked with
>the adjustments, now he needs to find a frequency reference once he's
>completed
>his 12-digit counter ;-)

I wouldn't trust any surplus TCXO to be adjusted correctly when I bought
it, so you need to check it anyway.

My favourite frequency reference at the moment is a GPS receiver with
a 1 PPS output. The pulses have about 1 us of jitter (according to
someone else's measurements), so if you use a 10 second gate time to
measure the time for 10 pulses, you have a period that's 10 seconds
plus or minus 2 us - 0.2 PPM. Read this period with a ratio-type
frequency counter, and the average number displayed tells you the
timebase error in the counter. This is enough to give 7 correct
digits from an 8-digit counter.

For better accuracy, you can phase-lock a VCTCXO to the GPS signal,
with a low-pass filter that gets rid of the jitter in the GPS 1 PPS
signal. That should be good enough for a few more accurate digits
out of your counter. Maybe not 12 digits, but close.

Dave

1599. HELP:RF Power Combiners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: John Fleenor <kf5tb@fastlane.net>
Message-ID: <AAA699F6C6830456.6A254EEE40567A1F.37F35EEEF17CF931@library-proxy.airnews.net>
Source record: 73764

Hello, I need info on how to build rf power combiner to connect 2 broadband hf amps that uses 2 2SC2879 transistors together. Thanks --- John

--
Visit KF5TB Web Site at http://www.fastlane.net/~kf5tb for Electronic Projects, Ham Software, Ham Graphics, Politics, Religion and more!

1600. It Is THE WEB COP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990207144353.19369.00001170@ng-ft1.aol.com>
Source record: 73765

Subject: Re: Is This The Web Cop
From: Terry Brown <browntl@concentric.net>
Date: Sun, Feb 7, 1999 11:34 AM
Message-id: <36BDC002.ECAC8430@concentric.net>

The guy must be a bit screwy. Why would a person who needs to sell
something not post it to multiple groups (how else could you get as much
coverage as possible and hopefully get it sold)?
Terry

KB5MER wrote:

> Subject: Re: Antenna Tuner For Sale
> From: "tcrpe" <tcrpe@yahoo.com>
> Date: Sat, Feb 6, 1999 12:12 AM
> Message-id: <FbQu2.12725$3J3.2941@news2.giganews.com>
>
> How come you don't post this to rec.radio.amateur.swap? You've got it on
> just about every other group there is!
>
> TR
>
> (into the killfile KB5MER -- just too much spam -- give it a rest)
>
> KB5MER wrote in message <19990205205308.23964.00000200@ng30.aol.com>...
> >
> >For Sale 1500 Watt Antenna Tuner
> > > Roller Inductor/Air Variable
> > > built in 1500W Dry Dummy Load
> > > $450.00 + shipping
> > > From Austin, Texas
> > >

1601. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36BDEE14.8B67A7EF@usit.net>
Source record: 73766

Scott Stephens wrote:
>
> ddoss@i1.net (DanD) wrote:
>
> >Can anyone explain the procedure for using a grid dip meter for
> >checking resonances in amplifier tank circuits, chokes, etc? I know a
> >little about the principle of the dipper, but need some clarification
> >on the exact procedure.
>
> >TIA - Dan
>
> The meter's dial is turned and the frequency swept through the region
> of interest while you watch the meter dial for a dip (or peak) caused
> by absorption. I turn the sensitivity of the meter up and sweep back &
> forth. I prefer to use inductive coupling if possible. Otherwise a
> small value cap can be used with a wire to couple the circuits.
>
> If your not carefull, you can create unintentional tuned circuits this
> way. Your very act of measuring tuning will affect the circuit your
> testing. A frequency counter is nice to have nearby so you can monitor
> the exact frequency.

One thing to watch is for overcoupling which can cause a gross error. I think that is what Scott is reffering to . Once you find a dip, reduce the coupling by moving your dipmeter farther and farther away, till you have only a very tiny, but still readable dip. This should give you a more accurate reading.

Don

1602. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: ddoss@i1.net
Message-ID: <_amv2.511$VQ5.9293082@news1.i1.net>
Source record: 73767

>The meter's dial is turned and the frequency swept through the region
>of interest while you watch the meter dial for a dip (or peak) caused
>by absorption. I turn the sensitivity of the meter up and sweep back &
>forth. I prefer to use inductive coupling if possible. Otherwise a
>small value cap can be used with a wire to couple the circuits.

>If your not carefull, you can create unintentional tuned circuits this
>way. Your very act of measuring tuning will affect the circuit your
>testing. A frequency counter is nice to have nearby so you can monitor
>the exact frequency.

So the dip coil is just sort of waved in proximity to the reactive
components (inductive only I assume) and the frequency of the dip
oscillator is adjusted for a dip (resonance) in the meter?

Who makes a decent dipper these days? I know the Heath grid dip meter
used to be a popular unit.

1603. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <3knv2.12086$jd2.28874464@rmnws01.ce.mediaone.net>
Source record: 73768

ddoss@i1.net (DanD) wrote:

>>The meter's dial is turned and the frequency swept through the region
>>of interest while you watch the meter dial for a dip (or peak) caused
>>by absorption. I turn the sensitivity of the meter up and sweep back &
>>forth. I prefer to use inductive coupling if possible. Otherwise a
>>small value cap can be used with a wire to couple the circuits.

>>If your not carefull, you can create unintentional tuned circuits this
>>way. Your very act of measuring tuning will affect the circuit your
>>testing. A frequency counter is nice to have nearby so you can monitor
>>the exact frequency.

>So the dip coil is just sort of waved in proximity to the reactive
>components (inductive only I assume) and the frequency of the dip
>oscillator is adjusted for a dip (resonance) in the meter?

I hold it still while tuning, I don't wave it. Inductive proximity
means both grid dip & circuit under test be in the same plane for
maximum magnetic coupling. But you can use capacitive probes for
E-field coupling too. But this will certainly cause de-tuning whenever
you move the meter, yourself, et.

>Who makes a decent dipper these days? I know the Heath grid dip meter
>used to be a popular unit.

Checkout http://www.mfjenterprises.com

But if you can wait a year, I may build one that covers .1 Hz - 3 GHz
with a frequency counter & computer interface.

1604. Re: Pinout of an SBL-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: geo@lnot.com
Message-ID: <XHnv2.6336$rO1.5923339@newsgate.direct.ca>
Source record: 73769

I emailed jenna tashley and told her that indeed
the pinouts for the SBL-1 on the QRP HomeBuilder page
were incorrect. She emailed me back and said this is now fixed and was very
sorry about the error and that after checking into the matter she had
inadvertantly copied one of Todd's home made mixers which had a different
pin-out.

Thanks Rod for the heads up!

http://qrp.pops.net/qrp/scheme.htm now correct

geo

1605. FS/F-Klystrons, RF transistors, trimmer capacitors and lots more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <F6t0Bx.JJI.0.queen@torfree.net>
Source record: 73770
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,misc.industry.electronics.marketplace

Here is an updated list as of February 3 as some items were sold.

The following are personal items I have for sale. Best reasonable
offers accepted, but I reserve the right to deem what is reasonable ;-)

I will not consider offers totalling under $20 (before shipping) due
to the amount of bother in breaking up all of this into very tiny orders,
but will break this up into smaller orders, so you may bid for all or
some of the quantity of a particular item and mix and match as you wish.
Final discretion is completely up to me, and I will not even respond to
absurd bids (such as the guy who wanted all 72 triacs for $10 Canadian
including shipping when the shipping would have been about $6!) The
minimum reserve bids are primarily for the cheapest priced items to keep
away the people who think I will sell the whole lot for almost nothing,
but also for the rest of you so you know I am not completely heartless.

I will have other stuff to add to this list over time as I go through
my drawers and a couple of boxes. I hope this will go well and that
I won't have to resort to E-Bay at some time in the future. So I will
post the updated list as items are sold. But I don't expect it to
sell quickly because of the nature of the items. I have to see if
this will work well or if it will be total anarchy.

E-mail your offers to bw201@torfree.net

Shipping is extra, but I can confirm shipping from Toronto, Canada and
can work it into the price if you wish. You may make bids in either
Canadian money or U.S. dollars. Orders must be prepaid but I can send
you references of people I have dealt with on sci.electronics.* groups
all of whom were happy with our dealings. And once an offer is accepted
we will trade physical addresses and phone numbers.

I have done all of my shipping by surface or air, parcel post, insured
by the post office so far with no problems.

Thanks

Qty. Item MINIMUM reserved bid
All items have never been for the TOTAL
been used unless noted quantity of this
(ie. it says "USED") particular item in
U.S. dollars,
shipping extra
VVVVV

8 NE5533AN Dual very-low noise Op Amp designed for 8
high quality low level audio preamplifiers

10 Solitron Devices, SD10, Sounvister - NOISE ZENER's 20
9V Zener diodes used as audio white noise sources in
much audio equipment. Comes with data sheet showing
individually tested noise outputs of 390 to
900 uV/20Khz @ 600 ohm, ordered by International
Rectifier (according to the data sheet) in 1975

1 Sigma Datacel # 301R2-24 optocoupler
with one lamp and two photoconductive cells

6 Clairex Photomod # CLM4012 optocoupler with one lamp
and one photoconductive cell with spec. sheets

1 Amphenol # 335-10871-3 SPDT coaxial relay 26VDC coil
silver plated with 3 miniature coax female (SMA?)
connectors, Date code 6836, but never used

35 DG180BP Dual SPST Very Low-Resistance (�10) J-FET 100
Low Distortion Analog Switches especially suited to
Video or Audio Switching purposes and precision Sample
and Holds, by Harris/Siliconix/Intersil list price
$20.20 U.S.! I have copies of the specs sheets for
you plus a summary of the data is at the end of this list
(FET switches unlike CMOS ones do not change resistance
with signal and so are extremely low distortion)

5 2N6347A Triac 12 Amp 400 volt by Motorola 2.00
non-isolated TO-220

3 MAC10-8 Triac 10 Amp 600 Volt by Motorola 0.75
non-isolated plastic case

31 Q4004L4 Triac 4 Amp 400 Volt by Teccor in 7.50
Isolated TO-220 plastic case

6 Q2040PFC Triac 40 Amp 200 volt by Teccor in 9.00
Isolated flange case

15 SC250B2 Triac 15 Amp 200 volt by G.E. Isolated Stud 12.00
package with locking nuts for mounting

12 TIC226B Triac 8 Amp 200 volts by T.I. in 3.00
non-Isolated TO-220

8 medium sized 0.5"/13mm dia, 120 VAC use MOVistors, 2.40
Panasonic (Matsushita) # ERZ-C10DK241, and

8 small 0.35"/8mm dia # ERZ-C05DK241 MOVistors by 1.60
Panasonic for 120 VAC use

3 Raytheon 726C/JAN Kylstrons used and in unknown
conditions but tube filaments are good (Listed at

$115 each brand new at www.elexs.com/10Klyst.htm)

5 2N5947 Low-noise low-distortion TO-117 stud RF NPN
transistor by Motorola for CATV and broadband amplifiers
5 Watt Pd, 400mA Ic max., 30 Vceo, 1100 MHz minimum fT
at 75mA Ic can provide photocopy of the data sheets

50 2SC1254 Low-noise UHF-VHF NPN transistor TO-72 case
by NEC. 800 MHz minimum fT at 6mA, 50mA Ic max.
25 Vceo, 0.25 Watt

5 80180 TO-117 stud RF NPN transistor by MEC for CATV
amplfiers. 5 Watt Pd max., 250mA Ic max., 25 Vceo,
1500 MHz fT

2 MPS6507 UHF-VHF NPN transistor TO-92 by Motorola 0.50
700 MHz minimum fT at 10mA, 100mA Ic max., 20 Vceo

1 MPS6511 UHF-VHF NPN transistor TO-92 by Motorola 0.25
1200 MHz minimum fT at 10mA, 100mA Ic max, 20 Vceo

4 MPS6547 UHF-VHF NPN transistor TO-92 by Motorola 1.00
600 MHz minimum fT at 2mA, 50mA Ic max., 25 Vceo

2 Isolated tab dual NPN RF transistors in special package
probably made by MA/COM. Looks like they are dual
common emitter RF Power transistors for CATV driver
broadband amplifier applications. I have no specs
but believe the part number start with "PH" as is a
common series by MA/COM. One says:
"N640 -12 and the other "W640 -12
PH2306 349" PH24010 313"
Rectangular tab with one mounting hole at each end,
and 7 .05" wide ribbon leads (3 on one side, 4 on other)

2 SHORTED General Electric C50 110 Amp SCR's free with
Electrically they are useless, but you might minimum $20
be able to use the braid on them. They are purchase
also great to hold by the braid and then whip but you pay
a mugger over the head with! ;-) the shipping

2 Used Piezoelectric Ceramic Blocks with metalized
ends. About 2" x 2" x 1 1/8". HEAVY

2 Mica compression trimmer capacitor 20 - 150pf
2 lug connections with a separate grounded screw
adjustment grounded through a centered mounting
bracket - flat base style approx. 7/16" x 7/8

79 Mica compression trimmer capacitor 35 - 250pf
2 lug connections with a separate grounded screw
adjustment grounded through a centered mounting
bracket - flat base style approx 5/16" x 13/16"
part number 310720850061

57 Dual mica compression trimmer capacitor PCB mount
with capacitors set in ceramic block 1 1/16" x 1 3/16"
with maximum height of ceramic 7/16" high.
Includes some silvered mica plates to limit range.
One capacitor is, 390 - 470pf,
the other capacitor is two sections in series:
first one 230 - 375pf, second 140pf fixed
Electro Motive part number 51102200
For you homebrewers, by removing the extra flat
plates and silvered mica sections to create various
combinations eg. 10 - 80pf with two plates one mica,
and 20 - 120pf with three plates and two mica pieces
or 10 - 75pf with just the top two plates and one
mica piece.

100 SFE10.7MA5A Murata-Erie 10.7MHz ceramic IF filter
(red dot - 10.70MHz center frequency) 3dB bandwidth
280 ±50 kHz, 20dB bandwidth of 650kHz, 6dB insertion
loss, 330 Ohm input/output impedance, the standard
for most stereo's and home receivers

1200 Ferrite beads - About 0.1" long x 0.13" O.D.,

84 Taiyo Yuden 3 lead passive hybrid filters 1.00
pn BPF07225, believed to be 72.25MHz bandpass
filters for commercial band receivers.

1 Double Disk converter/hole punch All metal construction $1.00
Yes the original product in the original box for you
antique lovers! Now if you can just find 3.5" 720k disks ;-)

80 USED - Miniature lamp holders with 24/28 volt lamps 5.00
plus 16 spare bulbs

12 Appliance neon indicator lamps with internal resistor 4.00
3/8" x 1 1/4" rectangular hole

9 Appliance slide switch 3A@125VAC plus 5.00
neon indicator lamp with internal resistor
3/8" x 1 1/4" rectangular hole

48 Knobs for 1/8" shaft Raytheon pn TSA50-2WL-1 9/16" dia
x 7/16" high. Fluted black polycarbonate knob with
brass insert with one set screw, white line up the side
and brushed aluminum circle on top.

3 Alco black machined aluminum knob for 1/8" shaft with
flat finger grip and thick aluminum skirt
numbered from 0 through 9

15 Various plastic knobs with set screws for
1/8" dia. shafts

12 Knobs for 1/4" shaft. 1 1/4" dia. x 5/8" high
Fluted black ABS knob with aluminum insert with two set

screws, NO pointer, with brushed aluminum circle on top.

12 Solid aluminum knob for 1/4" shaft. Aluminum coloured.
24 sided, with round front, 7/8" dia. max x 3/4" high
total. Smaller round base of 11/16" dia. for 1/4".
One set screw. Part brushed aluminum, part polished.
Nice looking. Has 1/32" wide metal insert as pointer.

3 Various machined aluminum knobs for 1/4" shaft

4 Various plastic knobs for 1/4" shaft

10 Large plastic knobs for 1/4" shaft with one set screw
Gold-coloured anodized alumimum cap, brown plastic
approx 2" in diameter and 5/8" deep

1 Strobe - flashes from 1 to 6 times a second. 20
Good for use in medium sized darkened room like a
rec room. Approx. 4 x 6 x 12 cm. (This unit and
the one below are in Hammond 1591C Heavy Duty ABS
boxes with 1591AC clear lids. These boxes alone cost
over $7 US each.) Runs off of the
AC outlet and has internal fuse for protection.
Uses FILM capacitors (3.3 ÂF) for charge storage.
The first item that "blows" on strobes are the
Xenon flash tubes, the other major item is the
capacitor if cheap electrolytics are used rather than
film capacitors. Film capacitors also have much
lower ESR (effective series resistance} and so are
usually as bright as strobes using electrolytic
capacitors with 3 times the capacitance.
(2 Linear replacement Xenon tubes are available for
$1.50 each, but only with the purchase of the strobe.)

1 Strobe - flashes from 2.5 to 14 times a second. 35
Good for use in medium sized darkened room like a
rec room. Approx. 4 x 6 x 12 cm. plus the size of
the external fan that includes a finger protector.
(This unit built in a Hammond 1591 Heavy Duty ABS
box with 1591 AC clear lid.) Runs off of the AC
outlet and has internal fuse for protection.
Uses Film capacitor (3.3 ÂF) for charge storage.
Because it uses the same capacitance as the $20
unit, but flashes up to 2.5 times as often, it
delivers up to 2.5 times as much power to the
Flash Tube. Includes a built-in fan to increase
Xenon tube life as well as using a special tube
designed for higher speed/higher power flashing use.
(4 Linear replacement Xenon tubes with data sheet,
are available for $4 EACH, but only with the
purchase of the strobe.)

WARNING: prolonged exposure to higher flash rates
can produce nausea and even epileptic-like seizures
in some people who are NOT epileptic.

1 6 Digit mechanical counter with 6 Digit preset 1
which drives relay - 93 Volts DC
could probably be powered by one of the
16VAC + 50 VAC listed below

1 ACE cylindrical key mechanical 7 pin lock 1
with 3 keys, for cabinet etc.,

16 25k Linear 50mm-travel slide potentiometer 2
with centre detent - no 3mm mounting screws

Military Grade high-G shock resistant relays

1 USED Hi-G Inc. 26.5VDC 575 DPDT 2A contacts
20 x 10 x 10mm

1 Branson #AR6919 26.5VDC 390 4PDT bolt-mount
20 x 23 x 10mm

1 HiG Inc. 26.5VDC 675 DPDT 2A contacts
20 x 23 x 10mm

1 Struthers-Dunn 26.5VDC 300 DPDT 5A contacts
25 x 31 x 15mm

4 Deutsch Inc. microsized 25.5VDC 1.3k DPDT
only 10 x 15 x 5mm!

(Solenoids and transformers are preferably for sale in the Toronto,
Canada area for pick-up, because of the cost of shipping heavy items
such as these, but if you are willing to pay for the shipping I will
send these anywhere.)

SOLENOIDS (very heavy but if you are willing to pay the shipping
you are welcome to them with minimum $20 order)

7 Unmarked solenoids 110VDC - 1" x 1 1/4" x 2" free

10 Unmarked solenoids 110VDC - 1" x 1 1/4" x 1 1/4" free

TRANSFORMERS (all with 115VAC primaries except the audio xformers):

1 Used "Type 10B" Variac "Powerstat" variable
transformer by the Superior Electric Company
120 VAC in, 0 to 120 or 0 to 132 VAC out @ 2.25 Amp
plus one 3 Amp resettable thermal circuit breaker

5 Microtran T1104, telephone coupling transformers
600 : 600 Ohm, 300-3500Hz 0.5dB, 0.5% distortion max
3/4" x 7/16" x 9/32"

3 #154A5969-1 Green audio transformer
1" x 3/4" x 7/8" believed to be 700mW
250 Ohm resistance and 30 Ohm resistance, believed
to be 5k Ohms to 500 Ohm Center-tapped impedance

1 Calectro D1-726 audio 3/4" x 5/16" x 5/16"
500 Ohm C.T. to 8/3.2 with 2" long insulated wires

1 Red audio transformer 1" x 3/4" x 3/4" three windings
26 ohms, 26 ohms and 50 ohms resistance,
believed to be 1k, 500 and 500 ohm impedance

2 Blue audio transformrs 1" x 3/4" x 3/4" three windings
52 ohms, 82 ohms and 82 ohms resistance,
believed to be 1k, 2.5k and 2.5k ohms impedance

1 Yellow audio transformer 1" x 3/4" x 7/8", one winding
26 Ohms, the other is 82 ohms resistance with two taps,
believed to be 500 ohm to 5 kohm (w/taps) impedance

1 Hammond #167J36 36VCT @ 1A closed frame
Heavy metal protective cover over windings

2 Hammond #166G36 36VCT @ 0.5A open frame

2 Signal Transformer ST-3-36 36VCT @ 65mA P.C. mount

2 Used 10VA 40VCT shielded

1 Used Hammond #166G20 20VCT@0.5A open frame

1 Hammond #166L5 5VAC@2A open frame

7 16VCT and 50VAC ±6VA

1 10 VAC + 10 VAC; 6 VA pcb mount transformer
by Signal Transformer; Split Trans # DST-40-20

6 11 VAC ±3VA (ie. ±250ma)

1 9.5 VAC @ 200mA

2 14VCT ±4VA (ie. ±300ma)

1 18VCT and 60VCT (common center tap) ±10VA

1 25VAC ±3VA

3 12.6VAC ±3VA

2 30 VAC @ 50mA

1 12VCT @ 150mA

1 Used 34VCT @ 20VA - 120/240 VAC input

3 AC adapters 7.5VDC @ 300mA 3.5mm plug

2 AC adapters 4.5VDC @ 100mA coaxial power plug

2 AC adapter 16.6VAC @ 100mA no connector "Atari"

1 AC adapter 9VDC @ 100mA coaxial plug

1 AC adapter 6VDC @ 300mA no plug

MOTORS (cheap! No bid too low on the unreserved motors as long as your total order meets the $20 minimum before shipping is added.)

1 "MN-30 Micro Motor" by Tradeship (California) Inc
Open-framed 12 Volt DC 5 pole permanent magent hobby
motor at up to 18,000 r.p.m. 3/32" shaft with gear
about 2 1/4" long with mounts, 1/2" thick, 3/4" wide
graphice brushes. In original box

1 "MX-77 Micro Motor" by Tradeship (California) Inc
Open-framed 12 Volts DC 7 pole permanent magnet hobby
motor at up to 20,000 r.p.m. 3/32" shaft with gear
about 2 5/8" long with gear, 5/8" thick, 7/8" wide
graphite brushes. In orginal box

1 Sychron 20 r.p.m 24VAC 6Watt AC motor

6 3-12 VDC permanent magnet motors
body approx. 1" dia. X 1.5" long with 1/2" long
shaft. Has graphite brushes

4 1.5-6 VDC permanent magnet hobby motors
body 0.5" x 0.8" x 0.9" long with 0.15" long shaft

16 Misc. USED motors with assorted voltages from 1.5
to 12 VDC, including motors used in cassette tape
recorders and VCR's.

4 108 VDC permanent magnet motors 7500 r.p.m.
full-load current of 0.08 amps. Rated for 105°C @
20 minutes. Body approx. 1" dia. X 1 3/8" long
with 3/16" long "d" shaft

3 USED pancake type 12 Volt stepper motors
removed from old floppy drives

1 USED cube style stepper motor from an old Hard Drive
body approx. 1.5" X 1.5" X 1" with gear on shaft
short 3/4" long leads

1 New stepper motor Rapid-syn model 20V-03L 6
Impedance protected. 6 leads. I can't "feel"
the step size. 2" dia. x 2 1/2" long body.
Double shafted 1/4" dia. x 1" long at both ends
Three threaded mounting holes at one end -
two at the other

1 Used stepper motor similar to above 20Volt 3
somewhat longer shafts. 6 leads with connector
Rapid-syn model 20V-01J. Looks like one end is
meant to fit into a 1.75" dia. hole, with a ridge
presumably for holding it in just above this.
"Feels" like it is 3.6° step size.

1 Stepper motor used from HD. 5 lead with connector
Astrosyn model # 17PS-c006-01. 1 5/8" x 1 5/8" x
1 1/4" body. 5mm dia. x 12mm long shaft.

Misc:

2 5 pin 180° DIN male to four RCA males on 3' cord 2

1 5 pin 270° DIN male to DIN male on 7' cord 1

1 5 pin male to 5 pin male slide projector control cable 1

1 misc 3 pin heater cord with no AC plug 0.01 ;-)

1 1/4" male to 1/4" female shielded extension cable 0.75

3 1/4" male to bare shielded end cable 2

8 Elmwood Sensor series 2400 thermal switch 2
N.C. - opens at 84°F

10 Used Red bananna jacks 0.50

4 6 Amp 250VAC 11' long European colour-coded 6
sets electrical cords with no AC plug at one end,
and 3 prong modular female at other, plus
the matching Switchcraft EAC-301

1 Used optical shaft encoder - removed 6
1/2" dia. x 3/4" long shaft. All electronics connect
to 5 pin connector Housing about 2" in dia. x 2" long

SPEAKERS: (to be sold in one inexpensive batch) $ 5

2 5cm dia. 8° 0.3W

8 5cm dia. 8° 0.15W

4 Used 5cm dia. 8° 0.1W

1 Sharp 8cm dia. 10° 0.4W

3 Sharp 6cm dia. 10° 0.3W

2 Sharp 6.5cm dia. 25° 0.2W

2 Used 5.7cm dia. 40° 0.2W

2 5 cm dia. 100° 0.2W

DG180 DATA:

DG180BP Dual SPST Very Low-Resistance (10) J-FET Low Distortion
Analog Switches especially suited to Video Switching purposes
and precision Sample and Holds, by Harris/Siliconix/Intersil
They listed at $28.25 each (CND funds) at the time I purchased them.
I have full spec sheets and Siliconix price list that shows them at
$20.20 U.S funds in singles, $13.44 if bought in 100's quantities.

I was doing a video switching project with a friend some time ago and
chose the DG180 JFET switch because it had the lowest resistance of any
I.C. and because of its very low distortion, since JFET switches unlike
CMOS ones retain constant ON-resistance for varying analog inputs.
These 35 are what I had left over.

I will of course provide data sheets with the chips.

Here is the basic data on them.

DG180 by Silconix (and second sourced by Harris/Intersil)
Dual SPST JFET Analog Switches

Features:
* Constant ON-Resistance Over Entire Analog Range (UNLIKE CMOS DEVICES)
* Low Leakage
* Low Crosstalk
* The lowest ON-Resistance available in any IC

Benefits:
* Low Distortion
* Eliminates Large Signal Errors
* High Bandwidth Capability

Applications:
* Video Switching
* Audio Switching
* Sample and Hold
* D/A Ladder Switches

The DG180 is a precision dual single-pole, single throw (SPST) analog
switch designed to provide accurate switching of video and audio signals.
This switch is ideally suited for applications requiring a constant
ON-resistance over the entire analog range.

Reduced switching errors are achieved through low leakage current
(Isoff < 1 nA). Application which benefit from flat ON-resistance
include video switching, audio switching, and precision sample and holds.

Each device comprises four n-channel JFET transistors (in parallel) and a
bipolar driver (TTL compatible) to achieve fast and accurate switch
performance. In the ON state, each switch conducts current equally well
in either direction. In the OFF condition, the switches will block up to
20 V peak-to-peak, with feedthrough less than -60dB at 10 MHz.

For the DG180BP (14 Pin Ceramic Side Brazed Package) by Siliconix:
(Part number DG180BK for the Intersil/Harris Ceramic DIP package)

Operating temperature range = - 25 °C to 85 °C

With V+= +15 V, V-= -15 V, and VL= +5 V:

Analog Signal Range Full temp range -7.5 to + 15 Volts

Switch Resistance @ Is = 10 ma Room temp 7.5 Ω typ. 15 Ω max.
Full temp range 25 Ω max.

Switch Saturation Current 2ms Pulse Duration 300 mA

Turn On time 240 ns typ, 600 max.

Turn Off time 140 ns typ, 250 max.

OFF Isolation f = 1 MHz, RL = 75 Ω typically > 55 dB
10MHz, RL = 75 Ω typ. 35 dB
50MHz, RL = 75 Ω typ. 20 dB

Also guaranteed to work with +12 Volts, -12 V and +5 V power supplies.

End of list

1606. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <36BE19BD.766E5050@home.com>
Source record: 73771

Hi, Dan,
Dip meter is not a precision instrument but it is good enough in most cases. You can measure the resonant freq. on a active or passive L/C circuit. Re: your question,
You must have a ball park guessing which range your circuit under test may fall into. Accordingly plug in the right coil to cover that range. Adjust the meter to mid-scale, and then position the dip meter coil to the circuit(not too close which will lead to wrong reading) and slowly turn the tuning knob. If the ckt is active you'll see peak, if passive you'll see dip, try to loose the couling between the coil and ckt and repeat the process few times to get reading as accurate as possible. Then read the dial. Since dip meter is an oscillator, you can use it as a marker freq. or as a source of certain freq. There are so many uses for it. It becomes handy when you install antenna too.
Hope this helps. I am not good at explaining things.
73, GL,
Tony, VE6CGX

DanD wrote:
>
> Can anyone explain the procedure for using a grid dip meter for
> checking resonances in amplifier tank circuits, chokes, etc? I know a
> little about the principle of the dipper, but need some clarification
> on the exact procedure.
>
> TIA - Dan

1607. High power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-07 00:00:00 UTC
From: Goran G <grongo@tel.hr>
Message-ID: <01be52e6$72109e40$69e21dc3@default>
Source record: 73772

Hi folks,

I'm looking for a bandswitch that could easily switch PI filter coil in my new HF
power amplifier with 2 x 4-400 tubes. I expect pure 2.000 W of output power at
some 4.4 kV DC on plates (loaded). It should have 9 positions to cover all
amateur bands, including WARC.
Any help?

Tnx Gogo 9A6C

1608. 3-1000 4-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: ahuffman@usit.net
Message-ID: <79lbfnqqb1@nnrp1.dejanews.com>
Source record: 73583

does anybody know what parasitic suppressor you need on the grid to stabilize this one will pull excess plate current with know input key it up and in a few seconds the plate will start to turn red 4000 on plate

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1609. Wanted - Racal RA217 Receiver Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R0802991042100001@news.latrobe.edu.au>
Source record: 73584

A friend has one of these & we want to fix it (its performance is almost non-existent though it can hear some signals from the outside world).

Can anyone please help with a copy of the circuit diagram??
A Gif or jpeg image would be fine.
Phil Rice VK3BHR
rice@ironbark.bendigo.latrobe.edu.au

1610. Haw to improve sensitivity of a ICOM PCR-1000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <79lbsg$8f2$1@news3.Belgium.EU.net>
Source record: 73585
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I'm a owner of the ICOM PCR-1000.

So everybody tells that the sensitivity is so good on the PCR-1000 !

The sensitivity at 144 to 146 Mhz is not so good as I expect !

It is measured at 12dB SINAD and at 144Mhz 0.32 ?V.
My Kenwood portable TH-22 is also measured by 12dB SINAD
and at 144mhz 0.16 ?V or less sensitiv.

So who nows haw I can improve the sensitivity of my PCR-1000 ?

All information is welcome !!!!

Thanks to all.

Regards

Geert Pirens

1611. Re: TEN METER DIPOLE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: exray@caribe.net
Message-ID: <79lng9$43u$1@nnrp1.dejanews.com>
Source record: 73586

Divide 468 by Freq in Mhz to get the overall length in feet. Connection point is in the exact middle. Although a dipole is a 75 ohm antenna, your rig is likely to be 50 ohms and either cable will give an equally slight mismatch, nothing to worry about. As for a balun, (with a 'n') if you have one you can try it. Wouldn't hurt but I doubt you'd see any difference.

Good luck-hope this helps..

-Bill M
WX4A
rticle <36be222f.0@news.i-way.co.uk>,
"PAPA" <paulin@patrol.i-way.co.uk> wrote:
> Can anyone help with dimensions etc for a 10mtr dipole which is unavoidable
> due to space restrictions.
> Have 75ohm and 50ohm coax available.
> Do I need a balum?
>
> Paul
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1612. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <79mu4c$1nj$1@nnrp1.dejanews.com>
Source record: 73587
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <36d73a4e.177237476@news.atl.bellsouth.net>,
ke4zv@bellsouth.net (Gary Coffman) wrote:
> You want a wire antenna. Wire is wire, and can be bought cheaper at places
> other than Radio Shack. Your local electrical supply house (or Home Depot,
> Lowes, etc) is a better source. There are all sorts of designs for wire
antennas.

With all due respect, there are even places cheaper than Lowes and Home
Depot. find a "farm & fleet" store, the kind of place that sells tractor
parts, dog kennels, livestock tranquilizers (grin) and Carhartt coveralls.
You can usually recognize the place by the piles of feed, fertilizer, and
huge plastic tanks in the parking lot.

Anyway, go inside and ask for electric fence wire. You'll be directed to
spools containing wire by the MILE. It's galvanized steel wire, 16-18 gauge
usually, and it's WONDERFUL for antennas. The steel is much stronger than the
soft-drawn copper you'll get at Lowes, it's not insulated so it won't be
carrying extra weight, and the zinc coating solders very, very well. And it
runs (last time I checked) about $20 per spool.

I worked with a fellow at Universal Radio in Ohio who went to buy a spool, and
at the checkout they asked him if he was in the farmers' discount program. (A
discount program for farmers, as you might have guessed.) He said yes, so they
gave it to him for half price. He's still using that one spool of wire to this
day.

If you can't find a farm & fleet store, check the various discount places ($1
stores, overstock / closeout stores, or even K-mart in a pinch). You'll find
little blister packs of "utility wire," usually 50 or 100 foot rolls for a
buck or two. It's the same stuff, just more expensive per foot.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1613. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: "Ralph B. Holland (vk1brh)" <vk1brh@dynamite.com.au>
Message-ID: <79miuj$e6r$1@bomb.dynamite.com.au>
Source record: 73588

How I use my GDO:

I find it convenient to couple the grid-dip meter into the circuit and
change the tuning on the dip meter until you notice a dip.
If you move the meter away from the circuit and change the tuning
false (internal) dips can be discriminated.

Depending on output power the coupling can be loose - i.e. the GDO coil
can be held in proximity to the coil of the circuit you are testing, or it
may be enhanced by using a single or two turn link wrapped around the
GDO coil and the coil in the test circuit.

There have been several GDO circuits published in the ARRL Handbook.

You may also visit Harry's homebrew GDO circuit
http://hem2.passagen.se/sm0vpo/use/gdo.htm

Harry's main url is: http://hem2.passagen.se/sm0vpo/

regards,

Ralph, VK1BRH
http://www2.dynamite.com.au/vk1brh

1614. Source for high-Q homebrew IF filter crystals.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: henryp@cartier.raleigh.ibm.com
Message-ID: <79n25smiu1@rtpnews.raleigh.ibm.com>
Source record: 73589

I have a quote from Colorado Crystal Corporation to build crystals with Q in the range of 800K to 1,000K. The center frequency specified is 5.0 MHz, but this is just representative. As the center frequency goes down, the Q goes up, and so does the price. At 10.0 MHz, the Q is in the range of 170K - 220K.

Price in quantities of 100 is about $15, subject to change when the final specs are determined. In quantities of 50, the price is $18. At this price, you can build a ten-pole CW filter of extraordinary performance, better than anything available commercially.

For various reasons, I'm designing for an IF frequency of 5.2075 MHz. Is anyone interested in going in on a bulk purchase?

Reply to 'henryp@us.ibm.com'.

-Henry, KU4XC

1615. 7768 tube wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: ALEX KOSMAN <cerakak@tx.technion.ac.il>
Message-ID: <79mj5t$vj1$1@techftp.technion.ac.il>
Source record: 73590

hello,

7768 planar triode wanted

thanks
alex

1616. Re: HELP:RF Power Combiners

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990208055413.24797.00001463@ng155.aol.com>
Source record: 73591

Twist 2 pieces of 18Ga. Teflon insulated wire, then wrap around a ferrite
torroid.

Use ohmmeter & connect seperate wires from opposite ends.

THere it is.
Also,
http://www.rfparts.com
has them for sale.

If ya need more info, just E-mail....
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

1617. Re: Simple Magnetometer idea

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: "Ralph B. Holland (vk1brh)" <vk1brh@dynamite.com.au>
Message-ID: <79mg9a$d0b$1@bomb.dynamite.com.au>
Source record: 73592

Neat posting!

>> http://www.eden.com/~rcbaker
>> http://web2.thesphere.com/SAS/WebX.cgi
>> http://www.sciam.com/1999/0199issue/0199amsci.html

Ralph
http://www2.dynamite.com.au/vk1brh

1618. 6DQ5 needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: wayneg@ncentral.com
Message-ID: <79ni0r$iq7$1@nnrp1.dejanews.com>
Source record: 73593

Looking for a new 6DQ5 tube.
Anyone who has one for sale please quote me your price.

Thank you.

73,
Wayne
NM3B

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1619. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36beee32.0@news.netwalk.com>
Source record: 73594

Brad Thompson wrote in message <36BC5493.7D4A@pop.valley.net>...

>I vaguely recall reading an article in an ancient issue of QST(?)
>re: someone who built a point-contact transistor using a galena slug
>and two cat's whiskers.
>
>Perhaps someone who has a QST index could locate the reference?
>73,
>Brad AA1IP

This was what I was refering to in my post.

I'm not sure which would work better, Galena or Germanium.

Jim
N8EE

1620. Cable schematic for Kenwood radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: kb2ehj@mindspring.com
Message-ID: <OnJet0TDpclF-pn2-fr8jdFVu9uiH@user-38ld9fc.dialup.mindspring.com>
Source record: 73595
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

Does anyone have or know were I can locate a cable
schematic diagram for the PG-4S PC interface cable?

I have a TM-V7A that it would be used on.

Thank you in advance.

Mark - KB2EHJ
kb2ehj@mindspring.com

1621. Re: Any ideas: use for 8.192 MHz TCXO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36BF27A7.3B997C22@certco.com>
Source record: 73596

Rob Turk wrote:

> Dave Martindale wrote in message <79jp89$924@zeppo.cs.ubc.ca>...
> >nicholas charles caruso <caruson@certco.com> writes:
> >>I've got a bunch (5, actually) of surplus vectron TCXO's that run at
> >>8.192 MHz. The cans have a screw-covered port which allows access to a
> >>trimmer screw inside. Twaddling it didn't produce any noticeable change
> >>in frequency on my scope or 5 digit (sigh) counter, but of course I
> >>assume it's a fine tuning adjustment.
> >
> >The trimmer probably has only a few parts per million tuning range.
> >You'll need a better counter to see any effect.

Yeah, I know -- hence the "5 digit", and the "(sigh)". :-)

> ... And he could build one with one of these TCXO's. Too bad he mucked with
> the adjustments, now he needs to find a frequency reference once he's
> completed his 12-digit counter ;-)

Ah, yes, but I only mucked with 1 of the 5 I have... and they came sealed
inside an antistatic bag with a company stock label holding the bag closed.
They looked untampered with, anyhow.

Thanks for the frequency counter idea!

73
ncc kb1dej

1622. Re: Haw to put up my X-Yagi antenna to Right circulated polarisation ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: "Allan H. Kaplan" <akaplan@fallschurch.esys.com>
Message-ID: <36BF2F07.416294F8@fallschurch.esys.com>
Source record: 73597
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur
Body handling: Binary attachment payload not displayed: vcard.vcf

Geert, I believe that you need to connect the horizontal and vertical feedpoints of your crossed yagis with a 90 degree phase shifter. This would be a quarter wavelength (including velocity factor) of coaxial cable. You would then connect your feedline to one of the feedpoints. I am not sure which one (horizontal or vertical) would go to the feedline for right-hand circular polarization. You need to check a good book or a more experienced VHF/UHF ham. If you connect the feedline to the "wrong" antenna, you get left hand circular polarization instead of right-hand! This all assumes that the horizontal and vertical elements are coplanar, or very close together. If they are not you would have to compensate with the phase shifter. Hope this helps!
73 de W1AEL
--

Allan H. Kaplan 703-560-5000, x4717 Fax: 280-1241 MS A404
Staff Electronic Engineer, Raytheon Systems Company, Falls Church
speaking only for myself, not necessarily for my employer... (8-)=

[One or more binary attachments are retained only in the source text.]

1623. Re: TEN METER DIPOLE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <36BE5E71.C022735B@bellsouth.net>
Source record: 73598

center 28.500 mhz each leg 8 ft 7 1/2 inch make it about 6 inches longer
to tune with. no you dont need a balun use #14 12 or 10 awg for each leg
solder coax to each leg then wrap in tape real good ....

PAPA wrote:

> Can anyone help with dimensions etc for a 10mtr dipole which is unavoidable
> due to space restrictions.
> Have 75ohm and 50ohm coax available.
> Do I need a balum?
>
> Paul

1624. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: dave@psilink.co.uk
Message-ID: <36bf36f2.30637055@news.psilink.co.uk>
Source record: 73599
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Won't this stuff have a higher resistance than copper wire?

If so, some of your RF is going to be wasted as heat.

de Dave (G0DJA)

On Mon, 08 Feb 1999 14:59:29 GMT, hinermad@my-dejanews.com said:

>
>Anyway, go inside and ask for electric fence wire. You'll be directed to
>spools containing wire by the MILE. It's galvanized steel wire, 16-18 gauge
>usually, and it's WONDERFUL for antennas. The steel is much stronger than the
>soft-drawn copper you'll get at Lowes, it's not insulated so it won't be
>carrying extra weight, and the zinc coating solders very, very well. And it
>runs (last time I checked) about $20 per spool.

1625. 7768 Planar Triode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <36bf3097.655035@news1.telia.com>
Source record: 73600
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Wed, 27 Jan 1999 10:55:53 +0200, "ALEX KOSMAN"
<cerakak@tx.technion.ac.il> wrote:

>hello,
>
>
>looking for a planar triode marked as:
>
>7768
>

Hello,

You have asked for 7768 valves many times before, and I have posted
this message many times. Haven't you noticed?

7768 General Electric NOS, NIB are in stock. This is a very special
valve with a transconductance of 50mA/V and u=225
I can find a few more data for you if you want it. This is a rather
expensive valve NOK 760.- each or about US$ 103.-

Best regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

1626. Re: High power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <36BE5ED2.F2162295@bellsouth.net>
Source record: 73601

http://www.surplussales.com/SSIndex.html

Goran G wrote:

> Hi folks,
>
> I'm looking for a bandswitch that could easily switch PI filter coil in my
> new HF
> power amplifier with 2 x 4-400 tubes. I expect pure 2.000 W of output power
> at
> some 4.4 kV DC on plates (loaded). It should have 9 positions to cover all
> amateur bands, including WARC.
> Any help?
>
> Tnx Gogo 9A6C

1627. Re: Source for high-Q homebrew IF filter crystals.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: xxx@yyy.com
Message-ID: <36BF38B3.209FDCF9@yyy.com>
Source record: 73602

Several questions:

Why 5.2075 IF ?

What are the design specs of the filter (extraordinary CW filter) ???

What design are u using for the filter ??
(there are several out there,
Ladder,
Lattice, Cascaded Lattice have seen these in alot of commericial filters I opened

)

What about the assymmetrical bandpass characteristics of a cascaded ladder filter

with so many poles.

QQQ : Why shouldnt we just convert to a IF of 15 KHZ from 455Khz ,
and just use one of the powerful DSP processors EVM to implement
whatever filter you desire.
DSP filters have better passband/stopband characteristics, and
ring much less. Plus, they can are very flexible .

I love those DSP filters in my ten-tec Rx320 !!!

Henry A. Pasternack wrote:

> I have a quote from Colorado Crystal Corporation to build crystals with
> Q in the range of 800K to 1,000K. The center frequency specified is 5.0
> MHz, but this is just representative. As the center frequency goes down,
> the Q goes up, and so does the price. At 10.0 MHz, the Q is in the range
> of 170K - 220K.
>
> Price in quantities of 100 is about $15, subject to change when the final
> specs are determined. In quantities of 50, the price is $18. At this price,
> you can build a ten-pole CW filter of extraordinary performance, better than
> anything available commercially.
>
> For various reasons, I'm designing for an IF frequency of 5.2075 MHz. Is
> anyone interested in going in on a bulk purchase?
>
> Reply to 'henryp@us.ibm.com'.
>
> -Henry, KU4XC

1628. MFJ's new air core roller inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <36bf3d8e.67831232@news.revealed.net>
Source record: 73603

MFJ has been advertising a new concept in roller indiictors in their antenna tuners. They call them "Air core." Well most of the roller indictors I ve seen have been air core, but does anyone know how these are made? maybe a treaded brass shaft with a slifing singer of brass that glides up and down the inductor as the shaft is turned Does anyone out there know??

I've seen photos in the various magazines, and it looks like they use clear plexglass or lexan (registered trademark) . It's probably so simple I'll be stunned when I see it!!!

Thanks
Terry-WB0VQP

1629. Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Walter Wickersham <wwickersham@oc.ctc.edu>
Message-ID: <36BF4E63.19F14EE1@oc.ctc.edu>
Source record: 73604
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

The subject says most of it.... I'm looking for ideas of how to build a cheap (pvc possibly) antenna tower, possibly 20feet, must be able to break down
for transportation to other locations, and support smalll 2m antenna's, one 3el. beam, a j-pole (made from 300 ohm twin lead), and a 440 1/4wave verticle...

Please reply to waffle@oz.net by email

thanx
Walter Wickersham
KD7AUR

1630. MFJ-1026/1025 Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Jeff Goodspeed <cmsx42@email.mot.com>
Message-ID: <36BF4975.39FAB3F@email.mot.com>
Source record: 73605
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Greetings Noise Warriors:

Would one of you kind souls be good enough to give me a copy of the schematic diagram (& parts list) for an MFJ-1026 or MFJ-1025 RF Rx Noise canceling unit? I would like to look it over and see if I want to mimic it in home brewing my own unit. There are some old QST articles, though the write up for the MFJ makes it sound like a better design.

My Xcvr already has a separate Rx ant input and I donï¿½t need any antenna switching capability. I also intend to H.B. low noise Rx antennas to feed into something like this.

I donï¿½t think there are any moral or ethical problems in copying the design as long as I donï¿½t try to market such a thing (and I donï¿½t).

TNX ES 73's ï¿½ Jeff ï¿½ KA9S

1631. Re: Help with BUD BOXES ....for Collins Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <79nrciqlk1@nnrp1.dejanews.com>
Source record: 73606

Well Joe, Hang onto your uppers... the Bud & Hammond boxes are still available, but the cost is about the same as a small country's GNP. Check out <www.E-sonic.com> or the Allied site on the web. They have the boxes listed. I just bought a bare aluminum "u-shaped" box that was 6"W-3"H-6"D and it cost me $28CDN. If the Collins look-alikes are still available, they are probably going for about $75USD.

73 de VE6INM

Joe K7JOE <K7JOE@yahoo.com> wrote:
> Hi,
> Anyone know the going rate for the bud boxes (I think that was
> the name brand) that matched the Collins S-line and KWM2 line
> of equipment.
>
> Apparently, they made these cabinets to match the station look of
> the vintage Collins gear. Trying to figure what the going rate is
> today for these boxes (The big transmitter/receiver size ones, not
> the little speaker/station console ones).
>
> Many thanks,
> Joe
> K7JOE
>

VE6INM (Glenn)

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1632. Heath Cheyenne info needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36BF9611.C6B241F2@eaglequest.com>
Source record: 73607

I've just recently, cleaned up and re-stung an old Heath Cheyenne MT-1,
somewhere down the line it was modified and an additional switch was put

on the faceplate for TX. My question is, does an unmodified Cheyenne
need to be put in Standby for recieve? In other words, does the
transmitter interfere with the reciever due to the occilator running
when sitting idle in the CW mode? If not I'd like to restore it to it's
original configuration, if so I want to add a QSK circuit to it.

Anyone know? What a nifty transmitter for $30, who said HR was expensive

:)

Tim ka8ddz

1633. Re: HELP: Trying to turn my home into a brewery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36BF98DC.414B30D0@eaglequest.com>
Source record: 73608

Christopher Heath wrote:

> What is a good source for projects for someone at my level of
> knowlege?

Chris, I highly reccomend picking up a copy of the W1FB QRP Notebook, and QRP Power. Both should be available from the ARRL at arrl.org. I learned soooo much from that QRP Notebook, Doug De Maw (SK) explained things in very simple terms and made it easy to understand. I have no desire to be an RF Engineer so I really wasn't interested in the math, just wanted to understand how and why circuits were used. I got my answers from his books. . I had never done any homebrewing until a few years ago, I started with the DC reciever from that book and wow did I get bit by the bug. There are lot's of schematics for building very simple transmitters etc. Most can be built in a couple hours and most all his work is available on PC boards from FAR Circuits.

Good Luck,

Tim ka8ddz

1634. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36BF9F9F.E36D93D2@eaglequest.com>
Source record: 73609
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.homebrew

KH wrote:

> I received a RadioShack DX-398 for Christmas, and am new to shortwaves. I
> live in an apartment and I'm guessing that the reception could be better. I
> went to the Shack and they suggested either their standard external antenna
> that you can tack to your wall or whatever, or better yet, they said I
> should get their battery-operated antenna so that I can just about pick up
> transmissions from the Voyager.

Absolutely, a battery operated antenna and an 80ft dish will net you plenty of Voyager reception.
(sorry I just couldn't resist after reading "transmissions from the Voyager"

Kevin, you've already had your question answered but I thought I'd dump in my two cents. The key, as many have already pointed out is to get some wire OUTSIDE, for receiving just about any wire will do, it makes NO difference if its solid copper, stranded, covered with teflon or plastic, red, blue or green. If your in a situation where you can't string up a permanent antenna then consider some of these tactics:

If your high (3rd floor or higher) get some small gage wire like awg 26,24,22 and spool it up on a fly reel, I like the fly reels because they are larger and don't bend the wire so small. Put a good size sinker on the end, stick it out the window and lower it almost to the ground the using a test clip hook onto the wire. If it's coated with enamel use a razor blade and carefully scrape off the enamel and mark that spot for future reference.

If your in a complex, I'd approach the landlord (perhaps with a fine Dominican Republic Cigar) and ask if you could string a small gage wire along the roof, you can buy standoffs in many varieties and you would only need 4 or 5 of them if you do it right. If you have a railing along a long outside walkway you could stand the wire off to the outside near the base where it's not conspicuous. You can use nails and wrap the wire around each nail once or twice, just put a piece of electrical tape around it and it should provide adequate insulation.

These are not ideal antenna configurations but better than anything indoors. Be creative but get that wire outside!

Good DXing

Tim ka8ddz

1635. Re: Source for high-Q homebrew IF filter crystals.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: rick@area.com
Message-ID: <79o9pl$1ji$1@vax.area.com>
Source record: 73610

>Henry A. Pasternack wrote:
>
>> I have a quote from Colorado Crystal Corporation to build crystals with
>> Q in the range of 800K to 1,000K. The center frequency specified is 5.0
>> MHz, but this is just representative. As the center frequency goes down,
>> the Q goes up, and so does the price. At 10.0 MHz, the Q is in the range
>> of 170K - 220K.
>> -Henry, KU4XC

It may be of interest to you that quartz has an intrinsic QF product
of about 10^13 for the axis used in the AT mode. Thus the Q's you
quoted at 5 MHz are within a factor of 2 of this limit. OTOH, it is
entirely possible to do even better than this, and at 10 MHz. High
quality crystals at 10 MHz routinely top the 1,000,000 Q mark. What is
interesting is that relatively low cost crystals often have surprisingly
good Q. I would shop around and see what you can get from other vendors
at 10 MHz. You might get higher Q for less $$$. Lower frequency
crystals, to be any good, have to use a bigger piece of quartz, it goes
as the inverse cube of the frequency. Naturally, this costs more.
5 MHz is probably a good place to stop. 2.5 MHz crystals which used
to be used in frequency standards are relatively huge and tend to be
quite microphonic. If at all possible, redesign your receiver to use
a 5.000000 MHz IF, so that you can use any 5 MHz crystals that may
be around. There are a thousand of them for every one at 5.206 or
whatever that was. You might find that a vendor is already making
5 MHz crystals for someone else and can sell them to you at the
quantity price. Economy of scale, and all that. Here's a concept:
buy reject crystals with lousy aging, poor tempco, or frequency
jumps. You'll never notice that in a crystal filter.

Rick Karlquist N6RK
rick@area.com

1636. Call for Papers - Central States VHF Society

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-08 00:00:00 UTC
From: Barry Buelow WA0RJT <bjbuelow@plutonium.net.nospam>
Message-ID: <36BFBC29.C651BD27@plutonium.net.nospam>
Source record: 73611
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Call for Papers
for
Central States VHF Society
Conference and Proceedings

The CSVHF Conference will be held July 22-25 in Cedar Rapids, Iowa.
Authors wishing to submit a paper
and/or make a presentation at the conference are encouraged to contact
Barry Buelow WA0RJT. Papers
will be accepted in technical areas related to VHF and UHF equipment
design, antennas and related topics.
Operating procedures and reports of band openings are also welcome.

The closing date for submitting a paper is May 15, 1999. Printed
material or electronic media will be accepted.

The CSVHF Society maintains a web page at http://www.csvhfs.org

Authors should contact:
Barry Buelow WA0RJT
4110 Emerson Ave NE
Cedar Rapids, IA 52411-6716
Email to: bjbuelow@plutonium.net

1637. Free Shopping Cart For Your Website!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: 464269@JwSJfC.COM
Message-ID: <199902081340.FAA01114@mailbox1.ucsd.edu>
Source record: 73612

Now you can get the free use of a Secure Electronic Commerce Shopping Cart
and a free SSL Server Certificate. The shopping cart is one of the finest
on the market and includes the following features:

- Supports UPS ground (USA) shipping rate charts
- Product database search feature
- Supports Cybercash credit card transactions
- Ability to store order information in a secure file
- Supports Secure Transactions (SSL)
- Works with frames
- Automatic field validation
- Ability to mail the order to multiple email addresses
- Supports a percentage discount rate
- Supports multiple currencies
- Ability to stay on same page when item is purchased
- Ability to order more than one item at a time
- Receipt sent to customer
- Header and footer files can be included in the customer receipt
- Ability to accept and verify credit card numbers
- Eight different types of shipping supported
- Three shipping algorithms supported
- Ability to add in sales tax
- Ability to keep track of what the user has purchased from page to page,
even if they use the back button. (No cookies used)

This offer is valid only for customers who host web sites with our
clients. Call now to find out how to get your free Secure Electronic
Shopping Cart (970) 349-0796 (United States).

Thank you.

1638. Hi gang;

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: smokey1f@worldnet.att.net
Message-ID: <79o5c6$37b$1@nnrp1.dejanews.com>
Source record: 73613

The last couple of days I have had the privelage of visiting many ham radio sites.It has encouraged this old duffer to go back into the hobby.I hope you will except my introduction and add me to your news group.I,m a liitle rusty but I can still do some R&D work.hope We can help eachother.fred stroisch at smokey1f@worldnet.att.net/end

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1639. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36cc8605.42249529@news.atl.bellsouth.net>
Source record: 73614
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Mon, 08 Feb 1999 19:17:58 GMT, dave@psilink.co.uk wrote:
>
>On Mon, 08 Feb 1999 14:59:29 GMT, hinermad@my-dejanews.com said:
>>Anyway, go inside and ask for electric fence wire. You'll be directed to
>>spools containing wire by the MILE. It's galvanized steel wire, 16-18 gauge
>>usually, and it's WONDERFUL for antennas. The steel is much stronger than the
>>soft-drawn copper you'll get at Lowes, it's not insulated so it won't be
>>carrying extra weight, and the zinc coating solders very, very well. And it
>>runs (last time I checked) about $20 per spool.

>Won't this stuff have a higher resistance than copper wire?
>
>If so, some of your RF is going to be wasted as heat.
>
>de Dave (G0DJA)

Yes it certainly will, about 17 times more in fact. Because
steel is ferromagnetic, the skin depth is very shallow, so
the skin resistance is a lot more than its increased DC
resistance over copper would indicate. You can also get
aluminum electric fence wire. That will have much less
loss. But it is very fragile, aluminum fatigues rapidly when
flexed, and it will quickly fail if not supported every few feet.

Copper wire has the properties we want in an antenna
wire. It isn't very expensive in the quantities we need.
So there's no good reason not to use it.

I must say that I don't understand the thinking processes
of people who think nothing of dropping over $1,000 for a
radio, but then carp about a few pennies a foot for the
antenna wire which makes the radio useful.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1640. Wanted: HBR-12 Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: tubepwr813@aol.com
Message-ID: <19990208201241.11276.00000298@ng-cd1.aol.com>
Source record: 73615

I used to have one of these RX's that an old ham built. I believe it was from an article in the 50's. It utilized 3 plug in coils for each band.

I would be interested in having one of these sets. The one I had used an Eddystone type dial.

Chris KX0Y

1641. Re: 3-1000 4-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Doug <doug@alpinet.net>
Message-ID: <79o6v3$f7p$0@207.14.62.67>
Source record: 73616

One question......are you really sure the problem is caused by Parasitics?

A couple questions.......is the amp designed as a grounded grid?
If so, what size bias diode or standby bias have you on the cathode?

Good luck, that tube can be a bearcat to stabilize. I've built several amps
with them.

73

Doug, K7YD
Livingston, MT

ahuffman@usit.net wrote:

> does anybody know what parasitic suppressor you need on the grid to stabilize
> this one will pull excess plate current with know input key it up and in a few
> seconds the plate will start to turn red 4000 on plate
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1642. furuno 1552

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: georgina and stephen pearce <pearce@ieee.org>
Message-ID: <36C0D466.5BA@ieee.org>
Source record: 73617

Hi,
Anyone out there with expertise in these marine hf transceivers?
I have one which I would like to mod to use cw with. Though not listed
as an option in the operator manual, cw appears on the lcd display ..
is it possible to enable it as a mode option or modify the firmware
to do the same? Currently I am driving it via the remote socket
.. with ptt and line in lines keyed and audio applied respectively ..
but it is messy and the transceiver must surely be capable of
producing a cw tone if the control firmware is patched

Thanks forany insights
Stephen zl1any
--
Stephen and Georgina Pearce
Hamilton, New Zealand
phone 64-7-839-6537
mobile 025-2937-348
pager (& voice mail)
64-9-358-0825
then enter "4547" when
prompted for pager
mailto:pearce@ieee.org

1643. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36BFC500.C1484E2F@home.com>
Source record: 73618
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Did you know that there is a $2 tax on your phone line for E-Rate courtesy of Clinton/Gore. Did you know that there is a $5 monthly tax on ISDN lines courtesy the same pair. Did you know that there are about 100 million household phonelines in the US, but somehow all this money collected hasn't made its way down to the schools who were supposed to be wired to the internet?

Clinton is only responsible for taxing the internet.

CW wrote:

> >
> > Oscar wrote in message <36BB7953.7D803E58@worldnet.att.net>...
> > >Clinton, didn't you know? Oh yes, Clinton has nothing to do with this
> > >thread.
> > >-------
> > >Clinton has a lot to do with this and every thread on the Internet as he
> > >is the one who pushed the *Information Superhighway.* He got at least
> > >one thing right. Right or wrong he wtill represents the American
> > >Presidency, C-in-C, etc. and probably a better president that Oliver
> > >North could ever hope of becoming...someone else who lied under oath.
> >
> >
> >
>
> The democrats like this kind of individual. So unaware of the world that
> he will believe anything that he is told. It's hard to believe that there
> are people this dense out there but apparently there are a lot of them.
> Well you say that "he at least got one thing right". Considering the fact
> that he had nothing to do with that "one thing" I guess you would have to
> say that he is batting a zero.
> CW
> KC7NOD

1644. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36BFC3EE.9E53BB33@home.com>
Source record: 73619

But you don't have to program a 7217, you can use it off the shelf. Some folks like to grow their own cabbages ...

Mark Zenier wrote:

> In article <36B66DE8.9AECC909@home.com>,
> Jeanette D. Walton <jdwalton@home.com> wrote:
> >For a frequency counter you might be better off using an off the shelf
> >Harris Semi chip like, I believe, the 7217, if all you want to do is
> >count. If, however, you want to use a Voltage to frequency converter as
> >part of an analog to digital converter, then the Stamp can fit the
> >bill. I believe it counts pulses in 10uSec intervals.
>
> If you get down to the bare iron and program the PICs in assembler,
> you can get access to all sorts of capability that's used for
> other things in the Basic Stamp.
>
> The counter prescaler in a 16c5x PIC is good for (maybe) 50 MHz,
> independent of the CPU's timing crystal, (more or less). This divides
> by up to 256 and then feeds the 8 bit counter register. So the program
> only has to worry about counting the number of times this last counter
> overflows, which can happen as slow as 65,536 times slower than the
> input at the pin. Slow enough for the sofware to deal with it.
>
> One of the hobby magazines had a PIC based frequency counter as a project
> 3-6 years ago. I think it was Electronics Now.
>
> Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1645. Re: VHF Quad MOSFET question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <36bfcd5b.50100003@news.magiclink.com>
Source record: 73620

Si8901s are still around if you want to try some, Jim. However getting the required drive voltage will be tricky....square wave drive is out of the question, have to put gates in a tuned 2m LO tank circuit. Interesting circuit design.

Fairchild FST3125 "quad bus switch" has four MOSFETs with drivers in a SOIC or smaller package. Switch time with logic drive is speced as a few nS. Works well on HF (+45 dBm intercept), am sure it'll work on 2m, too, but doubt it would work very well.

A high level diode mixer would be much more straightforward way to go.

On Wed, 03 Feb 1999 09:06:58 -0500, Zack Lau <zlau@arrl.org> wrote:

>I recall the Si8901 literature makes mention of 150 MHz operation
>but these devices may be collector's items.--Zack W1VT
>
>Jim wrote:
>
>> Are there any quad MOSFETs that will make a good mixer for 144 MHz?
>>
>> Jim
>> N8EE
>
>
>

1646. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Oscar <oscarrben@worldnet.att.net>
Message-ID: <36BFF002.948AE67E@worldnet.att.net>
Source record: 73621
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> The democrats like this kind of individual. So unaware of the world that
> he will believe anything that he is told.

I AM GULLIBLE. For a while there I was believing that Morse Code was
important for getting a ham license because someone told me so. I guess
this isn't true. Is someone lying to me again?????
Am I naive in thinking that the only true believers are Pro-CW hams?

1647. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Oscar <oscarrben@worldnet.att.net>
Message-ID: <36BFF008.7E6C1D1E@worldnet.att.net>
Source record: 73622
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

kilroy wrote:
>
> O bull!
> How long have _you_ been on the INet? We have been playing with WWW since
> long before SickWillie even met Monica.
> Clintoon had NOTHING to do with our internet, other than to suggest a tax on
> its use.
> Wake up.

As I understand it, of course I may be wrong, the Internet came into
being
c.1967, but not popularized until Clinton/Gore came along. The key word
is
popularized. Did Reagan, Carter, Bush ever mention it to us? Can't
recall.
Re taxes, Which President made this famous quote: "Read my lips, no new
taxes." Another lying Democrat, George Bush.
Poor Ronald Reagan, truly he probably "...didn't remember." I know the
real
estate dealer that tried to sell him back his own home, <G>, Funny thing
how
Oliver North, Annapolis graduate, keen mind, couldn't remember details
of the
Iran-Contra Affair...gosh, don't these national leaders take notes?!?!
How about this Democratic President: "I have a secret plan to end the
war
[Vietnam]." "I am not a crook." Wasn't called *Trickie Dick* for
nothing.
I still remember all those staunch patriotic, America is #1 Republicans
during
the Vietnam War who had a calling from Heaven to become ministers, ala
Stockman (a Reagan adviser I believe). Funny how they all had a change
of heart
when peace was declared.

1648. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Oscar <oscarrben@worldnet.att.net>
Message-ID: <36BFF388.3D17FBD2@worldnet.att.net>
Source record: 73623
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

<SNIP> Clinton is only responsible for taxing the internet.

I must have fallen asleep in my Civics/U.S. History class in college.
Please forgive my ignorance. I didn't know only Presidents from the
Democratic Party imposed taxes on us. I'm so dumb, next time I'll have
to
vote for Reublicans who only believe in "revenue enhancement." You know,
Ronald Reagan was right, why have national parks and forests, you've
seen
one tree, you've seen them all. You should've seen his ranch in Santa
Barbara County, California--all those plastic trees on his acreage.

1649. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <36bfcf87.50655514@news.magiclink.com>
Source record: 73624

Set the dipper meter reading for midscale. Then position the grid dip coil near the tank you are testing and tune for a dip in the grid dip meter. Reduce coupling by putting more distance between them, or making the axis of the two coils closer to ninety degrees until the dip is small, but still distinct. This is to prevent the dipper tank from "pulling" by the tank you are testing, and giving you an inaccurate freq reading. (You can tell that's happening when you get a different frequency coming in from higher frequency side of resonance than you do coming in from the lower frequency side). Then read the dipper frequency....on a receiver or a counter is gonna be better than any dial calibration if you want accuracy.

On Sun, 07 Feb 1999 14:17:57 GMT, ddoss@i1.net (DanD) wrote:

>Can anyone explain the procedure for using a grid dip meter for
>checking resonances in amplifier tank circuits, chokes, etc? I know a
>little about the principle of the dipper, but need some clarification
>on the exact procedure.
>
>TIA - Dan
>
>

1650. 3RP1-A CRT tube needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990209031917.00318.00000435@ng120.aol.com>
Source record: 73673

Hello, if you have a good used, or preferrably NOS 3RP1 A cathode ray tube,
my friend John (W2FNT) needs one. Either contact him, at > johnyk78@aol.com
or me, > tubecntral@aol.com with a description of the item
Thanks to all respondents in advance!
Thank you,
Joe Pratt, Tubecntral@aol.com
Thank you,
Joe Pratt, Tubecntral@aol.com

1651. Re: VHF Quad MOSFET question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <36bfe3be.548096@news.magiclink.com>
Source record: 73674

Si8901 is operable at VHF, A Siliconix application note suggests putting gates in a resonant tank circuit as the most reasonable way to develop large (10-20 volts p-p) voltage swings at essentially capacitive gates. Not your normal low-impedance stuff. I have some spare 8901s available if you want to try using those.

Fairchild FST3125, and similar "fast bus switch" chips by TI and others has four MOSFETs with drivers into SOIC. Switching times are a few nS: they are great at HF but doubt they will work at 2m very well.

Unless you're dying for a chance to do some tricky circuit design, a conventional diode mixer is more likely to give you good results right out of the box. - Bill, W7AAZ

On Wed, 03 Feb 1999 09:06:58 -0500, Zack Lau <zlau@arrl.org> wrote:

>I recall the Si8901 literature makes mention of 150 MHz operation
>but these devices may be collector's items.--Zack W1VT
>
>Jim wrote:
>
>> Are there any quad MOSFETs that will make a good mixer for 144 MHz?
>>
>> Jim
>> N8EE
>
>
>

1652. WTB: 455Khz crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: eco@mcmail.no.spam.com
Message-ID: <36bff9c3.0@news1.mcmail.com>
Source record: 73675

I want a couple of 455khz crystals, any size.

Colin, G8FRA

1653. Re: Pinout of an SBL-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: "Robinson, AB5VH" <rc@crusoe.org>
Message-ID: <79ou8n$1au$1@news-2.news.gte.net>
Source record: 73676

Pinout of an SBL-1? I use it for the background graphics at my website index page! Yeah, it is indeed a neat little unit. Very versatile.

--

-Robinson- (AB5VH)

for radio, maritime, and locks stuff go to:
http://crusoe.org and
http://www.geocities.com/capecanaveral/galaxy/7982
and my NEW, IMPROVED, BIGGER site at:
http://www.geocities.com/~robinsonab5vh/

dit diddy dit dit
---

geo wrote in message ...
>Try
>
>http://qrp.pops.net/qrp/scheme.htm
>
>they have one on this page
>geo
>
>In article <36BD3620.65D9BF0F@c2i.net>, pnarozny@c2i.NET says...
>>
>>Hi There.
>>I have sevral (35) of MCLSRA-1H this stuff is very like SBL-1 as is
>>maybe most used.
>>My question is: What is the pin out on a SBL-1? This is a nice little
>>fellow of a
>>balanced mixer witch could be used to a DC. I need to know the correct
>>pinout. When
>>looking at the "pin side", i have one pin with blue around and the rest
>>is green. I
>>guess then that the "blue" pin is one (1).
>>
>>Is the pinout like this?
>>1234
>>8765
>>
>>Or like this?
>>1357
>>2468
>>

>>Most of the circuit i have seen use "pair" of pin for out, in, and
>>loc.osc.
>>--
>>Paul-Erik Narozny
>>P.O.Box 209
>>N-1540 Vestby
>>Norway
>>Tlf: +47 6495 2778
>>Fax: +47 6495 2777
>>E-Mail: la5hja@repairman.com
>>
>

1654. Re: HELP: Trying to turn my home into a brewery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: "Robinson, AB5VH" <rc@crusoe.org>
Message-ID: <79ouvi$a3q$1@news-2.news.gte.net>
Source record: 73677

I agree. The late Doug DeMaw is a good man to read if you are not an engineer. You can mix and match most of his circuits and "design" some pretty good gear that doesn't take a project team to align and debug and get on the air. You won't build his projects from Rat-Shack parts, but neither will you have to commission a special factory run for a component, either. The majority of his designs can be built with catalogued parts from Mouser alone. W1FB QRP Notebook is definitely my favorite "cookbook".

--

-Robinson- (AB5VH)

for radio, maritime, and locks stuff go to:
http://crusoe.org and
http://www.geocities.com/capecanaveral/galaxy/7982
and my NEW, IMPROVED, BIGGER site at:
http://www.geocities.com/~robinsonab5vh/

dit diddy dit dit

Tim wrote in message <36BF98DC.414B30D0@eaglequest.com>...
>
>
>Christopher Heath wrote:
>
>
>> What is a good source for projects for someone at my level of
>> knowlege?
>
>Chris, I highly reccomend picking up a copy of the W1FB QRP Notebook, and
>QRP Power. Both should be available from the ARRL at arrl.org. I learned
>soooo much from that QRP Notebook, Doug De Maw (SK) explained things in
>very simple terms and made it easy to understand. I have no desire to be
>an RF Engineer so I really wasn't interested in the math, just wanted to
>understand how and why circuits were used. I got my answers from his
>books. . I had never done any homebrewing until a few years ago, I started
>with the DC reciever from that book and wow did I get bit by the bug.
>There are lot's of schematics for building very simple transmitters etc.
>Most can be built in a couple hours and most all his work is available on
>PC boards from FAR Circuits.
>
>Good Luck,
>
>Tim ka8ddz

>

1655. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: xxx@yyy.com
Message-ID: <36C01263.42677C2A@yyy.com>
Source record: 73678
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.homebrew

Hello,

It is usually a problem to reject noise (generated in computers and sodium lights) while still picking up signal, In other words, Signal to noise ratio can be a problem in high noise urban areas.

At the risk of sounding like an advertisement, I would suggest a small aperture active antenna in an window . Local Noise and signal minima and maxima occur quite a lot when you move such an antenna. Certain location will give you a minima for the local noise, while still picking up enough signals. This will give you the best SNR. Connect this active antenna through a shielded cable to the receiver.

The external longwire antenna would be an excellent choice if you had enough real estate and were located in a low noise area. This should connected with a simple (homebuilt) Balun transformer to a coax cable like RG58 or RG 6 TV cable (I tend to like the TV cable better) , preferable buried in the ground (to get rid of common mode signal and noise), to your radio.

Please look at www.naswa.org for more information

Dx 398 is a fine receiver and it begs for an external/active antenna.

Tim wrote:

> KH wrote:
>
> > I received a RadioShack DX-398 for Christmas, and am new to shortwaves. I
> > live in an apartment and I'm guessing that the reception could be better. I
> > went to the Shack and they suggested either their standard external antenna
> > that you can tack to your wall or whatever, or better yet, they said I
> > should get their battery-operated antenna so that I can just about pick up
> > transmissions from the Voyager.
>
> Absolutely, a battery operated antenna and an 80ft dish will net you plenty of
> Voyager reception.
> (sorry I just couldn't resist after reading "transmissions from the Voyager"
>
> Kevin, you've already had your question answered but I thought I'd dump in my
> two cents. The key, as many have already pointed out is to get some wire
> OUTSIDE, for receiving just about any wire will do, it makes NO difference if
> its solid copper, stranded, covered with teflon or plastic, red, blue or green.
> If your in a situation where you can't string up a permanent antenna then
> consider some of these tactics:
>

> If your high (3rd floor or higher) get some small gage wire like awg 26,24,22
> and spool it up on a fly reel, I like the fly reels because they are larger and
> don't bend the wire so small. Put a good size sinker on the end, stick it out
> the window and lower it almost to the ground the using a test clip hook onto the
> wire. If it's coated with enamel use a razor blade and carefully scrape off the
> enamel and mark that spot for future reference.
>
> If your in a complex, I'd approach the landlord (perhaps with a fine Dominican
> Republic Cigar) and ask if you could string a small gage wire along the roof,
> you can buy standoffs in many varieties and you would only need 4 or 5 of them
> if you do it right. If you have a railing along a long outside walkway you could
> stand the wire off to the outside near the base where it's not conspicuous. You
> can use nails and wrap the wire around each nail once or twice, just put a piece
> of electrical tape around it and it should provide adequate insulation.
>
> These are not ideal antenna configurations but better than anything indoors. Be
> creative but get that wire outside!
>
> Good DXing
>
> Tim ka8ddz

1656. switched capacitor filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Ian Mitchell <ian.mitchell@utas.edu.au>
Message-ID: <36C017B8.29699CD6@utas.edu.au>
Source record: 73679

Hello,

I was wondering, can two switched capacitor filters be used to produce a relative 90 degree phase shift by clocking them with a quadrature clock?

I don't think the above is possible, but could there be another way to achieve it?

Thanks, Ian

1657. Re: switched capacitor filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: C Bauman <cbauman@impulse.net>
Message-ID: <36c03e2d$0$200@sienna.impulse.net>
Source record: 73680

Ian Mitchell wrote in message <36C017B8.29699CD6@utas.edu.au>...
>I was wondering, can two switched capacitor filters be used to produce a
>relative 90 degree phase shift by clocking them with a quadrature clock?
>
>I don't think the above is possible, but could there be another way to
>achieve it?

Not using two separate, independent switched capacitor filters, but if two analog mux switches could read the same capacitor bank, it would be a simple matter to set the outputs 90 degrees apart.

Carl WB6YFZ

1658. WTB: 45.455MHz DTCXO in quantity

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be5431$f3cbc120$a4193bcb@default>
Source record: 73681

Wanted approx 4000 per year
Digitally temp compensated xtal oscillator
45.455 MHz
0.5 ppm stability
Any suppliers for this quantity?

Thanks
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

1659. Re: Source for high-Q homebrew IF filter crystals.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <79pnv6dom1@nnrp1.dejanews.com>
Source record: 73682

In article <79o9pl$1ji$1@vax.area.com>,
rick@area.com (Richard Karlquist) wrote:

> (snip...)
> If at all possible, redesign your receiver to use
> a 5.000000 MHz IF, so that you can use any 5 MHz crystals that may
> be around. There are a thousand of them for every one at 5.206 or
> whatever that was. You might find that a vendor is already making
> 5 MHz crystals for someone else and can sell them to you at the
> quantity price. Economy of scale, and all that. Here's a concept:
> buy reject crystals with lousy aging, poor tempco, or frequency
> jumps. You'll never notice that in a crystal filter.

Hear! Hear! The best buys for stuff like this are the bags of
surplus microprocessor and colour burst crystals. I routinely
see bags of hundreds for a few dollars: grade them to pick the
good ones and you have a very cheap filter. Even the new prices
(e.g. Digi-Key) are not unattractive when you buy them in
100-up quantities.

You can always play such games with DSP. But that option has its
limitations too. The first of which is ham radio's mental block
on the subject...

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1660. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: heath_filtered@s2i2.com
Message-ID: <36c152b1.51557415@news.ncal.verio.com>
Source record: 73683
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Actually, the President doesn't impose taxes. Congress does.

Not only does Clinton have nothing to do with this thread but these cross posts are out of context as well.

If you are waiting for either Republicans or Democrats to save the world, you might as well jump off a cliff today. Since most people can't help but to look out for their own interests, one can only expect politics to become an arena for self-serving corruption. Those who have not taken this road as they walk amongst the devils deserve all the more praise for their strong character and firm principles.

On 9 Feb 1999 08:34:07 GMT, Oscar <oscarrben@worldnet.att.net> wrote:

> I didn't know only Presidents from the
>Democratic Party imposed taxes on us.

--
KF6EAL, Christopher

1661. Re: HELP: Trying to turn my home into a brewery.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: heath_filtered@s2i2.com
Message-ID: <36c05103.51127056@news.ncal.verio.com>
Source record: 73684

Most of the responses I received were through email so anyone paying
attention here wouldn't know that I received a half dozen or more
responses. Thanks to all for the responses. I have already taken steps
to aquire some of the suggested material.

On Mon, 08 Feb 1999 21:09:32 -0500, Tim <ka8ddz@eaglequest.com> wrote:

>
>
>Christopher Heath wrote:
>
>
>> What is a good source for projects for someone at my level of
>> knowlege?
>
>Chris, I highly reccomend picking up a copy of the W1FB QRP Notebook, and
>QRP Power. Both should be available from the ARRL at arrl.org. I learned
>soooo much from that QRP Notebook, Doug De Maw (SK) explained things in
>very simple terms and made it easy to understand. I have no desire to be
>an RF Engineer so I really wasn't interested in the math, just wanted to
>understand how and why circuits were used. I got my answers from his
>books. . I had never done any homebrewing until a few years ago, I started
>with the DC reciever from that book and wow did I get bit by the bug.
>There are lot's of schematics for building very simple transmitters etc.
>Most can be built in a couple hours and most all his work is available on
>PC boards from FAR Circuits.
>
>Good Luck,
>
>Tim ka8ddz

--
KF6EAL, Christopher

1662. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: flanders@groupz.net
Message-ID: <36c0586d.2796507@nntp.groupz.net>
Source record: 73685
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Tue, 09 Feb 1999 00:57:31 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>SOMEBODY SAID:
>>>. ...It's galvanized steel wire, 16-18 gauge
>>>usually, and it's WONDERFUL for antennas. ...
>
>AND THEN Dave (G0DJA) SAID:
>>Won't this stuff have a higher resistance than copper wire?
>>
>>If so, some of your RF is going to be wasted as heat.
>>
>>
>THEN, , ke4zv@bellsouth.net (Gary Coffman) wrote:
>Yes it certainly will, about 17 times more in fact. Because
>steel is ferromagnetic, the skin depth is very shallow, so
>the skin resistance is a lot more than its increased DC
>resistance over copper would indicate.

BUT - what does this 17 times greater resistance mean in practical terms? If Copper is a tenth of an ohm, even at 17 times worse, steel would only be 1.7 ohms, and could therefore be neglected as an important loss source in a 50 Ohm antenna dipole.

I have tried to get the answer to this question before and apparently nobody knew the practical effect. I will be putting up a tower this summer and want to use the (insulated) galvanized guys as an inverted vee antenna system.

Can anybody predict the practical difference in loss resistance between the very large galvanized guy wires (surface area corresponding to 1/4 inch dia) and the much smaller copper "standard" wire of 12 gauge or so? If the guy wire surface area is 17x the copper, is it a wash? Is it frequency dependent?

Jerry W4UK

1663. Re: Free Shopping Cart For Your Website!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <79puvlkmd1@nnrp1.dejanews.com>
Source record: 73686

Boy, check the headers on THAT message.

Get real -- would YOU buy an SSL connection for e-commerce from a mail-hijacking SPAMmer with no return address except abuse@ucsd.edu?

How long before your customers see their credit cards looted by www.online.casinos_r_us.com?

You have to be a really stupid SPAMmer to think we're dumber than that.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1664. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C06E29.A038D2D0@teleport.com>
Source record: 73687
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Jerry Flanders wrote:
>
> BUT - what does this 17 times greater resistance mean in practical
> terms? If Copper is a tenth of an ohm, even at 17 times worse, steel
> would only be 1.7 ohms, and could therefore be neglected as an
> important loss source in a 50 Ohm antenna dipole.
>
> I have tried to get the answer to this question before and apparently
> nobody knew the practical effect. I will be putting up a tower this
> summer and want to use the (insulated) galvanized guys as an inverted
> vee antenna system.
>
> Can anybody predict the practical difference in loss resistance
> between the very large galvanized guy wires (surface area
> corresponding to 1/4 inch dia) and the much smaller copper "standard"
> wire of 12 gauge or so? If the guy wire surface area is 17x the
> copper, is it a wash? Is it frequency dependent?
>
> Jerry W4UK

Yes, it can be predicted. Unfortunately, the rigorous calculation of the RF resistivity of plated wire is complex. However, if the plating thickness is at least a few skin depths, the plated wire behaves for practical purposes like it's made only of the plating material, and the calculation is simple. If you don't know the plating thickness, you can do the calculation for each material to get an idea of the limits. For example, a galvanized wire would have an RF resistivity greater than that of zinc but less than that of steel (which is much more resistive at RF). (Actually, there are plating thicknesses for which the combined resistivity is slightly greater or less than either material, but not by much.) Equations for calculating the RF resistivity of wire can be found in a lot of sources, but probably the easiest way to see the impact on an antenna is by using one of the readily-available modeling programs. The free demo version of ELNEC, available from www.teleport.com/~w7el will easily do this. You simply model the antenna with no conductor loss, then with the DC resistivity and relative permeability of the wire or plating (although there can be a catch here; you have to know these parameters at least approximately), and compare the results. The loss is frequency dependent, because the skin depth and hence the RF resistivity is a function of frequency. For full-sized antennas with a constant wire size, the amount of loss becomes greater at lower frequencies in spite of the greater skin depth. This is because when you halve the

frequency, the antenna length doubles but the skin depth (and RF conductivity) increases only by the square root of two.

To answer your other question, if one wire has 17 times the RF resistivity of another, it has to have 17 times the surface area (not 17 times the cross-sectional area), of another wire in order to have the same RF resistivity. So its diameter has to be 17 times as great. This assumes that the skin depth is only a small fraction of the diameter, which is a good assumption at HF and above for antenna-sized wires of reasonable conductivity.

Roy Lewallen, W7EL

Roy Lewallen, W7EL

1665. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <79pu6v$sh5$2@news4.svr.pol.co.uk>
Source record: 73688
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Walter Wickersham wrote in message <36BF4E63.19F14EE1@oc.ctc.edu>...
>The subject says most of it.... I'm looking for ideas of how to build a
>cheap (pvc possibly) antenna tower, possibly 20feet, must be able to
>break down
>for transportation to other locations, and support smalll 2m antenna's,
>one 3el. beam, a j-pole (made from 300 ohm twin lead), and a 440 1/4wave
>verticle...
>
>Please reply to waffle@oz.net by email
>
>
>thanx
>Walter Wickersham
>KD7AUR

Look at the Antennex website, they have a series of projects using upvc plumbing fittings and pipe for a lattice mast, up to IIRC 20 feet or so and costing approx 10 dollars per 10" section.. I dont have the URL but it should be easy enough too find them with a search engine..
73 Mike W G8NXD

1666. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36c07c9e.0@news.netwalk.com>
Source record: 73689
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Walter Wickersham wrote in message <36BF4E63.19F14EE1@oc.ctc.edu>...
>The subject says most of it.... I'm looking for ideas of how to build a
>cheap (pvc possibly) antenna tower, possibly 20feet, must be able to
>break down
>for transportation to other locations, and support smalll 2m antenna's,
>one 3el. beam, a j-pole (made from 300 ohm twin lead), and a 440 1/4wave
>verticle...
>
>Please reply to waffle@oz.net by email
>
>
>thanx
>Walter Wickersham
>KD7AUR

You could build an A frame mast.

20 ft would be quite easy to manage, although I am not sure about the 3 element beam. Do you mean VHF or HF?

Let me see....(mumble mumble)...you would need perhaps seven 8 ft 2x4. Pressure treated wood is more durable, but heavier. Five of them would go together like this:

I
I I
I I

Put a 1 foot overlap at each section and you will get a height of 21 ft.

The remaining 2x4s are to be used for cross pieces, two at the bottom (each side) and one at the level of each joint.

Drill holes at appropriate places and install 5/16 inch bolts. And don't forget eyebolts for the guy ropes.

Jim
N8EE

1667. WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <b9MhkCAmaIw2EwgU@falstaf.demon.co.uk>
Source record: 73690
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear All,
I want some xtals for a 10.7 MHz, 455kHz double superhet. I am after
10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.

Can anyone help?.

Rgds

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

1668. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: xxx@yyy.com
Message-ID: <36C08B65.39ED942B@yyy.com>
Source record: 73691
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

10.240 crystals are used by numerous cordless phones etc as freq ref
standard
for PLL.

It may be possible to pull 10.240 to 10.245

Digikey sells Epson 10.240 crystals in that watch crystal package.

Robin Birch wrote:

> Dear All,
> I want some xtals for a 10.7 MHz, 455kHz double superhet. I am after
> 10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.
>
> Can anyone help?.
>
> Rgds
>
> Robin
> ____
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

1669. Re: MFJ-1026/1025 Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <918589255.858365@cs1.sdd.hp.com>
Source record: 73692
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jeff OM,

Why don't you ask MFJ for a copy of the schematic?

73,
Don, W6JL

>Greetings Noise Warriors:
>
>Would one of you kind souls be good enough to give me a copy of the
>schematic diagram (& parts list) for an MFJ-1026 or MFJ-1025 RF Rx Noise
>canceling unit? I would like to look it over and see if I want to mimic
>it in home brewing my own unit. There are some old QST articles, though
>the write up for the MFJ makes it sound like a better design.
>
>My Xcvr already has a separate Rx ant input and I don't need any antenna
>switching capability. I also intend to H.B. low noise Rx antennas to
>feed into something like this.
>
>I don't think there are any moral or ethical problems in copying the
>design as long as I don't try to market such a thing (and I don't).
>
>
>TNX ES 73's Jeff KA9S
>
>

1670. another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <79prcr$5g0@fox.ksu.ksu.edu>
Source record: 73693

Thought you might like to hear another sad Radio Shack story.

I'm posting this to "homebrew" even though it arose out of a "truckbrew" in which I added to my pick-up truck a second battery with isolated charging, DVM voltage monitering, HF and VHF radios, power outlets in the "topper" area, NVIS antennas (which worked VERY WELL), etc. (the "etc." included replacing the AM/FM radio).

Between the "cut here" lines is a copy of a letter I sent last October; what happened and my conclusions follow the letter.

---------- cut here ---------- cut here ---------- cut here ----------
Leonard Roberts, President
Radio Shack, A Division
of Tandy Corporation
100 Throckmorton St, Suite 1000
Fort Worth, TX 76102

Dear Mr. Roberts:

I want to let you know just how UN-happy I am with the Optimus "In-Dash AM/FM [Radio with] Stereo Cassette with Auto-Stop" (Catalog # 12-2009) I purchased in March, 1996, and installed in my pick-up truck in April, 1997, right about the time its warranty expired (I'm just slow--my problem, not yours).

Basically, your radio has always had two problems; the first I found immediately, and the second I just discovered this past week:

1. Its selectivity on both AM and FM is TERRIBLE! For example, there is a small (5,000-watt) AM radio station whose transmitter is located on the other side of town. That station (at 580 KHz) can be clearly heard from 530 through 640 KHz and effectively precludes listening to any another stations on those "adjacent" frequencies except for one which does make it through at 610 KHz. Similarly, there is an NPR/ classical-music FM station at 89.5 MHz to which I like to listen, but stronger stations "bleed" through until that station is wiped out!

Another FM example: there is a local FM station at 103.5 MHz; I can hear it clearly at 89.1 MHz, 89.3 MHz, 90.1 MHz, and on up the dial. That is TERRIBLE selectivity.

But, because I was so slow in installing the radio such that the warranty had expired, I thought I'd just have to live with the "lemon".

2. However, just last week I used the "CD" input for the first time. It worked fine, BUT when I left the cable plugged into the radio

overnight, the radio LOST ALL of its programming: all 30 radio memories AND the clock time! With this new discovery I just have to complain.

Speaking as an electrical engineer with more than 30 years of experience, I can understand the cost/performance tradeoffs of building a not-too-expensive radio with poor selectivity, but disconnecting the "keep alive" voltage to the memories when the auxiliary CD input is used IS ONE CRAPPY DESIGN!

As I said before, the warranty period is long past. However, if you'd like me to continue buying more than parts at Radio Shack, I'd appreciate your authorizing an after-the-warranty return of my radio for a better model.
---------- cut here ---------- cut here ---------- cut here ----------

Incidentally, I used the "CD input" to feed audio from my HF transceiver to the pickup-truck speakers, which worked very well! But I never imagined I'd have to UNplug that input every time before turning the ignition off just so the AM/FM radio could remember its programming!

WHAT HAPPENED

About a month later, in response to the above letter, I received a call from Radio Shack headquarters asking me to identify the Radio Shack store from which I purchased the crappily-designed AM/FM radio. When I identified our local store, I heard someone in the background say

"That's one of our franchise stores."

The caller thanked me, AND THAT'S THE LAST I'VE HEARD OF THE MATTER!

MY CONCLUSIONS
----
1. Don't be slow in using new purchases, or (stated another way) don't buy anything until I am actually ready to use/install it.

2. Try EVERY possible feature ASAP.

3. Do NOT buy from a Radio Shack franchise (locally-owned) store, 'cause Radio Shack Headquarters apparently can't even ask it to correct a problem.

4. Do NOT buy anything "big" (i.e., more than miscellaneous parts) from Radio Shack, period!

Of course, your mileage may vary.

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

1671. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990209145203.22833B-100000@Ocean.CAM.ORG>
Source record: 73694
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

10.240MHz crystals are common in other areas because they can be divided down easily with binary counters (similar to the 8.192MHz TCXO's mentioned here recently). You may be able to find them among standard crystals in electronic supplier's catalogs.

In a lot of commercial equipment, the same frequency is used to convert from 10.7MHz to 455kHz. They just use a relatively wider filter in the first IF, and so the 5KHz difference isn't a problem, and then the 455KHz filter is the main selectivity.

This is the scheme I've seen used in dual conversion CB sets, with synthesizers at least. Some cordless phones (not all are dual-conversion). 49MHz superhet walkie talkies may use the frequency; i can't find the manual for the set I bought which has a schematic; if they don't use 10.240 then they are bound to use the exact frequency. Perhaps baby monitors use the scheme; I've not looked inside one so it's just an assumption that some might.

The scheme using a wider filter at the first IF depends on what you are doing. I have some old 10.7MHz FM filters that must date to the days of 30KHz bandwidth, and I doubt the 5KHz offset would be a problem. A lot of the equipment that uses the scheme uses a ceramic filter in the first IF, and it's more like that in an FM broadcast receiver, though I've not checked bandwidth to see if they are narrower. Scanners apparently use this scheme, and I have a Radio Shack single frequency monitor receiver that does too

The problem with 10.245MHz crystals is that the ones I've found have been in equipment that has a 10.7MHz filter and a 455KHz filter, so it's hardly a solution to the filters that need that second conversion.

Michael VE2BVW

On Tue, 9 Feb 1999 xxx@yyy.com wrote:

>
>
> 10.240 crystals are used by numerous cordless phones etc as freq ref
> standard
> for PLL.
>
> It may be possible to pull 10.240 to 10.245
>
> Digikey sells Epson 10.240 crystals in that watch crystal package.
>

>
>
>
>
>
> Robin Birch wrote:
>
> > Dear All,
> > I want some xtals for a 10.7 MHz, 455kHz double superhet. I am after
> > 10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.
> >
> > Can anyone help?.
> >
> > Rgds
> >
> > Robin
> > ____
> > Robin Birch robin@falstaf.demon.co.uk
> >
> > M1ASU/2E0ARJ Old computers and radios always welcome
>
>
>
>
>

1672. Re: It Is THE WEB COP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Brad Fisher <p70142@email.mot.com>
Message-ID: <36C0941F.8463A954@email.mot.com>
Source record: 73695

Not intending to start a flame war on a subject has has been
beaten to death over and over ...

A person would not post to multiple groups because it would
be a basic net etiquette violation. The internet was developed
to provide a forum for the exchange of constructive ideas, not as
a low cost vehicle for advertising. Every time you spam multiple
newsgroups you create excessive bandwidth consumption, and break the
focus of groups that have no interest in what you are attempting
to sell.

This is why separate subject specific newsgroups have been created ...
if someone wants to buy something then they go there ... potential
sellers should do the same to get the best exposure.

If you are unsure of proper net etiquette protocol, you can easily find
answers in the news.answers group.

Good Luck

KB5MER wrote:
>
> Subject: Re: Is This The Web Cop
> From: Terry Brown <browntl@concentric.net>
> Date: Sun, Feb 7, 1999 11:34 AM
> Message-id: <36BDC002.ECAC8430@concentric.net>
>
> The guy must be a bit screwy. Why would a person who needs to sell
> something not post it to multiple groups (how else could you get as much
> coverage as possible and hopefully get it sold)?
> Terry
>
> KB5MER wrote:
>
> > Subject: Re: Antenna Tuner For Sale
> > From: "tcrpe" <tcrpe@yahoo.com>
> > Date: Sat, Feb 6, 1999 12:12 AM
> > Message-id: <FbQu2.12725$3J3.2941@news2.giganews.com>
> > >
> > How come you don't post this to rec.radio.amateur.swap? You've got it on
> > just about every other group there is!
> > >
> > TR
> > >
> > (into the killfile KB5MER -- just too much spam -- give it a rest)
> > >

> > KB5MER wrote in message <19990205205308.23964.00000200@ng30.aol.com>...
> > >
> > >For Sale 1500 Watt Antenna Tuner
> > > Roller Inductor/Air Variable
> > > built in 1500W Dry Dummy Load
> > > $450.00 + shipping
> > > From Austin, Texas
> > >

--
Bradley W. Fisher N7XSS

1673. WTB: 9 Mhz CW IF Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <36C0AF06.46E0@sympatico.ca>
Source record: 73696

Looking for 9 MHz IF filter for CW. Any brand but prefer KVG.

Please email asking price.

John VE3PCN

1674. RX-320 Free Beta Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: mktg@ix.netcom.com
Message-ID: <36c6b1fb.10596913@nntp.ix.netcom.com>
Source record: 73697

February 9, 1999

Dear RX-320 User,

Last fall I acquired one of the new Ten-Tec RX-320 receivers. It is really a delight to use and listen to.

After a few weeks, it occurred to me that the supplied software did not fully use all the functionality of the radio. I wondered what else could be done.

So, I wrote my own software. It is not as pretty as Ten-Tec's but it does have some additional features:

- Squelch (adjustable)
- Scanning of lists (files) with adjustable delay
- Tuning in a variety of steps from 1 Hz to 1 Mhz
- 34 selectivity settings
- Runs under DOS or Windows - even works on a 80386 computer using DOS

The program has only been run by me (on several computers), so that really makes it a Beta version.

I would be happy to supply free of charge this Beta version to anyone interested who has an RX-320. The software will not function without an RX-320.

The program is supplied along with several other files in a single zip file. Installation and removal are simple, as the program does not affect any system settings either in DOS or windows.

The program is easy to use - just press various keys to engage the different functions.

Brief installation, removal, and operating instructions are included.

If there is enough interest, the Beta version may advance into a final version. In any event, I am not aware of any major bugs in the program.

Send your request to my e-mail at mktg@ix.netcom.com and I will send you the zip file by return e-mail.

Regards,

David
W7HTJ

1675. Need "short verticle" antenna design for 6-meter talkie

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <79qc2c$n9g$1@news.onr.com>
Source record: 73698

I'm looking for a shortened 6-meter antenna for a handie talkie
application. About 3 feet is my ideal target length.

Does anyone have any good design references for such an antenna?

thanks in advance,

W5CDT

--
-->Remove the x's from my email address before using <--

1676. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Martin Ackroyd <martin.ackroyd@virgin.net>
Message-ID: <36C0B356.52399C90@virgin.net>
Source record: 73699
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin Birch wrote:
>
> Dear All,
> I want some xtals for a 10.7 MHz, 455kHz double superhet. I am after
> 10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.
>
> Can anyone help?.
>

An ad in 'Radio Active' says they can make you
a crystal for around ï¿½7.50. [01322 330830]

Good luck
Martin

1677. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: Andrew Marshall <andrew@g8bur.demon.co.uk>
Message-ID: <UmxjHOA8KMw2Ewhv@g8bur.demon.co.uk>
Source record: 73700
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <b9MhkCAmaIw2EwgU@falstaf.demon.co.uk>, Robin Birch
<robin@falstaf.demon.co.uk> writes

>I want some xtals for a 10.7 MHz, 455kHz double superhet. I am after
>10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.

A scrap Pye Westminster, Vanguard, Cambridge or similar rig should yield
a 10.7MHz to 455KHz conversion board, fitted with either a 10245KHz or a
11155KHz xtal (beware - IIRC, some (?lowband) sets had a lower first IF,
so the rock will be on a different frequency). These sets, especially AM
ones, go for very low prices at rallies.

BTW, the conversion crystal frequency was chosen in order to avoid its
harmonics appearing on or near the Rx frequency, so that's a point to
bear in mind.

HTH

73,
Andrew G8BUR.
--
Andrew Marshall.
Unsolicited advertising matter unwelcome. Offenders may be blacklisted.

1678. Icom BC-30

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: "Paul F. McCarron" <w1hzy@cybertours.com>
Message-ID: <36C0F455.512514DC@cybertours.com>
Source record: 73701

Does anyone know how to modify a BC-30 to charge the standard RS 7.6 V battery for the HTX 202 or 404? The three little micro switches on the bottom of the charger have something to do with charge rate, but I haven't figured it out yet. Any help would be appreciated. Thanks, Paul

1679. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: dana <danay@primenet.com>
Message-ID: <Pine.BSI.3.96.990209223113.8470A-100000@usr08.primenet.com>
Source record: 73702
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

i wish i could find some of those myself? wonder if they sell them
anywhere?
http://www.randomc.com/~dana

---
danay __ __ ____ ___ ___ ____
danay@primenet.com /__)/__) / / / / /_ /\ / /_ /
/ / \ / / / / /__ / \/ /___ /

On Wed, 3 Feb 1999, Steve Leong wrote:

> Does anyone know the availability of any "dummy" AA cells?
> (I've seen them in the past - they are plastic forms the same size of
> an AA cell, with a metal strip connecting the top and bottom contacts -
> basically a specialized jumper!).
>
> I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
> spaces for too many AA cells (excess voltage would damage radio). I need
> to insert two "dummy" AA cells to act as jumpers for these extra spaces.
> Already tried to solder jumpers in place - can't do it due to the metal
> they used for the contacts.
>
> Thanks for any assistance and advice!
>
> Steve KC6IJM
>
>

1680. Re: Wanted: AA Dummy Battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: dana <danay@primenet.com>
Message-ID: <Pine.BSI.3.96.990209223608.8470B-100000@usr08.primenet.com>
Source record: 73703
Cross-posted to: ca.wanted,la.wanted,misc.emerg-services,misc.industry.electronics.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

I saw that message, and will try that. thanks.
i am blind, and play around with radios all the time.
let me know what you think about my web site by e-mailing me at the bottem
of the page.
http://www.randomc.com/~dana

---

danay __ __ ____ ___ ___ ____
danay@primenet.com /__)/__) / / / / /_ /\ / /_ /
/ / \ / / / / /__ / \/ /___ /

On Wed, 3 Feb 1999, Greg Halpin wrote:

> Steve Leong wrote:
> >
> > Does anyone know the availability of any "dummy" AA cells?
> > (I've seen them in the past - they are plastic forms the same size of
> > an AA cell, with a metal strip connecting the top and bottom contacts -
> > basically a specialized jumper!).
> >
> > I have a AA battery pack for a handheld radio (Kenwood TK-250) that has
> > spaces for too many AA cells (excess voltage would damage radio). I need
> > to insert two "dummy" AA cells to act as jumpers for these extra spaces.
> > Already tried to solder jumpers in place - can't do it due to the metal
> > they used for the contacts.
> >
>
>
> Steve,
>
> Have you checked at a Radio Shack? (Presuming you are located near one)
>
> I have an old RS portable citizen's band radio that uses two dummy cells
> when using 1.5V AA batteries instead of 1.2V AA rechargables. They are
> a lead-like cast dummy with a thin body and normal sized top and bottom.
> Perhaps they can get them for you as a replacement part ... radio is a
> TRC-209, #21-1660 if that helps at all.
>
> Greg Halpin
>
>

1681. icom pcr1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: john <bigwho@pconline.com>
Message-ID: <79qb95rgc2@bell.pconline.com>
Source record: 73704

I would like to talk to owners of Icom Pcr1000 radios. I have some questions. John

1682. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-09 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF6y9GG.674@netcom.com>
Source record: 73705

In article <36BFC3EE.9E53BB33@home.com>,
Jeanette D. Walton <jdwalton@home.com> wrote:
>Mark Zenier wrote:
>
>> In article <36B66DE8.9AECC909@home.com>,
>> Jeanette D. Walton <jdwalton@home.com> wrote:
>> >For a frequency counter you might be better off using an off the shelf
>> >Harris Semi chip like, I believe, the 7217, if all you want to do is
>> >count. If, however, you want to use a Voltage to frequency converter as
>> >part of an analog to digital converter, then the Stamp can fit the
>> >bill. I believe it counts pulses in 10uSec intervals.
>>
>> If you get down to the bare iron and program the PICs in assembler,
>> you can get access to all sorts of capability that's used for
>> other things in the Basic Stamp.
...

>But you don't have to program a 7217, you can use it off the shelf. Some folks
>like to grow their own cabbages ...

But the orginator of the thread wanted to do it with a PIC. (The '17 is
a 4 digit counter/display). The disadvantage of using a counter chip
like the Intersil 7216/7226 is that they are expensive or hard to get,
limited in frequency to 10 MHz, and (worst of all) are a total pain to
interface to anything else. Their output is the decoded multiplexed
drive for an LED dispaly

>> One of the hobby magazines had a PIC based frequency counter as a project
>> 3-6 years ago. I think it was Electronics Now.

Well, that was a merry chase. Turns out to be Popular Electronics,
November 1994. "Build a 50 MHz Frequency Counter" by Terry Weeder.
http://www.gernsback.com for the publishers website.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1683. Re: Info - PC parallel port pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <36c1e12d.7729511@news.nemaine.com>
Source record: 73525
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Everything you need is at:

http://tsikora.tiac.net/hwb/ca_Printer.html

Have fun,
Ken

On Wed, 10 Feb 1999 19:23:10 +0000, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>I know this is off topic - but...
>
>Can someone tell me the pinouts for a PC parallel port, the D type
>connector that is.
>
>I am setting up a non pc computer to talk to a printer and need to make
>up a connector for it. It has a parallel port that will talk centronics
>but doesn't have a lead, so I'm going to make up a lead that connects to
>a PC lead. I just need to know what the various pins do.
>
>Rgds
>
>Robin
>____
>Robin Birch robin@falstaf.demon.co.uk
>
>M1ASU/2E0ARJ Old computers and radios always welcome

1684. PC Parallel port pinut (and others!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <79st3r$8sa$1@nnrp1.dejanews.com>
Source record: 73526

Check this site:

http://plop.phys.cwru.edu/repairfaq/REPAIR/F_Pinouts.html

Pinouts for ports you didn't even know you had.

Dave

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1685. LM1872

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: vincent coppola <vcoppola@snet.net>
Message-ID: <36C20DD7.3258@snet.net>
Source record: 73527

Does anyone know if National still makes the LM1872 and where it can be obtained? I have searched many catalogs with no luck.

Vince

1686. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <ynmw2.122$rN.370@news3.ispnews.com>
Source record: 73528
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

nicholas charles caruso wrote in message
<36C1D619.E36164@technologist.com>...
>You can buy reasonably safe glass etching compounds now - still fluorine
>based but not HF, as I understand it. Some sort of paste material:
>apply, wait some nontrivial amount of time, wash off, done.

Typically ammonium bifluoride - and still fairly nasty. The vapors given off by the etching are also hazardous.

>Now, if one were to etch a series of circuit traces on a plate of glass,
>paint them with solder paste and then heat the whole thing to
>solder-melting point, would the melted solder paste wet and adhere to
>the etched glass? This and surface mount components would make a very
>interesting circuit board.

Likely not. The surface tension of the solder, and its non-wetting characteristic with glass would have the solder melt and produce little balls. Your best bet would be to sputter the traces using a conductive metal. The old silver mirror technique might work too; the problem here would be the silver dissolving into the solder.

I have a box of ceramic circuit board material. These have a thick layer of copper. The boards are pre-punched on 0.1" centers. The ceramic, however, is a dull gray color - not very pretty.

You can buy (or at least used to) Mylar circuit boards for flexible circuits. You have to use a low temperature solder and solder quickly with them, but you do end up with a transparent board.

Dr. Barry L. Ornitz WA4VZQ ornitz+U@dpnet.net

1687. Upconversion w. ring mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <36C1EE1C.ADF7468A@netcologne.de>
Source record: 73529

Hi,

can the IF output of a diode ring mixer be used as RF input and the RF input as IF output?

I want to use a ring mixer for up conversion (IF frequency 1.8 GHz) but the maximum frequency of the IF output of standard ring mixers is well below 1.8 GHz.

Peter

1688. FS ,Cross Point Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: wa7atj@aol.com
Message-ID: <19990210163421.13020.00000083@ng04.aol.com>
Source record: 73530

2.75x2.75 in. Marked 300w fwp, 60w rev, 200microamp movements ,NIB, $3.00 plus shipping.

1689. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: David Chapman <dave@chassis.demon.co.uk>
Message-ID: <g7UXSRAk8fw2EwXc@chassis.demon.co.uk>
Source record: 73531
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Hi Robin..

Send me a SAE, donate at least a pound to Red Nose Day, and I'll send
you one by return. What's your preference, 10.245 or 11.155MHz?

73 - Dave G3NGK QTHR.

David C.Chapman - Chartered Engineer. FIEE. (dave@chassis.demon.co.uk)

CHAPMAN ASSOCIATES is a Consultancy offering practical expertise and
design skills in the fields of counter-surveillance, electronic protection
and security. Visit our Jan.1999 Web site at http://www.chassis.demon.co.uk
---

1690. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <79t2q3$7n0$1@scotty.tinet.ie>
Source record: 73532
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin Birch wrote in message ...
>Dear All,
>I want some xtals for a 10.7 MHz, 455kHz double superhet. I am after
>10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.
>
>Can anyone help?.
>
>Rgds
>
>Robin
>_____

Cirkit (UK) sell 10.245 MHz crystals. Price UKP 1.12, in the 1997 catalogue.
Order No. 45-10003. E-Mail mailorder@cirkit.co.uk

Some VHF 2-way radio's and cordless phones use 10.245 MHz crystals. Most
CB's use a 10.240 crystal, as the PLL reference. (10.240MHz / 1024 = 10KHz.)

Ah!, just found one in my junk box. It's yours if you want it.

73, ED. EI9GQ

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/

****

1691. QST 40A Switching Supply Mylar

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: ccieslak@my-dejanews.com
Message-ID: <79t3nm$f01$1@nnrp1.dejanews.com>
Source record: 73533

Does anybody know of a source for polyester/Mylar film for T1 in the Dec./Jan.
QST 40A switching power supply? It needs to be 2-4 mils in thickness.

please reply to ccieslak@law.uiuc.edu

thanks & 73,
chris aa9hd

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1692. Re: homebrew electronic keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <79t78c$au2$1@scotty.tinet.ie>
Source record: 73534

Jamel wrote in message <36c12285.0@news2.tm.net.my>...
>I am resolved to build my own electronics keyer.
>
>If anyone can help me to point me to a www site, (or assist me in however
>way) to construct an electronic keyer to compliment my homebrew paddle
>keyer, I will be most obliged.
>
>
>Thank you.
>
>Jamel

Try www.nettaxi.com/citizens/ei9gq/index.html

73, Ed. EI9GQ

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/

****

1693. Re: Upconversion w. ring mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36C22542.524E@pop.removethistomailme.net>
Source record: 73535

Peter Bolch wrote:
>
> Hi,
>
> can the IF output of a diode ring mixer be used as RF input and the RF
> input as IF output?
>
> I want to use a ring mixer for up conversion (IF frequency 1.8 GHz) but
> the maximum frequency of the IF output of standard ring mixers is well
> below 1.8 GHz.
>
> Peter

Probably so. The Mini-Circuits ZEM-4300MH, for example, supports RF/LO signals between 300 and 4300 MHz, with an IF extending from DC-1000 MHz. As with most DBMs, it is possible to switch the LO/RF and IF ports, giving you RF response extending down to DC and IF response to the full mixer rating of 4300 MHz.

I've used a ZEM-4300MH as part of a homebrew tracking generator, with a +2 dBm 110 MHz LO injected at the IF port, a +2 dBm 2182 MHz signal at the RF port, and a 2072 MHz IF coming out through the LO port. Worked fine even though the LO injection was below spec, but this was a non-critical application with clean signals, fixed levels, and a really nice cavity filter in the output circuit. In other words, IMD and conversion loss were not important. In the final design I replaced the ZEM-4300MH with a cheaper PAM-42 model, with similar results.

Later on I did some quick IMD and conversion-loss tests on a reverse-connected ZEM-4300MH, and basically found no penalties with running the mixer that way. Note that my tests were conducted in the VHF-UHF range; for an IMD- or flatness-critical application you'd probably want to test at the actual frequencies of interest. I'd be curious to hear from anyone who's done more careful testing of IF/RF-reversed mixers, to see if my impressions are valid in the general case.

The Mini-Circuits catalog basically says "yes, you can do this," but they point out that a mixer operated with RF applied to its IF port is more vulnerable to damage caused by static electricity and so forth, due to the lack of transformer isolation.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1694. NEED HELP!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Pedro <senorpurpl@hotmail.com>
Message-ID: <79tae9$6fe$1@winter.news.rcn.net>
Source record: 73536

I have a Uniden handheld that I don't have a speaker mike for and I can't use the Radio Shack one. Does anyone know how to wire a speaker mike to it? Thanks!

--

1695. Re: Antique Electronic Supply - WARNING!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: RHJ <russja@stratos.net>
Message-ID: <79tcnhkpv1@remarQ.com>
Source record: 73537
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I am looking in the Feb qst and find no mention of 6146b or 6883. I also find that my qst has duplicate pages from 49 to 64 . i have no pages 64 to 81. Is that wher the article is? I have 12 6883's that I would like the info on.

Thanks,

Russ W8RHJ

Tom V. wrote in message <36C1039C.4FBD@postoffice.worldnet.att.net>...
>For anyone thinking of doing the 6146B to 6883B mod in the Feb issue of
>QST note that AES is sending 6883's as a substitute and make no
>appologies - you'll have to send them back for a refund.
>

1696. Re: icom pcr1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: rtm@netgate.net
Message-ID: <rtm-ya02408000R1002991915170001@news.netgate.net>
Source record: 73538

In article <79qb95rgc2@bell.pconline.com>, "john" <bigwho@pconline.com> wrote:

>I would like to talk to owners of Icom Pcr1000 radios. I have some
>questions. John

John-

There's a mailing list for the PCR-1000; the archives will probably answer
a lot of questions.

Details:

PCR-1000 is a mailing list (reflector) open to all radio
amateurs for discussion of PCR-1000.

* Anything PCR-1000 Related

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe pcr-1000

73-
--
artie@nospam.netgate.net

1697. Re: switched capacitor filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36C0D6DD.F5C0C935@worldnet.att.net>
Source record: 73706

See Dan Tayloe's article on a sampling mixer using switched capacitor techniques. He get's essentially the result you're looking for: http://www.extremezone.com/~ki7mn/tayloe.htm

Ian Mitchell wrote:

> Hello,
>
> I was wondering, can two switched capacitor filters be used to produce a
> relative 90 degree phase shift by clocking them with a quadrature clock?
>
> I don't think the above is possible, but could there be another way to
> achieve it?
>
> Thanks, Ian

1698. FS: Network Devices "Link-Tester"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Gil Bishop <gbishop@home.com>
Message-ID: <8J5w2.460$rv2.419@news.rdc1.ct.home.com>
Source record: 73707
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

Hello all.
As the resident company techno-geek, I get first dibs on all the stuff that's "too good to throw away" - this is a great example! This link-tester is designed to test and validate the coax and/or twisted-pair connections between IBM dumb terminals and their controllers. It consists of a hand-sized transmitter/receiver pair with digital readouts and BNC connectors, two power supplies, several cable adapters, and the user manual all in a foam lined hard-shell briefcase. Cost several thousand dollars new, and is 100% functional for what it was designed to do - it's just obsolete in a LAN environment.
As a ham, I looked at it and thought of all the things I could build inside the cases of the two testing units, not to mention a dozen uses for the foam padded briefcase. But since I've got no time to "play" these days, make me an offer. There's plenty of homebrew opportunities with this...the case alone is worth something! (And if by some chance you happen to run an IBM mainframe or AS400 shop you might actually be able to use the tool!)

73 and take care
Gil
k1gil

1699. resistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <36C0F35A.26A44397@bellsouth.net>
Source record: 73708

100k 50 watt not over 5" long anyone have any? thanks

1700. homebrew electronic keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Jamel <ajamel@tm.net.my>
Message-ID: <36c12285.0@news2.tm.net.my>
Source record: 73709

I am resolved to build my own electronics keyer.

If anyone can help me to point me to a www site, (or assist me in however way) to construct an electronic keyer to compliment my homebrew paddle keyer, I will be most obliged.

Thank you.

Jamel

1701. Wanted!-Yaesu FL-2500 Linear Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Steve Bermudez <odin@webspan.net>
Message-ID: <79r7lb$f6r$1@remarQ.com>
Source record: 73710
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Looking for CLEAN example ONLY, preferrably from Non-Smoking environment!
PLS respond with condition & price.

Steve

1702. Capacitor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: adam@onramp.net
Message-ID: <MPG.112aed8c684b15d7989689@news.onramp.net>
Source record: 73711
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Good day, all,

Recently, I have begun to learn by experience all of the wonderful things I learned by education when I was studying for my ham license. I came across a couple of old Heathkit radios and decided to restore them, but don't know enough about the hordes of different kinds of components to make rational choices about replacement parts.
The radios date from the early 60s (SB-300 and SB-400), and the parts lists contain references to several types of capacitors, many of which are not available today. I have closely perused the Mouser and Digikey catalogs, but no luck on many of these. The questions follow in no particular order:

Several of the values for caps listed are not "standard" today (e.g., 7.5, 36 and 90 pf). Should I just use the next higher value that is available? Or perhaps the next lower?

Many of the caps listed are mica. I understand that mica provides a greater temperature stability, but they are pricier than I like. One source I have says that ceramics rated NP0 will work well for temperature stability. Is that true? What are the circumstances in which you would definitely want to use mica, instead of ceramic?

What about mylar? Polypropelene? Tantalum? What applications would these be best suited for?

What is the meaning of the various temperature coefficient ratings (NP0, Z5U, etc.)

The same question regarding EIA Class I, II, and III?

Trimmer caps - are these just adjustable capacitors?

Snubbers?

In power supply applications, I have seen some schematics that use monster electrolytic filter caps - 20K mf. The radios I am working on use 20 mf. What is the purpose of using such huge ratings? Is it just a better filter?

I would very much appreciate any responses that would help me to understand the nature of these beasties a bit better.

Thanks!

Adam Adkins, KM5SS
adam@onramp.net

1703. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: "Harry, WA3PTG" <hhurst@delaware.infi.net>
Message-ID: <79rrfs$s0v$1@nw001t.infi.net>
Source record: 73712

Brad, AA1P wrote:
>Hello again--
>
>Before I get the antivivisectionists on my case (I really do like
>cats!), the whiskers in question consist of stiff segments of fine-gauge
>wire.

Yeah, I like cats too. Taste just like chicken. Better than dog, not as
good as horse.

Wow, that should do it!!!

1704. Re: homebrew electronic keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: "Harry, WA3PTG" <hhurst@delaware.infi.net>
Message-ID: <79ruf8$q0b$1@nw001t.infi.net>
Source record: 73713

Jamel wrote in message <36c12285.0@news2.tm.net.my>...
>I am resolved to build my own electronics keyer.
>
>If anyone can help me to point me to a www site, (or assist me in however
>way) to construct an electronic keyer to compliment my homebrew paddle

Do you have a single or double lever paddle?

The only keyer circuit I have found on the net is at:
http://www.qrp.pops.net/qrp/default.htm

I have built a simple keyer from "Solid State Design" published by the ARRL. It uses 3 NE555 timer chips, the entire circuit fits nicely on a Radio Shack 276-150 pc board. Very simple, and it works.

There are many other designs published in various book and magazines, and several current kits are available that are both cheap and easy to build, and have just about any feature you would want in a keyer. Here is a links page for parts and kits that include a couple of keyer kit vendors, it's fun just plowing thru all this stuff:

http://www.fix.net/~jparker/norcal/links/suplylinks.htm

Good luck with your project.

1705. WTB: 455khz xstals + other bits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: colin@mcmail.no.spam.com
Message-ID: <36c17e8b.0@news1.mcmail.com>
Source record: 73714

Wanted: a couple of 455khz crystals, any size.
Also B7G and B9A screened valve (tube) bases, with cans.
455khz IF transformers (valve type)
365pf+365pf air spaced tuning cap.
365pf single gang tuning caps. (2)

Colin, G8FRA

1706. Re: homebrew electronic keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <79rvt4$6ah@freenet-news.carleton.ca>
Source record: 73715

"Harry, WA3PTG" (hhurst@delaware.infi.net) writes:
>>I am resolved to build my own electronics keyer.
>>
>>If anyone can help me to point me to a www site, (or assist me in however
>>way) to construct an electronic keyer to compliment my homebrew paddle
>
> The only keyer circuit I have found on the net is at:
> http://www.qrp.pops.net/qrp/default.htm
>

Ed, ei9gq has a PIC-based keyer at: www.nettaxi.com/citizens/ei9gq/index.html

73 de va3rr/aa8llu

1707. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990210090029.03440.00000033@ng-fu1.aol.com>
Source record: 73716

>10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.

Robin:
I have several 10.695 xtals.....maybe 15 or more. George W3ASE.
G345CDE

1708. WTB Johnson 213 Tube Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: hanavin@ren.eecis.udel.edu
Message-ID: <79s5q3$i7t$1@dewey.udel.edu>
Source record: 73717

Hi,

I am looking to buy or trade for some Johnson
213, or similiar type tube sockets. They are
the 4 pin type, that fit 304TL, 304TH Tubes.

Chuck (W3FJJ)

1709. Midland 13-509 / PL Board?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Paul Knight <paul.knight@prairiecomm.com>
Message-ID: <79s8qm$r2g$1@eve.enteract.com>
Source record: 73718
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi! Is it relatively painless to install a PL board in a Midland 13-509? I have a ComSpec board that I would like to put it. I'm lacking docs, so any info would be helpful.

Are there any other upgrades of interest with this rig? I found an old article in "73 Magazine" about improving the squelch performance, but that's it. Has anyone ever changed out the finals to get more than 10W out (like is commonly done with the HR-2510/2600)?

Thanks for any help -

Paul WD8DKY
paul.knight@prairiecomm.com

1710. Re: homebrew electronic keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: "DJ Wang (KE3ZB)" <ddw2@mail.lehigh.edu>
Message-ID: <36C1B225.5CD5@mail.lehigh.edu>
Source record: 73719

Jamel wrote:
>
> I am resolved to build my own electronics keyer.
>
> If anyone can help me to point me to a www site, (or assist me in however
> way) to construct an electronic keyer to compliment my homebrew paddle
> keyer, I will be most obliged.
>
> Thank you.
>
> Jamel

Try the following site, K1EL has designed a PIC chip that is great and inexpensive!

http://members.aol.com/k1el/k8info.html

DJ, KE3ZB

1711. Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36C1D619.E36164@technologist.com>
Source record: 73720
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I've been wondering about oddball techniques for fabricating circuitry at home.

You can buy reasonably safe glass etching compounds now - still fluorine based but not HF, as I understand it. Some sort of paste material: apply, wait some nontrivial amount of time, wash off, done.

Now, if one were to etch a series of circuit traces on a plate of glass, paint them with solder paste and then heat the whole thing to solder-melting point, would the melted solder paste wet and adhere to the etched glass? This and surface mount components would make a very interesting circuit board.

I plan on trying this, of course, but I wonder if anyone out there has any first hand experience or directly applicable book learnin' and would be so kind as to share?

Note that I'm *only* interested in applying this technique to showpiece, home built, one-or-two-off items.

Particularly, I'm not worried about manufacturability or ease of construction except at the grossest level.

thanks and 73
nick caruso KB1DEJ

1712. Info - PC parallel port pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <pmjBLGAeydw2Ew21@falstaf.demon.co.uk>
Source record: 73721
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I know this is off topic - but...

Can someone tell me the pinouts for a PC parallel port, the D type connector that is.

I am setting up a non pc computer to talk to a printer and need to make up a connector for it. It has a parallel port that will talk centronics but doesn't have a lead, so I'm going to make up a lead that connects to a PC lead. I just need to know what the various pins do.

Rgds

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

1713. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-10 00:00:00 UTC
From: bb840@scn.org
Message-ID: <F6y7ss.ADH@scn.org>
Source record: 73722

In a previous article, mcalhoun@ksu.edu (Myron A Calhoun) says:

>
>WHAT HAPPENED
>-------------
>About a month later, in response to the above letter, I received a call
>from Radio Shack headquarters asking me to identify the Radio Shack
>store from which I purchased the crappily-designed AM/FM radio. When
>I identified our local store, I heard someone in the background say
>
> "That's one of our franchise stores."
>
>The caller thanked me, AND THAT'S THE LAST I'VE HEARD OF THE MATTER!
>
>MY CONCLUSIONS
>--------------
> 1. Don't be slow in using new purchases, or (stated another way)
> don't buy anything until I am actually ready to use/install it.
>

Probably a good idea.

> 2. Try EVERY possible feature ASAP.
>

Ditto.

> 3. Do NOT buy from a Radio Shack franchise (locally-owned) store,
> 'cause Radio Shack Headquarters apparently can't even ask it
> to correct a problem.
>

This I don't understand. The fact it was bought at a franchise store
should have made no difference. ANY corporate owned store can handle
problems with Radio Shack brand products, REGARDLESS of where they were
bought. They only thing they can't handle is non-Radio Shack products
purchased at franchise stores. I would suggest you contact them again.

> 4. Do NOT buy anything "big" (i.e., more than miscellaneous parts)
> from Radio Shack, period!
>

I really haven't had problems with their "big" products, but as you said,
mileage may vary.

73
--

A.D. 1999 - The LAST year of the 1900's.
A.D. 2000 - The LAST year of the 20th Century.
Jim Aeschliman, W7WJM
Black Diamond, Washington w7wjm@arrl.net

1714. Re: LM1872

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <79vldu$m18$1@scotty.tinet.ie>
Source record: 73475

vincent coppola wrote in message <36C20DD7.3258@snet.net>...
>Does anyone know if National still makes the LM1872 and where it can be
>obtained? I have searched many catalogs with no luck.
>
>Vince

Grandata Ltd. (UK)
GRANDATA.LTD@BTINTERNET.COM
UKP1.75 in 1998 price list

Ed. EI9GQ

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/

****

1715. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <79vm1k$2tq$1@news-2.news.gte.net>
Source record: 73476
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Roy Lewallen wrote in message <36C3326F.AD1C41C3@teleport.com>...
>I've built two A-frames, one from 2X4s and the other from 2X3s. The
>2X3 version is a whole lot lighter but still plenty strong, and I
>recommend that approach. I've taken down the 2X3 version because a
>nearby tree (a giant sequoia) grew to antenna-support size. The 2X4
>one is still up after about 15-20 years. Both are about 40 feet tall,
>and were made from 22-24 foot pieces of lumber. Don't know if you can
>still get them this long. This construction obviously wouldn't be
>portable, but might give you some ideas.
>
>Roy Lewallen, W7EL

2x4's in that length might be hard to find, but 2x8's or larger CAN be found, and then ripped down to the desired dimension. If the final-dimension lumber is thoroughly treated, first with a good coat of copper sulphate, and then with 2 coats of linseed oil, followed by a finish cover coat of good exterior paint, it will be weather and trouble proof for YEARS! Use of stainless hardware and long deck screws instead of nails is a good idea too!

Gary - KJ6Q

1716. Computer Cable for Yaesu FT-757 MKI

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Susan Misener <skam@tir.com>
Message-ID: <36C364DA.236ADFE9@tir.com>
Source record: 73477

Hi, I'm looking for easy to follow directions to build a RS-232 cable to my Yaesu FT-757 GX MKI. I've found a couple pieces of info but they are tough to follow. Thanks, Marc.

1717. Re: WTD 10.7 MHz IF XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Dan Glover <dan@dangl.demon.co.uk>
Message-ID: <F70JFy.E9r@dangl.demon.co.uk>
Source record: 73478
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <36C0B356.52399C90@virgin.net>, Martin Ackroyd
<martin.ackroyd@virgin.net> wrote:
>Robin Birch wrote:

>> I want some xtals for a 10.7 MHz, 455kHz double superhet. I am after
>> 10.7MHz +- 455kHz so 11.155MHz or 10.245MHz.

>An ad in 'Radio Active' says they can make you
>a crystal for around £7.50. [01322 330830]

The company to which you refer used to stock 10.245 at a much lower
price. Might be worth checking, although they've largely dropped out of
the "off-the-shelf" aspect. This sort of thing used to be stocked by
Cirkit and maybe Maplin IIRC. Oh, and quite a few old Pye sets used
10.7MHz and 455kHz.

Robin: how many do you want and is the package important? I might be
able to liberate a few from the junk here...

Dan, G6RMA

--
Dan Glover (dan@dangl.demon.co.uk)
Today's Excuse:
user to computer ratio too high.

1718. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: "Christopher R. Carlen" <crobc@epix.net>
Message-ID: <36C36DF1.31FF356E@epix.net>
Source record: 73479
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen wrote:
>
> nicholas charles caruso wrote:
> >. . .Apparently
> > one can use Indium compounds to join glass to metal or glass to glass... Also
> > interesting.
> >
> > Anyone know how toxic Indium is?
>
> No, but the Indium Corporation of America makes a variety of
> indium-alloy low-temperature solders they call "Indalloy". You might
> check into these.
>
> Roy Lewallen, W7EL

According to the Merck Index, Indium is relatively non-toxic when
administered orally, but highly toxic intravenously or subcutaneously.

So don't shoot it up.

Nothing mentioned about vapors, though. I am a chemist and have
generally found indium to be regarded as a very low hazard element.

_____
Christopher R. Carlen
crobc@epix.net
carlenc@cs.moravian.edu
My OS is Linux 2.0.29

1719. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C37BAE.94614F1E@teleport.com>
Source record: 73480
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Gary - KJ6Q wrote:
>
> 2x4's in that length might be hard to find, but 2x8's or larger CAN be
> found, and then ripped down to the desired dimension. If the
> final-dimension lumber is thoroughly treated, first with a good coat
> of copper sulphate, and then with 2 coats of linseed oil, followed by
> a finish cover coat of good exterior paint, it will be weather and
> trouble proof for YEARS! Use of stainless hardware and long deck
> screws instead of nails is a good idea too!
>
> Gary - KJ6Q

The climate here in western Oregon is pretty hard on outside wood, but my A-frame has lasted 15-20 years with nothing more than a couple of coats of deck stain. I've re-stained it maybe 3 or 4 times in that interval. It's also important to keep the wood off the ground. Otherwise, in this climate at least, it'll quickly rot and/or get infested with termites. I got 3 concrete pyramids -- the variety with a hole in the top -- at the local home-improvement store, and put a bolt into each, threads up, with a little concrete. The bottom board of the A-frame is drilled in three places for the bolts to stick through, and the A-frame is set down on the pyramids to keep it off the ground.

Roy Lewallen, W7EL

1720. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36C38B58.3C45@ibm.net>
Source record: 73481
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Roy Lewallen wrote:
> Otherwise, in this climate at least, it'll quickly rot and/or get
> infested with termites.

Why not use treated wood, Roy? It is sealed and termites don't
like it. "Treated" wood is rated for ground contact.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

1721. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <79vvo6neh1@scotty.tinet.ie>
Source record: 73482

Scott Stephens wrote in message ...
>cmcdonld@thezone.net (Chris Mcdonald) wrote:
>
>>I'm planning on building some homebrew gear and I was woundering
>>- can you make a pic controled oscillator?
>

Radcom (RSGB Mag) Jan. 1999 has an interesting article describing
a PIC controlled DDS VFO.

Elektor Feb. 1998 has details of my "Digital Display And VFO Stabilizer."

The PIC can be used to control a DDS synthesizer, like the AD9850, or
a PLL, MC145151, MC145106, etc.....

73, Ed. EI9GQ.

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/

****

1722. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C39540.BCD6650A@teleport.com>
Source record: 73483
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

I'd rather just keep the wood off the ground than use wood laced with the toxic stuff used in pressure treating. That's a personal twitch, though, and treated wood should work o.k. if you're so inclined. I realize that the deck stain isn't lovely stuff, either.

Roy Lewallen, W7EL

W6RCecilA wrote:
>
> Roy Lewallen wrote:
> > Otherwise, in this climate at least, it'll quickly rot and/or get
> > infested with termites.
>
> Why not use treated wood, Roy? It is sealed and termites don't
> like it. "Treated" wood is rated for ground contact.
> --
> 73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

1723. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <3mNOEZBkd2w2Ewkk@jmwa.demon.co.uk>
Source record: 73484
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Please note that I prefer **not** to receive an e-mail copy of newsgroup posts.

<36C328F6.C6C00AFB@technologist.com>, nicholas charles caruso <nzc@technologist.com> wrote:
>Anyone know how toxic Indium is?

I don't have any figures, but it's not to be trifled with. Not as bad as thallium or beryllium, probably, but not at all good for you.
--
Regards, John Woodgate, Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
OOO - Own Opinions Only. ERROR! OUT OF CORNFLAKES. Please check cereal port configuration.

1724. Antique Electronic Supply - WARNING!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: "Tom V." <TVAC@postoffice.worldnet.att.net>
Message-ID: <36C1039C.4FBD@postoffice.worldnet.att.net>
Source record: 73539
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

For anyone thinking of doing the 6146B to 6883B mod in the Feb issue of QST note that AES is sending 6883's as a substitute and make no appologies - you'll have to send them back for a refund.

1725. Antique Elec Supply - WARNING!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: "Tom V." <TVAC@postoffice.worldnet.att.net>
Message-ID: <36C1049C.476F@postoffice.worldnet.att.net>
Source record: 73540

For anyone thinking of doing the 6146B to 6883B mod in the Feb issue of QST note that AES is sending 6883's as a substitute and make no appologies - you'll have to send them back for a refund.

1726. Wanted: HBR-16 not HBR-12 :-)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: tubepwr813@aol.com
Message-ID: <19990210211910.23106.00000196@ng156.aol.com>
Source record: 73541

Hello Gentlemen,

To all who responded, thanks for correcting me regarding the "HBR-12". Yes, I believe it was the HBR-16 that I had many moons ago. Too many years have gone by...hi

Does anyone out there have one of these that they are no longer interested in and would like for it to have a new home??

Thanks,
Chris KX0Y

1727. Re: QST 40A Switching Supply Mylar

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be5568$bdfd33c0$b6864d0c@default>
Source record: 73542

I recently bought 4 mil mylar sheet at a blueprinting/drafting supply
house,
used it and some aluminum foil to build a 12kv capacitor.

ccieslak@my-dejanews.com wrote in article
<79t3nm$f01$1@nnrp1.dejanews.com>...
> Does anybody know of a source for polyester/Mylar film for T1 in the
Dec./Jan.
> QST 40A switching power supply? It needs to be 2-4 mils in thickness.
>
> please reply to ccieslak@law.uiuc.edu
>
> thanks & 73,
> chris aa9hd
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

>

1728. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: ke6hey@aol.com
Message-ID: <79tkjn$tv3$1@nnrp1.dejanews.com>
Source record: 73543
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <36BFF008.7E6C1D1E@worldnet.att.net>,
oscarrben@worldnet.att.net wrote:

> Another lying Democrat, George Bush.
>

QUESTION?!?

Since when is George Bush a Democrat?

I am not even a legal adult and I STILL know a democrat from a republican.

I better go back to associating with people my own age who still think before they type.

hmhampton -
teenager - procoder - not to lazy to get up and study for PRIVILEGES I want - RealHam.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1729. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: ignitron@my-dejanews.com
Message-ID: <79u0em$7im$1@nnrp1.dejanews.com>
Source record: 73544
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Before you finalize the design on your home made wooden antenna support,
go to the lumberyard and get prices on various sizes of boards. You may
be pleasantly surprised to learn that LONGER pieces are sometimes
priced lower than shorter pieces because of supply and demand.

In article <36c07c9e.0@news.netwalk.com>,
"Jim" <jbolinger@lintek.com> wrote:
>
>
> You could build an A frame mast.
>
> 20 ft would be quite easy to manage, although I am not sure about the 3
> element beam. Do you mean VHF or HF?
>
> Let me see....(mumble mumble)...you would need perhaps seven 8 ft 2x4.
> Pressure treated wood is more durable, but heavier. Five of them would go
> together like this:
>
> I
> I I
> I I
>
> Put a 1 foot overlap at each section and you will get a height of 21 ft.
>
> The remaining 2x4s are to be used for cross pieces, two at the bottom (each
> side) and one at the level of each joint.
>
> Drill holes at appropriate places and install 5/16 inch bolts. And don't
> forget eyebolts for the guy ropes.
>
> Jim
> N8EE
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1730. FS: NOS Tubes - new list

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: DAVE SYER <dave.syer@sympatico.ca>
Message-ID: <36C288F2.6D57@sympatico.ca>
Source record: 73545
Cross-posted to: rec.audio.tubes,rec.radio.swap,rec.ham-radio.packet,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

I have the following for sale or trade. If interested, please email
reply - I'll answer this weekend.

Thanks, Dave Syer
dave.syer@sympatico.ca

> QTY Part No Manufacturer X-Ref comments
> 280 CK5829WA Raytheon 5829 Mil. Spec, unopened boxes
> 280 6ss7 JAN RCA VT199 Mil. Spec, unopened boxes
> 46 VU120/10E/121 CV1119 CV1120,SU3150A
> 500 12J5WGT Raytheon Raytheon 6j5,g,gt Mil. Spec, unopened boxes, 12v
> fils, 'audiophile cult following'
> 25 1H6 G RCA & Westinghouse
> 75 1D5GP RCA % Westinghouse
> 14 14A7/12B7 Sylvania & Westinghouse
> 174 12h6/2J12h6 Ex RCAF, May '54
> 22 6C5 Westinghouse exc. Preamp triode.
> 11 2050
> 12 710
> 16 WL672A 672
> 4 6807
> 1 740L
> 2 5Z3
> 1 C1K/6014
> 1 7306A/5684
> 1 3203
> 4 16X897
> 8 5693 Improved 6sj7 - exc preamp triode
> 13 5814A
> 5 2X2A
> 8 6X5WGT
> 3 6U3AQ
> 2 6SK7
> 2 5844
> 1 35Z5GT
> 24 6A6 JAN, RCA, Raytheon, Sylvania
> 12 5V3/5V3A
> 16 7B4 Rogers Majestic
> 20 7A6 GE & Rogers Majestic
> 5 61SPT BVA Cossor cv5081
> 3 CV1290/NU33 VU120,CV1001, su2150A
> 5 CV1128 gt1c
> 2 CV1076 GEC cv10760,cv10761

> 4 301A WESTERN ELECTRIC
> 39 E1148/717A HYTRON JAN cv1135, cv2920, cv6, vt232
> 5 6K7G
> 20 VT269/717A WESTERN ELECTRIC cv3594
> 4 7AU7
> 5 CV2347 STC 5B/258M
> 23 6Q7/JANCG-6Q7 6q7g, cv587,cv588, cv589, vt92, vt92a
> 3 6S7
> 6 ID8GT
> 6 1G4GT/G
> 2 1D7G
> 1 6K8G
> 2 6L5G
> 2 6J7G/CV1074
> 3 6118
> 1 6CM6
> 1 6BD6
> 1 1S4
> 4 CV8727/12E14
> 1 JAN6080WB
> 1 6159
> 1 2C26A
> 1 622

I also have 35 pcs, 2400mfd 450wvdc Aerovox electrolytics. Used but in
exc condition.

1731. Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Johnson <robjohn@chesco.com>
Message-ID: <Mxvw2.338$nx.297564@newshog.newsread.com>
Source record: 73546

Trying to find info for substitution or a source for transistor CP640.
Appears to be a JFET in a TO-5 case. Logo on case looks like "C". About 1980
vintage. Would appreciate any help.
Thanks, Greg K3EWZ

1732. Re: Info - PC parallel port pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: bejones@hursley.ibm.com
Message-ID: <36c2a4fe.2699411@newsserver.hursley.ibm.com>
Source record: 73547
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Wed, 10 Feb 1999 19:23:10 +0000, Robin Birch
<robin@falstaf.demon.co.uk> wrote:
Not off topic at all if you are connecting radio or test equipment via
the parallel port (lots of PC scopes and data acquisition tools
connect to LPTx)

A great place for the answer to this and many connector queries is
http://hwb.acc.umu.se/index.html

Brian G0UKBP

1733. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: "Robinson, AB5VH" <rc@crusoe.org>
Message-ID: <79udf9$9ns$2@news-1.news.gte.net>
Source record: 73548

Rat Shack makes a couple of decent products. The HTX-202 is a clunky looking old 2M HT, but is nevertheless fairly popular due to its fairly rugged construction and reasonable price. I built one of their cheap CB SWR meters into a QRP rig once. It wasn't compact or pretty, but it was a simple hookup.

OTOH, I had a SWL Receiver from RS, I think the model # was DX-390 or DX-380. Anyway, it was a mid size portable with BFO and no casette recorder built in. I actually used this as my first ham receiver, in conjunction with a crystal transmitter using a 2n2222 and a 2n2222A. Actually made a few contacts with that clumsy lashup. Anyway, this was in a marine environment. The antenna was at about 85 feet. The static generated by the wind, spray, etc on my 40/15M dipole trashed the front end. There is evidently some pretty delicate pre-amp circuitry there. I eventually ran the feedline directly to the mixer and got it working again, though with rather reduced sensitivity. The antenna was about 180 feet away from the ship's MF and HF antennas, and full power out of the ship's gear was only about 6 amps on the wire. That really bummed me out. The audio was pretty decent out of that set, and it didn't cost all that much for a set with a BFO, but it just couldn't hang.

Sometimes it is nice to be able to run right in and buy a part or some wire, even at their prices. I am currently pondering designing a receiver built with just stuff that Rat Shack stocks. That might be tough, but it would be nice if a newbie homebrewer could just go there and buy all the parts for a project.

--

-Robinson- (AB5VH)

for radio, maritime, and locks stuff go to:
http://crusoe.org and
http://www.geocities.com/capecanaveral/galaxy/7982
and my NEW, IMPROVED, BIGGER site at:
http://www.geocities.com/~robinsonab5vh/

dit diddy dit dit

James Aeschliman wrote in message ...
>
>In a previous article, mcalhoun@ksu.edu (Myron A Calhoun) says:
>
>>

>>WHAT HAPPENED
>>-------------
>>About a month later, in response to the above letter, I received a call
>>from Radio Shack headquarters asking me to identify the Radio Shack
>>store from which I purchased the crappily-designed AM/FM radio. When
>>I identified our local store, I heard someone in the background say
>>
>> "That's one of our franchise stores."
>>
>>The caller thanked me, AND THAT'S THE LAST I'VE HEARD OF THE MATTER!
>>
>>MY CONCLUSIONS
>>--------------
>> 1. Don't be slow in using new purchases, or (stated another way)
>> don't buy anything until I am actually ready to use/install it.
>>
>
>Probably a good idea.
>
>> 2. Try EVERY possible feature ASAP.
>>
>
>Ditto.
>
>> 3. Do NOT buy from a Radio Shack franchise (locally-owned) store,
>> 'cause Radio Shack Headquarters apparently can't even ask it
>> to correct a problem.
>>
>
>This I don't understand. The fact it was bought at a franchise store
>should have made no difference. ANY corporate owned store can handle
>problems with Radio Shack brand products, REGARDLESS of where they were
>bought. They only thing they can't handle is non-Radio Shack products
>purchased at franchise stores. I would suggest you contact them again.
>
>> 4. Do NOT buy anything "big" (i.e., more than miscellaneous parts)
>> from Radio Shack, period!
>>
>
>I really haven't had problems with their "big" products, but as you said,
>mileage may vary.
>
>73
>--
>A.D. 1999 - The LAST year of the 1900's.
>A.D. 2000 - The LAST year of the 20th Century.
>Jim Aeschliman, W7WJM
>Black Diamond, Washington w7wjm@arrl.net

1734. New -> Tube Collectors Club & Newsletter + Tube Lore Book

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <36C2BAA7.50D0@worldnet.att.net>
Source record: 73549

To all Group Members,

A group of collector-historians has recently formed the Tube Collectors Association. This is in response to the need for a focused group dedicated to the growing activity of collecting radio/wireless tubes and to sharing historical insight about them. As a tube enthusiast, you'll probably be interested in this development, and may want to help guide the activities of the group from the start.

For more on the Tube Collectors Association:
http://www.eht.com/oldradio/tubecollectors/index.html

Also if interested: Tube Lore by Ludwell Sibley Web Page:
http://www.eht.com/oldradio/tubelore/

--
73' John Dilks, K2TQN

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum

Webmaster for the Antique Wireless Association
http://www.ggw.org/awa Click on "Page 2"
-=and=-
for the New Jersey Antique Radio Club
http://www.eht.com/oldradio
-

1735. Re: QST issues on CD's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Dieter <d.mayr@salzburg.co.at>
Message-ID: <36C2E59E.554237B1@salzburg.co.at>
Source record: 73550

"J.-M. Noeding" schrieb:

> just bought some CD's from ARRL. Found it somewhat complicated to change
> from reading January to February 1950 by having to type both 2 and
> February issue to change the content..... I am running with windows98
> and microsoft office 97(?).
> Is is any way to print the circuit diagrams to gif files, other than
> printing and then scanning later?
>
> 73
> Jan-Martin
> LA8AK
>
> ---
> DUBUS register http://www.kirsta.demon.co.uk/radio/jm-dubus.txt
> Radio-Tech/waveguide http://www.users.zetnet.co.uk/ross/radio/

Hi, Jan-Martin

I change the issues this way: Type the year and month number in their fields

and type " * issue " in the "Article"-field.
If you want to change the month , simply change the month number , delete
the name of the month in the "Article"-field and type an * in front of the
word
" issue ". You can also mark the monthname with the mouse and overwrite it
with *.
This is the simplest way to change the year and month i have found.

You dont have to scan in your schematics, because they are on the CD in
TIFF-format
which is the normal scanner output format.
The files are organised in the following way:
On every CD are directories named with the last 2 digits of the year (i.e.

82 for 1982)
Each directory contains subdirectories named 1 to 12 (for the month)
The files are named this way: YYMMPPP.tif
where YY is the year (i.e. 82)
MM is the month (i.e. 03 for March)
PPP is the page number + 2 (i.e. 010 for page nr. 8)
(001 and 002 are the cover-pages)

So if your diagram is in the February 1950 issue on page 45, your file is:
X:\50\2\5002047.tif with X: as your CDROM drive:
You can convert tif to gif with most graphic-programs.

I hope this will help
73
Dieter, OE2CDM

1736. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <79up7thpi1@flood.weeg.uiowa.edu>
Source record: 73551
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

You may be able to get away from chemical etching by using am air eraser (small sand blaster) The one I use is a paasche. The grit size is about 2400 (I think) aluminum oxide. I can make lines the width of a pencil line.

Then you could try silver print conductive paint for printed circuits. Fill the etched area with this.

I don't know if this will work. You might crack the glass when you solder to it. Just another input......

Good luck

john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

1737. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: nicholas charles caruso <nzc@technologist.com>
Message-ID: <36C2FA78.F268AD96@technologist.com>
Source record: 73552

John Stroppel wrote:

> You may be able to get away from chemical etching by using an air
> eraser (small sand blaster) The one I use is a paasche. The grit
> size is about 2400 (I think) aluminum oxide. I can make lines the width
> of a pencil line.

I've seen these for sale in the Small Parts catalog (www.smallparts.com).
Interesting.
Do you use it inside a sandblasting box, or what?

> Then you could try silver print conductive paint for printed circuits.
> Fill the etched area with this.
>
> I don't know if this will work. You might crack the glass when you
> solder to it. Just another input......

The conductive silver paint is an interesting idea. Thanks. They also make
silver filled epoxy, I think. Anyone have any experience, good or bad, with
this stuff? Perhaps I could use the epoxy instead of soldering?

As far as cracking, I was thinking of using tempered glass, and soldering
with low-temp solder and a hot-air blower. I suppose hard glass might make
the sandblasting thing more difficult to do... also, I understand tempered
glass can shatter violently when drilled -- I wonder if this applies to
etching with a sandblaster too?

> Good luck

Thanks!
73
ncc kb1dej

1738. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: dan rae <rae4@popd.ix.netcom.com>
Message-ID: <36C30C44.3F2F@popd.ix.netcom.com>
Source record: 73553

Johnson wrote:
>
> Trying to find info for substitution or a source for transistor CP640.
> Appears to be a JFET in a TO-5 case. Logo on case looks like "C". About 1980
> vintage. Would appreciate any help.
> Thanks, Greg K3EWZ
Greg,
It was a power fet made by Teledyne Crystalonics in Mass. Phone # was
(617)491 1670. I have no idea if the company is still in business.
This and the others in the series were designed for low IMD high dynamic
range vhf/hf RF amps in the common gate configuration, and were pretty
unique. I don't think there are any modern equivalents. The CP640 and
643 were often specified for high end RF stages around that time (for
example in Rhode's Transceiver design in Ham Radio magazine in 78)
You can get similar performance now in other ways but the simplicity of
the designs that these fets made possible was nice. A single grounded
gate fet with matching transformers gave you +40dBm Intercept, +20dBm 1
dB compression, a pretty good noise figure of 2.2 dB and a swr of less
than 1.5 to 1 from 0.5 to 50 MHz.

If you find an equivalent I'd be happy to hear about it!

73,

Dan AC6AO / G3NCR

1739. Re: PIC's and homebrew gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <VkEw2.12245$jd2.30964199@rmnws01.ce.mediaone.net>
Source record: 73554

cmcdonld@thezone.net (Chris Mcdonald) wrote:

>I'm planning on building some homebrew gear and I was woundering
>- can you make a pic controled oscillator?

Use a pulse width modulated output port to vary varactor. Better filter it good enough. You might even get the PIC to retune itself via its VCO.

I remember reading on the PIC mailing list a few years back about a PIC transmitter that used a harmonic of the CPU crystal as the transmitter frequency.

>- how do those PIC based frequency counter work?

The PIC has a prescaler on the counter-timer. After the frequency to be counted is gated into the prescaler via a port controlled NAND gate, another port line pulses the prescaler until it rolls over, to the value in it can be read too.

>- can you decode DTMF with a PIC

A subject of considerable debate on the PIC list a few years back. In short, a task for DSP but some cheap & dirty techniques (like pulse width modulation) may have been perfected. Check the PIC list archive.

>Also are there any websites with schematics for a 2 meter transciver
>or transmitter?

Probably. Once again, the PIC list archive.

1740. Re: switched capacitor filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <fnEw2.12246$jd2.30965184@rmnws01.ce.mediaone.net>
Source record: 73555

Ian Mitchell <ian.mitchell@utas.edu.au> wrote:

>Hello,

>I was wondering, can two switched capacitor filters be used to produce a
>relative 90 degree phase shift by clocking them with a quadrature clock?

>I don't think the above is possible, but could there be another way to
>achieve it?

Yep. You don't need two, just one. A state-variable active filter
provides quadrature outputs. One implementation mode of a switched
capacitor filter is the state-variable filter. Go to National
Semiconductors web site and find application notes on filters,
switched capacitor filters, and switched filter data sheets.

1741. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36c313d5.0@news.netwalk.com>
Source record: 73556
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Early printed circuit boards where exactly that---printed.

They printed conductive paint directly on a ceramic substrate using a silk screening process.

This was invented during WW2 for use in electronic bomb fuses (the fuses being electronic, not the bombs), which needed to be rugged, compact, and mass producible, in addition to being reliable.

Don't remember the inventors name, but there was an article in CQ magazine last year about it.

You might be able to do the same thing with etched glass---the idea being to have something for the conductive paint to stick to.

But, why not try old fashioned point to point wiring? It should work for everything up to lower microwave frequencies if you are careful (and build subcircuits in separate boxes or compartments).

Jim
N8EE

1742. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36c31676.0@news.netwalk.com>
Source record: 73557
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

ignitron@my-dejanews.com wrote in message
<79u0em$7im$1@nnrp1.dejanews.com>...
>Before you finalize the design on your home made wooden antenna support,
>go to the lumberyard and get prices on various sizes of boards. You may
>be pleasantly surprised to learn that LONGER pieces are sometimes
>priced lower than shorter pieces because of supply and demand.
>

This is true.

I did not mention that I have built one myself. It is 36 ft tall and is
made out of combinations of 12 ft and 8 ft 2x4s.

The traditional A frame mast was made out of 2x2 lumber, but 2x4 is much
sturdier. I estimate that it will stand up to 100+ MPH winds with no
trouble (am using 5/16 inch steel guy wire and 4 ft anchors).

The reason I mentioned using 8 ft 2x4s is that the original poster wanted
something portable. An 8 ft piece would be much easier to carry around than
a 12 ft piece. In my case it was for fixed use.

By the way, I had originally planned on a 48 ft mast, but it proved too
heavy to erect, so I shortened it to 36 ft. Even then I had a total of 4
people to pull it up (including myself). I guesstimate that a 21 footer
would be no problem for 2 or three 'trained' people.

Jim
N8EE

1743. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <79v4mrmik1@flood.weeg.uiowa.edu>
Source record: 73558

When I have used the sand blasting technique, I went outside put on
a respirator and face shield and went to work. This keep me from cleaning
up the shop and having to protect others from the oxide compound. Silica
compounds are hazordus to breath. I did not try to recover the blasting
compound. I did not have that much to etch.

john
WA0VYZ

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

1744. Re: WTD XTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <79v71d$v5s$1@news4.svr.pol.co.uk>
Source record: 73559
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin Birch wrote in message ...
>Dear All,
>I want some xtals for a 10.7 MHz, 455kHz double superhet. < snipped >
>Can anyone help?.
>Rgds Robin
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

I'm looking for HC18 ? (1/2" pin spacing) 38.6667Mhz xtal for a 28 > 144
Transverter. WHY?

While we are on the topic of xtals, I have a fair collection for the
TRIO-2200GX and TR-7200G, not sure exactly what channels, I also have a
96.000 Mhz xtal for 144 > 432 Transverter / converter, no use to me !.
anyone interested I'll look them out.
cheers Mike W
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

1745. HB Loop stick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: MOstrowski <M_OstrowskiXXX@yahoo.com>
Message-ID: <79v7vg$1au$1@ink.msen.com>
Source record: 73560

Does any one have any info on homebrewing a loop stick antenna?
I'd like to buy a large ferrite stick and wrap my own, but I have no
starting point for the gauge of wire to use and the approximate
number of turns for a particular frequency range.

Michael Ostrowski - KC8GBM
Saline, MI

M_OstrowskiXXX@yahoo.com
Remove the XXX to reply directly

1746. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36C328E4.E8FEE836@usit.net>
Source record: 73561

Robinson, AB5VH wrote:

> Sometimes it is nice to be able to run right in and buy a part or some wire,
> even at their prices. I am currently pondering designing a receiver built
> with just stuff that Rat Shack stocks. That might be tough, but it would be
> nice if a newbie homebrewer could just go there and buy all the parts for a
> project.

Keep in mind that by the time you finish designing your reciever, there
will surely be a few parts that Radio Shaft no longer carries :)

Don

1747. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C3326F.AD1C41C3@teleport.com>
Source record: 73562
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

I've built two A-frames, one from 2X4s and the other from 2X3s. The 2X3 version is a whole lot lighter but still plenty strong, and I recommend that approach. I've taken down the 2X3 version because a nearby tree (a giant sequoia) grew to antenna-support size. The 2X4 one is still up after about 15-20 years. Both are about 40 feet tall, and were made from 22-24 foot pieces of lumber. Don't know if you can still get them this long. This construction obviously wouldn't be portable, but might give you some ideas.

Roy Lewallen, W7EL

Jim wrote:
>
> This is true.
>
> I did not mention that I have built one myself. It is 36 ft tall and is
> made out of combinations of 12 ft and 8 ft 2x4s.
>
> The traditional A frame mast was made out of 2x2 lumber, but 2x4 is much
> sturdier. I estimate that it will stand up to 100+ MPH winds with no
> trouble (am using 5/16 inch steel guy wire and 4 ft anchors).
>
> The reason I mentioned using 8 ft 2x4s is that the original poster wanted
> something portable. An 8 ft piece would be much easier to carry around than
> a 12 ft piece. In my case it was for fixed use.
>
> By the way, I had originally planned on a 48 ft mast, but it proved too
> heavy to erect, so I shortened it to 36 ft. Even then I had a total of 4
> people to pull it up (including myself). I guesstimate that a 21 footer
> would be no problem for 2 or three 'trained' people.
>
> Jim
> N8EE

1748. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: nicholas charles caruso <nzc@technologist.com>
Message-ID: <36C328F6.C6C00AFB@technologist.com>
Source record: 73563
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jim wrote:

> Early printed circuit boards where exactly that---printed.

[very interesting topical stuff deleted]

> But, why not try old fashioned point to point wiring? It should work for
> everything up to lower microwave frequencies if you are careful (and build
> subcircuits in separate boxes or compartments).

Now now. You're starting in with practicalities! This is an obsession, the notion of metal traces bonded directly to the glass -- it's not subject to practical considerations! :-)

But seriously, I've done a little bit of point-to-point (in kits, like my HW-101, and from scratch, a couple of
HF VFOs built dead bug style as experiments) wiring, and what you suggest is very interesting: perhaps point-to-point using standoffs mounted to the glass. Someone recently suggested an interesting method of boring holes in plate glass -- chucking a suitably sized piece of copper pipe into a drill, and using it with abrasive-filled silicone compound to grind through the glass. Apparently one can use Indium compounds to join glass to metal or glass to glass... Also interesting.

Anyone know how toxic Indium is?

thanks, good food for thought,
73
ncc kb1dej

1749. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <36C2F216.5990@ns.atl.org>
Source record: 73564

Dear friend of rat,

IMHO more like mongoose than chicken.
Good with pickled mustard green.

In addition to point contact transistor,
you might want to try biasing the diode
and looking for a spot that results in a
negative resistance,
AKA tunnel diode.
PLEASE document and write to me
if you observe this effect!

-bob
wb4mnf

1750. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C33782.F80578D2@teleport.com>
Source record: 73565

nicholas charles caruso wrote:
> . . .
> The conductive silver paint is an interesting idea. Thanks. They also make
> silver filled epoxy, I think. Anyone have any experience, good or bad, with
> this stuff? Perhaps I could use the epoxy instead of soldering?
> . . .

I've had some experience with both silver paint and conductive epoxy. The silver paint was used to do temporary repairs and experimental connections on hybrid circuits. It's very conductive but not strong at all, so it won't take any mechanical stress. I've never tried soldering to it, but doubt that you do so reliably.

We used conductive epoxy a great deal for attaching components to hybrid circuit substrates. The epoxy was a single-part, heat-curing variety. It's hard when it dries, and sticks well (but everything has to be *very* clean). This may be viable for your application. I'd be careful in mixing this process with soldering. If you do, you should do the epoxy attach first. It'd be really difficult to get things clean enough to epoxy after soldering in the same vicinity.

I've had trouble (actually, long days, nights, and weekends of hair-pulling trouble) using conductive epoxy for attaching small beam-lead diode bridges (connections develop a few tens of ohms of resistance), but don't think you'd have trouble with larger components.

Roy Lewallen, W7EL

1751. Re: HB Loop stick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C33967.D1C7BC27@teleport.com>
Source record: 73566

The only place I've seen information on this topic is in a National Semiconductor publication called the "Audio/Radio Handbook". The one I have is dated 1980, and the information is in section 3.1. You might check the National web site and see if it ended up in an app note or if they still publish this book. Or, if you email me a fax number, I'll fax you the information. It's only a couple of pages.

Roy Lewallen, W7EL

MOstrowski wrote:
>
> Does any one have any info on homebrewing a loop stick antenna?
> I'd like to buy a large ferrite stick and wrap my own, but I have no
> starting point for the gauge of wire to use and the approximate
> number of turns for a particular frequency range.
>
> Michael Ostrowski - KC8GBM
> Saline, MI
>
> M_OstrowskiXXX@yahoo.com
> Remove the XXX to reply directly

1752. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36C345D4.4DE8@ibm.net>
Source record: 73567
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Roy Lewallen wrote:
> Both are about 40 feet tall,
> and were made from 22-24 foot pieces of lumber. Don't know if you can
> still get them this long.

The longest I have been able to find at the average lumber yards is 20ft.
I use 2x4s up to 30ft and then a fiberglas pole for the last 20ft.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

1753. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Ken <tylereng@pacbell.net>
Message-ID: <36C338F7.F01F107D@pacbell.net>
Source record: 73568
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Jim wrote:
>
> Early printed circuit boards where exactly that---printed.
>
> They printed conductive paint directly on a ceramic substrate using a silk
> screening process.
>
> This was invented during WW2 for use in electronic bomb fuses (the fuses
> being electronic, not the bombs), which needed to be rugged, compact, and
> mass producible, in addition to being reliable.
>
> Don't remember the inventors name, but there was an article in CQ magazine
> last year about it.
>
> You might be able to do the same thing with etched glass---the idea being to
> have something for the conductive paint to stick to.
>
> But, why not try old fashioned point to point wiring? It should work for
> everything up to lower microwave frequencies if you are careful (and build
> subcircuits in separate boxes or compartments).
>
> Jim
> N8EE

It may have been invented years ago, it may have been used on circuit boards for bomb fuses, but it is far from being an obsolete process. There are many manufacturers using silk screening for conductive traces on ceramic and glass substrates, for among other things, strain gauges. We did a project a couple of years ago that used a conductive platinum/glass compound that was fused in a furnace to a ceramic substrate. The application for the device was in extremely high temperature environments.

The temperatures used in soldering to the screened traces by the way are as high or higher than those used on standard boards. This is primarily due to the properties of the trace materials and the types of solder pastes used. Most of the trace materials I have worked with are platinum and alloyed platinum/gold. While standard soldering methods work they don't withstand the high temperature applications we were dealing with.

As far as a do it yourself at home project I wouldn't know where to start. I would prefer the vacuum sputtering method with an electroplated copper build up to strengthen the traces. This would allow you to use conventional print and etch techniques. Surface preparation for whatever method is used can be aided by glass bead blasting the surface prior to application of the

material of choice. It adds a micro pitting on glass surfaces that is hard to accomplish with other methods, including chemical, and the added adhesion properties are well worth the effort.

--
Ken Tyler

mailto://tylereng@pacbell.net

1754. Re: Small load Antenna Tower Ideas needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <36C30220.2C51@ns.atl.org>
Source record: 73569
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

I second the 2x3 recommendation.
Buy some 2x6 and rip them.
Fir is not much more expensive than yellow pine
considering the extra strength. If you are concerned about
engineering, check some wood construction references.

-bob

1755. FS Classic KW

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990211162012.16931.00000130@ng147.aol.com>
Source record: 73570

```
Classic KW For Sale
Barker & Williamson Model L-100A
80-10 meters pair 813's
Power Supply and Manual
Scale 1-10 = 9
$575.00 + shipping from Austin, Texas
```

1756. Re: Capacitor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: nicholas charles caruso <nzc@technologist.com>
Message-ID: <36C349C1.22189093@technologist.com>
Source record: 73571
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Adam Adkins wrote:

> The radios date from the early 60s (SB-300 and SB-400), and the
> parts lists contain references to several types of capacitors, many of
> which are not available today.

What are the types that you can't find, just out of curiosity?

> I have closely perused the Mouser and
> Digikey catalogs, but no luck on many of these. The questions follow in
> no particular order:

Try http://www.surplussales.com as well as Dan's Small Parts,
http://www.fix.net/dans.html.

> Several of the values for caps listed are not "standard" today
> (e.g., 7.5, 36 and 90 pf). Should I just use the next higher value that
> is available? Or perhaps the next lower?

Depends on the function in the circuit. If they're used in a resonant
circuit, you'll change the tuning of the
circuit if you change the value of the cap. If they're used for coupling,
changing the value a little bit may or may not be bad, depending on the
design. If they're used for bypassing, the values can be broadly substituted.
Many people here know more about this than me, and will hopefully chime in.

In any case, these sorts of caps are unlikely to have failed and you should
definitely not replace them unless you've got a specific reason to do so.

> Many of the caps listed are mica. I understand that mica provides
> a greater temperature stability, but they are pricier than I like. One
> source I have says that ceramics rated NP0 will work well for temperature
> stability. Is that true? What are the circumstances in which you would
> definitely want to use mica, instead of ceramic?

NP0 is a type of ceramic material that exhibits a very tiny amount of drift
with temperature. They are in general superior to silver micas in resonant
circuits. Silver micas supposedly aren't good under large DC biases -- the
silver migrates through the dielectric, or so I've read. Again, see comments
above about not touching unless blah blah blah...

> What about mylar? Polypropelene? Tantalum? What applications
> would these be best suited for?

buy a copy of _The Art of Electronics_ by Horowitz and Hill. They discuss
capacitor types at length. An excellent and readable book. The accompanying
lab manual is excellent, too. amazon has both of these.

I think Barnes and Noble had a sale on _Art_ recently.

Also, Terman's _Radio and Electronic Engineering_ (you can find copies at www.mxbf.com) is very good
and covers material in a way more modern texts do not. 4th edition preferable.

> What is the meaning of the various temperature coefficient ratings
> (NP0, Z5U, etc.)
>
> The same question regarding EIA Class I, II, and III?

can't answer these; you can probably find via a dedicated enough web search. try www.dejanews.com to search back through newsgroup postings.

> Trimmer caps - are these just adjustable capacitors?

yes -> trimmer implies a variable that's intended to be set once and left; usually physically small, and having a
fairly limited range and small capacitance, as general guidelines.

> Snubbers?

I think these are RC networks packaged as a single unit, intended to absorb energy created by opening the circuit through a large inductive load. But I could be wrong.

> In power supply applications, I have seen some schematics that use
> monster electrolytic filter caps - 20K mf. The radios I am working on
> use 20 mf. What is the purpose of using such huge ratings? Is it just a
> better filter?

I think so, but there may be more to it than that; perhaps larger caps store more energy -> can deal better with
smoothing out ripple when large current flows are involved. Are these schematics for high-current DC supplies for solid state amps or transceivers?

> I would very much appreciate any responses that would help me to
> understand the nature of these beasties a bit better.

OK, here's some general advice:

You aren't planning on replacing all the caps in these things, are you? I think that that would be a bad idea.
Only the electrolytics are at all likely to fail, and in my experience not all that likely (I have some very old tube radios still running on original electrolytics).

You should try to diagnose any problems and resolve them as surgically as possible.

One thing that *can* happen to old electrolytics is depolarization, which can lead to failure when power is later applied. Depolarization happens when the set's been sitting unused for a long period of time. You can avoid this by re-forming the dielectric -- get a variac, a variable autotransformer (see

www.surplussales.com or preferably (much more cheaply) your local hamfest) that allows you to control the voltage applied to a device. Start off with the variac set to some very low voltage, say less than 10 VAC, and slowly advance it, allowing the device to sit for some significant period of time at each new voltage, up to 110V. How long? I've heard people say 20 minutes; others say at least an hour. I've no idea what the "correct" amount of time is; hopefully here someone with more hands on experience will chime in... but slow and steady is better than plugging the thing into the wall and turning it on.

Particularly, the notion of replacing silver micas and suchlike, which you seem to be hinting at, is asking for trouble. These are very reliable components and you should only replace one if you've got good evidence it's failed. Throwing the tuning off on the interstage coupling xformers in a superhet receiver, for instance, will lead to a bunch of work that ain't easy to do even with the right equipment unless you're experienced.

73,
nick caruso KB1DEJ

1757. FS Parts/Projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990211162728.16931.00000145@ng147.aol.com>
Source record: 73572

For Sale: Parts and Projects for the Builder
RF decks / Final Pas
Motorola
6 Meter RF Deck Pair 8560ï¿½s in push-pull
with 95% of power supply parts
Bud cabinet 14" $300.00

2 Meter RF Deck single 8560 $ 175.00

RCA
6 Meter pair 4-250ï¿½s in push-pull
Tank coil, filament transformer, Grid coil $250.00

6 Meter 4-125"s same as above $225.00

Home Brewed projects

6 Meter, 2 X 4CX250B / Power Supply / Cabinet
Need wiring, Meters, TR switch
Will make about 700 watts P.E.P. $ 380.00

6 Meter, single 4-400 / Power Supply / Bud cabinet
Needs TR switch / LPF / 650 watts P.E.P. $450.00

1758. WTB: ARRL Adv. License Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Jack Hardin <jhardin@hal-pc.org>
Message-ID: <01be560a$91cac7c0$4882b4ce@jhardin>
Source record: 73573
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Want to buy (cheap): the current ARRL Advanced License Manual. I am aware of the web sites with the question pool, but I'm looking for a copy of the ARRL book. If you have one you don't need, please let me know how much you want for it, mailed to me in Texas. Please respond by e-mail since I may not check this newsgroup often.
Jack
jhardin@hal-pc.org

1759. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C357B0.A00989C9@teleport.com>
Source record: 73574
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

nicholas charles caruso wrote:
>. . .Apparently
> one can use Indium compounds to join glass to metal or glass to glass... Also
> interesting.
>
> Anyone know how toxic Indium is?

No, but the Indium Corporation of America makes a variety of
indium-alloy low-temperature solders they call "Indalloy". You might
check into these.

Roy Lewallen, W7EL

1760. FS: Western Electric NOS Shielded Twinax switchboard wire!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: OPCOM <vaxhackery@worldnet.att.net>
Message-ID: <36C3774C.BD13E949@worldnet.att.net>
Source record: 73485
Cross-posted to: rec.audio.tubes,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

This beautiful vintage wire is composed of two 22 guage conductors, one with white colored insulation and one with orange, intertwined within a paper sheath, residing inside a very heavily woven shield, in turn surrounded by another paper sheath, and this is then covered by a very durable and flexible yet thickly woven cotton covering of a light grey-pink color. This wire is of the utmost in quality, and perfect for stringent instrumentation or tube audio requirements. I'm not sure how many feet are on the spool, but as you can see, it is full. 200 feet maybe? Don't hold me to that, it's just a guess. The spool itself is extremely nice on the top, but does have some slight scuffing and a little surface oxidation on the bottom, as shown in the pictures. I have not seen a nicer 45 year old spool of wire anywhere.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=64451989

Item 64451919 on Ebay. Pictures as well, in case you just wanna see what an old spool of good wire looks like.. :)

1761. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <7a00m2cm1@nnrp1.dejanews.com>
Source record: 73486

In article <bchv2.503$VQ5.9145146@news1.i1.net>,
ddoss@<nospam>i1.net wrote:
> Can anyone explain the procedure for using a grid dip meter for
> checking resonances in amplifier tank circuits, chokes, etc? I know a
> little about the principle of the dipper, but need some clarification
> on the exact procedure.
>
> TIA - Dan

DO NOT USE IT !!
Instaed use a noise bridge.
The GDM is an oscilator that is adjusted with the dial to a certain frequency
And it runs prety stable on the selected frequency. when coupled to a resonant tank
the load kills the oscilation, the grid curent went up (the old days of tubes) and the user took a measurement.
Before the oscilation died because of the heavy coupling, the oscilator changed frequency, some times A LOT!
Therefor the grequency it was set and the frequency it died, to give an indication can be from wide, to
very wide.
A noise bridge on the other hand, generates a wide band noise, you tune a receiver to the dsired frequency, and
adjust the tank until the noise goes down on that frequency. this way you KNOW what frequency you are working.
CT

>

>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1762. FS:16uf@4500vdc oil capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: kf8od@aol.com
Message-ID: <19990211200434.10603.00000269@ng-fw1.aol.com>
Source record: 73487

Have several 16uf@4500vdc oil capacitors for sale. $20.00 each shipped or 6 for $100.00 shipped.

73, Mike
KF8OD

Long live QRO!

1763. FS: Sweep tubes, rectifier tubes, nixies, more...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990211202751.18596.00000243@ng93.aol.com>
Source record: 73488

I have six used NL-840 nixie display tubes, $20 all.
For more info, check my website at;
http://members.aol.com/Reactor001

Also, I have four lots of tubes posted on eBay;

Lot 1, 187 asst. NOS/NIB 7-pin and 9-pin miniature tubes;
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=65533742

Lot 2, 111 asst. tubes, each boxed, all test good;
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=65537689

Lot 3, 24 asst. beam power tubes, used, all tested/boxed (inc. a bunch of
6146ï¿½s);
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=65542917

Lot 4, 50 asst. NOS/NIB sweep tubes, rectifier tubes, and more;
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=65545990

Thanks for checking,
Tom Mitchell
email - OvrReactor@aol.com

1764. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: notjimbob@worldnet.att.net
Message-ID: <36c83b66.27453990@netnews.worldnet.att.net>
Source record: 73489
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Thu, 11 Feb 1999 12:31:19 -0500, "Jim" <jbolinger@lintek.com> wrote:

>
>Early printed circuit boards where exactly that---printed.
>
>They printed conductive paint directly on a ceramic substrate using a silk
>screening process.
>
>This was invented during WW2 for use in electronic bomb fuses (the fuses
>being electronic, not the bombs), which needed to be rugged, compact, and
>mass producible, in addition to being reliable.

The old proximity fuses were built with vacuum tubes too. They were
rugged enough to survive being used in mortar shells.

Jim

1765. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <JOMw2.12257$jd2.31201862@rmnws01.ce.mediaone.net>
Source record: 73490
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

nicholas charles caruso <caruson@certco.com> wrote:

>I've been wondering about oddball techniques for fabricating circuitry
>at home.

...

>Now, if one were to etch a series of circuit traces on a plate of glass,
>paint them with solder paste and then heat the whole thing to
>solder-melting point, would the melted solder paste wet and adhere to
>the etched glass? This and surface mount components would make a very
>interesting circuit board.

>I plan on trying this, of course, but I wonder if anyone out there has
>any first hand experience or directly applicable book learnin' and would
>be so kind as to share?

Ask about that at rec.crafts.glass. I got the last part of a thread on
electroplating 'came', which is metalized glass...

"
> But all I know about
>it besides that it *can* be done is that they "send it out" to get it
>done.

Contact Swest, Inc. [11090 N.Stemmons Frwy, Dallas TX 75229,
214-247-7744] a comprehensive jewelers supply firm and ask for their
catalog
that includes non-cyanide plating solutions and books on how to use
them along
with a bunch of equipment. See if you want to pursue it. "

Let us know what you find out about this, I'm interested too.

1766. mods needed for kenwood ts830s and vfo230

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Bill <whagen@NOREPLY.inreach.com>
Message-ID: <36C3A959.16F0@NOREPLY.inreach.com>
Source record: 73491

hi all, I have a kenwood ts830s and vfo 230, and wouldlike to extend the recieve coverage into the mw band. Anyone know hwo to extend the frequency? thanks
--
Please remove the word "NOREPLY" from the email adress. Sorry for the inconvenience, but it helps keep down the spam.

1767. FA: MOTOROLA SABER TEST ACCESSORIES AND PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7a0faocco1@nnrp1.dejanews.com>
Source record: 73492

HAVE THE FOLLOWING MOTOROLA SERVICE TOOLS FOR WORKING ON SABER RADIOS...
external antenna adapter
test bed for working on saber that out of its case
batt eliminator/currewnt draw testing adapter.

the units are on ebay for auction. heres the links
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=66337079
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=66338447
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=66340764

all units are in good shape and are not beat up or abused.
thanks
robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1768. FS: 22 V 2.4 A Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: worley@40hill.com
Message-ID: <36C3E074.4DA8@40hill.com>
Source record: 73493
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew,sci.electronics.components

I have at least 20 ea. 22 volt 2.4 amp transformers in plastic case, with jack for computer type ac cord (120V 60Hz input). About 4" cubed, 3.5 lbs. each, unused mint condition, $3.75 each or 4/$14 or 10/$30 plus UPS. 36330 zip.(Alabama) Can be used with a rectifier and appropriate sized cap to power 28 V filaments, or as is for 21 V or 24 V sweep tube filaments. Also good for 24 V power supply. NOTE: Please REPLACE the "40" with "snow" to make "snowhill" or call 334-347-5281 day/eve/wknd.

1769. FA: NEW MOTOROLA TELEPHONE STYLE HANDSET

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7a0fqa$cr6$1@nnrp1.dejanews.com>
Source record: 73494

HAVE THE FOLLOWING MOTO PART ON EBAY.. (2) TELEPHONE STYLE HANDSET FOR USE IN HIGH NOISE ENVIROMENTS OR WHERE PRIVACY IS AN ISSUE. THESE ARE NEW WITH DOCS AND SCHEMATIC, CURRENTLY WIRED FOR "MICOR"
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=66318175 thanks robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1770. FA: ICOM IC-AG1 LOW NOISE PREAMP FOR 430MHZ NEW!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7a0gqvdlk1@nnrp1.dejanews.com>
Source record: 73495

NEW IN BOX ICOM IC-AG1 430MHZ PREAMP. UNIT IS ON EBAY, HERES THE LINK..
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=64953122
thanks
robert

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1771. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: cincpac <cincpac@nightmail.com>
Message-ID: <36C3D13A.7E87B7B4@nightmail.com>
Source record: 73496
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> > Another lying Democrat, George Bush.
> >
>
> QUESTION?!?
>
> Since when is George Bush a Democrat?
>
> I am not even a legal adult and I STILL know a democrat from a republican. I better go back to associating with people my own age who still think before they type.

> teenager - procoder - not to lazy to get up and study for PRIVILEGES I want -
> RealHam.

Mr. Teenager, you're a *real ham* in more ways than you think. You need to spend less time with archaic modes of communication and more time learning to interpret satire, irony, double meanings, and other genre of English writing.
Think, read, and try to discern what was writtten before YOU type.

1772. Looking for info on Racal Synth

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: "g0mjw.freeserve.co.uk" <Mike@g0mjw.freeserve.co.uk>
Message-ID: <7a12jf$i2f$1@news6.svr.pol.co.uk>
Source record: 73497
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

I am trying to find out about a Racal Synthesiser - model CT562
This comprises of a synth model 9061 and a signal processor model 9062.
The two units need to be connected together - but I have not got the cables.
The plugs are no problem.

Does anyone have any info or even better a manual I might copy?

Mike

1773. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C401B8.1F9630D4@teleport.com>
Source record: 73498
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Woodgate wrote:
>
> <36C328F6.C6C00AFB@technologist.com>, nicholas charles caruso
> <nzc@technologist.com> wrote:
> >Anyone know how toxic Indium is?
>
> I don't have any figures, but it's not to be trifled with. Not as bad as
> thallium or beryllium, probably, but not at all good for you.

That's a good description of lead, too.

Roy Lewallen, W7EL

1774. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Dirk Bruere <artemis@kbnet.co.uk>
Message-ID: <36C41E18.6E1E85B0@kbnet.co.uk>
Source record: 73499
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen wrote:
>
> John Woodgate wrote:
> >
> > <36C328F6.C6C00AFB@technologist.com>, nicholas charles caruso
> > <nzc@technologist.com> wrote:
> > >Anyone know how toxic Indium is?
> >
> > I don't have any figures, but it's not to be trifled with. Not as bad as
> > thallium or beryllium, probably, but not at all good for you.
>
> That's a good description of lead, too.
>
http://www.scescape.net/~woods/elements/indium.html

Dirk

1775. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7a1cie$4om$1@nnrp1.dejanews.com>
Source record: 73500

In article <79udf9$9ns$2@news-1.news.gte.net>,
"Robinson, AB5VH" <rmcrusoe@do.not.spam.me.gte.net> wrote:
> OTOH, I had a SWL Receiver from RS, I think the model # was DX-390 or
> DX-380. Anyway, it was a mid size portable with BFO and no casette recorder
> built in. I actually used this as my first ham receiver, in conjunction with
> a crystal transmitter using a 2n2222 and a 2n2222A. Actually made a few
> contacts with that clumsy lashup. Anyway, this was in a marine environment.
> The antenna was at about 85 feet. The static generated by the wind, spray,
> etc on my 40/15M dipole trashed the front end. There is evidently some
> pretty delicate pre-amp circuitry there. I eventually ran the feedline
> directly to the mixer and got it working again, though with rather reduced
> sensitivity.

If I recall correctly, the RS DX-390 is built by Sangean. They use a couple of JFETs in the front end as preamps, and they are very sensitive to static discharge. I worked for a time in a Ham / SWL repair shop, and that was probably the most common repair for many of the Sangean portables, the Sony ICF-2010, and the occasional RS portable SW that came in. We had a "calibrated" AM broadcast station in town that we used for testing the Sony - if it read S9 or better, the FETs were OK. If it read S4-5, one FET was blown. If it read S2 or less (or was inaudible) most likely both FETs were shot.

While we tried to use original manufacturer's parts for repair, we found that the venerable MPF102 was a suitable replacement. It seems to me, though, that the FET pin arrangement was different, requiring leads to be swapped around a bit. I think - I may be mistaken.

Still, the Sangeans were generally decent SW radios for the money.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1776. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7a1cst$54p$1@nnrp1.dejanews.com>
Source record: 73501

In article <36C33782.F80578D2@teleport.com>,
Roy Lewallen <w7el@teleport.com> wrote:
> nicholas charles caruso wrote:
> > . . .
> > The conductive silver paint is an interesting idea. Thanks. They also make
> > silver filled epoxy, I think. Anyone have any experience, good or bad, with
> > this stuff? Perhaps I could use the epoxy instead of soldering?
> > . . .
>
> I've had some experience with both silver paint and conductive epoxy.
> The silver paint was used to do temporary repairs and experimental
> connections on hybrid circuits. It's very conductive but not strong at
> all, so it won't take any mechanical stress. I've never tried
> soldering to it, but doubt that you do so reliably.
>
> We used conductive epoxy a great deal for attaching components to
> hybrid circuit substrates. The epoxy was a single-part, heat-curing
> variety. It's hard when it dries, and sticks well (but everything has
> to be *very* clean). This may be viable for your application. I'd be
> careful in mixing this process with soldering. If you do, you should
> do the epoxy attach first. It'd be really difficult to get things
> clean enough to epoxy after soldering in the same vicinity.
>
> I've had trouble (actually, long days, nights, and weekends of
> hair-pulling trouble) using conductive epoxy for attaching small
> beam-lead diode bridges (connections develop a few tens of ohms of
> resistance), but don't think you'd have trouble with larger
> components.

Roy,

Something I've considered, but not yet tried, is laying down a pattern of conductive ink (paint, epoxy, whatever) and then plating copper over the top of it. Copper plating isn't especially difficult, and can be done with chemicals available from a drug store (copper sulfate). (It's not like gold plating, which uses cyanide compounds.) I used to copper-plate Mom's silverware when I was a kid. Boy was she mad! (Grin) Still, it's not bad.

It would take a while to plate up thick enough copper to solder to, but it might work well enough to mount small parts with a low-wattage iron and low temp. solder.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1777. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7a1d7h$59p$1@nnrp1.dejanews.com>
Source record: 73502
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <36C328F6.C6C00AFB@technologist.com>,
nicholas charles caruso <nzc@technologist.com> wrote:
> Someone recently suggested an interesting method of boring holes in plate
glass
> -- chucking a suitably sized piece of copper pipe into a drill, and using it
> with abrasive-filled silicone compound to grind through the glass.

Yabbut...

That takes a LONG time. A friend of mine used to make rings from tiger eye (a silicate mineral, if I'm not mistaken) the same way - two pieces of brass tubing for the inner and outer diameters of the ring, a slab of mineral, and an abrasive slurry. Took about 12 hours by his report. He'd mount the rock on the table of a drill press, mount one of the tubes in the drill chuck, sprinkle grit on the rock, and lower the drill running at slow speed. He got tired of holding it so he'd use a bungee cord to keep the drill bearing down, then go away and watch TV for a few hours.

Of course, we ARE talking about obsessions here...

Dave

Apparently
> one can use Indium compounds to join glass to metal or glass to glass... Also
> interesting.
>
> Anyone know how toxic Indium is?
>
> thanks, good food for thought,
> 73
> ncc kb1dej
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1778. Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199902121351.IAA01530@pop.uky.edu>
Source record: 73503

You could try to plate it with copper first.
But to do that you would need to coat it with
something conductive such as DAG (a graphite suspension).
It is commonly used in CRT's and such. Then connect a
power supply (negative terminal) to the DAG and positive
terminal to a copper anode both placed in a water and copper sulfate
solution. Copper sulfate is a common salt that I used to
get at local drug store. Once it is plated in copper solder
could stick to it. In fact DAG will stick to un-etched glass
as well. I don't know how strong the bond would be but it
should work.
Years ago my father had an imported car that had bad
starter brushes. Parts for this car were not available in
the US. I got some brushes that were much larger and ground
them down to size. Then drilled holes in them and plated the
brushes with copper using copper sulfate solution. After that I
put the big stranded wires into the holes and soldered them.
Worked well. Had no problems with them after that.
It just happened that the week before that we covered plating
and electrolysis in my high school chemistry class. Timing was
perfect.
Oh, by the way, don't put the copper sulfate solution in
a metal container. It will most likely eat a hole thru it.
Also be sure to read all the MSDS information and warnings.
73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

1779. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <36c43299.1352967@news.azstarnet.com>
Source record: 73504

On Fri, 12 Feb 1999 01:38:11 GMT, 8877@my-dejanews.com wrote:

>In article <bchv2.503$VQ5.9145146@news1.i1.net>,
> ddoss@<nospam>i1.net wrote:
>> Can anyone explain the procedure for using a grid dip meter for
>> checking resonances in amplifier tank circuits, chokes, etc? I know a
>> little about the principle of the dipper, but need some clarification
>> on the exact procedure.
>>
>> TIA - Dan
>---
>DO NOT USE IT !!
>Instaed use a noise bridge.
>The GDM is an oscilator that is adjusted with the dial to a certain frequency
>And it runs prety stable on the selected frequency. when coupled to a resonant tank
>the load kills the oscilation, the grid curent went up (the old days of tubes) and the
user took a measurement.
>Before the oscilation died because of the heavy coupling, the oscilator changed frequency,
some times A LOT!
>Therefor the grequency it was set and the frequency it died, to give an indication can be
from wide, to
>very wide.
>A noise bridge on the other hand, generates a wide band noise, you tune a receiver to the
dsired frequency, and
>adjust the tank until the noise goes down on that frequency. this way you KNOW what
frequency you are working.
>CT

Please disregard everything posted above. The poster soes not know
what he is talking about.

A GDO, when used properly, DOES NOT quit oscillating when coupled to
the circuit under test (CUT). If it was not oscillating, where would
be the "grid dip" indication?

Proper use includes loose coupling, not "heavy coupling." Bring the
GDO inductor near the CUT and slowly tune the frequency dial until the
dip is noted. Once the dip is found, reduce the coupling by
increasing the separation between circuits and re-null the meter. If
you need to know the frequency to better accuracy than the dial
provides, leave things positioned as they are and tune your receiver
to the GDO frequency and read the receiver dial.

Most of the resonance measureing schemes using noise bridges load the
CUT so bably that the frequency accuracy is worse than the
GDO/receiver method.

At work I have at my disposal a half-million dollars worth of vector network analyzers, impedance bridges, vector impedance meters, etc. I still keep a GDO around the lab, but I don't have any noise bridges.

At home for resonance/impedance measurements, I have several sig generators, two Boonton Q meters, two Boonton RX meters, an HP vector voltmeter, two Millen GDOs and a prized RF Measurements Corp GDO, but no noise bridges either.

Use the GDO!

73,
N7WS

1780. Re: homebrew electronic keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Al Williams <alw@al-williams.com>
Message-ID: <eloJmOpV#GA.123@nih2naaf.prod2.compuserve.com>
Source record: 73505

If you can find the July/Aug 1998 QEX, I had an article in there that shows a Stamp-based keyer. The nice part is you can program it in situ and it is easy to program in Basic with no extra hardware. The firmware I supplied did iambic with dot and dash memories, a "canned" message and sidetone.

You can find more about the Stamp and the new Basic Stamp FAQ:
http://www.al-williams.com/wd5gnr/stampfaq.htm

You can also find a lot of ham, Stamp, and PIC info at
http://www.al-williams.com/wd5gnr

The keyer will also be a project in my upcoming Stamp book.

73,

Al WD5GNR

Jamel wrote in message <36c12285.0@news2.tm.net.my>...
>I am resolved to build my own electronics keyer.
>
>If anyone can help me to point me to a www site, (or assist me in however
>way) to construct an electronic keyer to compliment my homebrew paddle
>keyer, I will be most obliged.
>
>
>Thank you.
>
>Jamel
>
>

1781. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: John Fields <jfields@austininstruments.com>
Message-ID: <36C439B5.582E2C8B@austininstruments.com>
Source record: 73506
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

nicholas charles caruso wrote:

> Now, if one were to etch a series of circuit traces on a plate of
> glass,
> paint them with solder paste and then heat the whole thing to
> solder-melting point,

--

DuPont makes a line of conductive inks/pastes designed to be
screened onto a substrate and then fired in an oven until they melt
and fuse to the surface of the substrate.

I've used them on alumina and they worked very well, but I'm not
sure how they'd work on glass.

Check with DuPont.

Alternatively, there are conductive epoxies which you could use
which would make your life considerably easier; paint the traces,
stick on the components, let the whole thing cure, and there you go!

Master Bond comes to mind as a supplier of conductive epoxies, and
they have nickel based as well as silver based ones.

You better be sitting down when you find out how much they cost!

--
John Fields, Austin Instruments, Inc.
El Presidente Austin, Republic of Texas
"I speak for the company" http://www.austininstruments.com

1782. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Ken <tylereng@pacbell.net>
Message-ID: <36C43CDB.ADBCD205@pacbell.net>
Source record: 73507
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

hinermad@my-dejanews.com wrote:
>
> In article <36C328F6.C6C00AFB@technologist.com>,
> nicholas charles caruso <nzc@technologist.com> wrote:
> > Someone recently suggested an interesting method of boring holes in plate
> glass
> > -- chucking a suitably sized piece of copper pipe into a drill, and using it
> > with abrasive-filled silicone compound to grind through the glass.
>
> Yabbut...
>
> That takes a LONG time. A friend of mine used to make rings from tiger eye (a
> silicate mineral, if I'm not mistaken) the same way - two pieces of brass
> tubing for the inner and outer diameters of the ring, a slab of mineral, and
> an abrasive slurry. Took about 12 hours by his report. He'd mount the rock on
> the table of a drill press, mount one of the tubes in the drill chuck,
> sprinkle grit on the rock, and lower the drill running at slow speed. He got
> tired of holding it so he'd use a bungee cord to keep the drill bearing down,
> then go away and watch TV for a few hours.
>
> Of course, we ARE talking about obsessions here...
>
> Dave

Enter the wonderful world of lasers. Boring holes is both easy and fast
if you have enough power and the right type.

--
Ken Tyler

mailto://tylereng@pacbell.net

1783. Ham Theory Books FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Ken Simpson <W8EK@usa.net>
Message-ID: <jLXw2.43$wS.1097@monger.newsread.com>
Source record: 73508

For sale - Amateur Radio Theory Books:

Amateur Radio - Theory and Practice by Robert Shrader, W6BNB
covers electronic theory, with special chapters for ham radio $ 8

Ameco Amateur Radio Theory Course
comprehensive book, good for all class licenses $ 6

Ameco Complete Technician Radio Amateur FCC Test Manual $ 4

Tab - Oscar: The Ham Radio Satellites, by K4TWJ
hardbound $ 8

Tab - Amateur Radio General Class License Study - 2nd Edition $ 4

Tab - Amateur Radio Advanced Class License Study - 2nd Edition $ 4

FCC Rule book by ARRL - 9th edition - $6

FCC Rule book by ARRL - 7th edition - $ 5

W5YI Part 97 FCC rules and regulations $ 3

Prices do not include shipping from Florida.
All books are in good condition.

E-mail to W8EK@usa.net

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@usa.net or W8EK@fdt.net
http://www.gnv.fdt.net/~kenmar
Voice Phone (352) 732-8400

1784. wtb - Triad M-4Z modulation transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <7a1kdq$796$1@news.ispn.net>
Source record: 73509

Wanted:

Triad M-4Z modulation transformer - "autotransformer" primary with "speaker" secondary. Matches 5000 ohms to 6750 ohms.

To be used for 75 M peanut whistle AM rig.

Thanks!

Ron, W0NYQ

1785. Re: WTB UNC 4-40 screws

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Richard Earl <w9juc@juno.com>
Message-ID: <36C46622.A2854D14@juno.com>
Source record: 73510
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I have stainless steel (18-8) Phillips binder head 4-40x1/2" screws.

Will send for no charge if you czn supply shipping address and valid HAM
CALL SIGN IN YOUR REPLY.

GL es 73

Rich

W9JUC

GL es 73

Rich

W9JUC

Simon Cox wrote:
>
> Can someone help with a source, in the UK, of UNC 4-40
> screws 1/2" long for a piece of Racal equipment. RS etc. etc.
> don't sell such unless you count D connector screws. The
> screws required are 6 BA or 2.5mm look alikes. I need 30.
>
> Thanks, simon.cox@breathe.co.uk

1786. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: FRIDBERG@PSFC.MIT.EDU
Message-ID: <12FEB99.18152353@radio.psfc.mit.edu>
Source record: 73511
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In a previous article, hinermad@my-dejanews.com wrote:
->In article <36C328F6.C6C00AFB@technologist.com>,
-> nicholas charles caruso <nzc@technologist.com> wrote:
->> Someone recently suggested an interesting method of boring holes in plate
->glass
->> -- chucking a suitably sized piece of copper pipe into a drill, and using it
->> with abrasive-filled silicone compound to grind through the glass.
->
->Yabbut...
->
->That takes a LONG time. A friend of mine used to make rings from tiger eye (a
->silicate mineral, if I'm not mistaken) the same way - two pieces of brass
->tubing for the inner and outer diameters of the ring, a slab of mineral, and
->an abrasive slurry. Took about 12 hours by his report. He'd mount the rock on
->the table of a drill press, mount one of the tubes in the drill chuck,
->sprinkle grit on the rock, and lower the drill running at slow speed. He got
->tired of holding it so he'd use a bungee cord to keep the drill bearing down,
->then go away and watch TV for a few hours.
->
->Of course, we ARE talking about obsessions here...
->
->Dave
When I was a kid I made a 5" reflector telecscope. I grinded my own mirror out
of thick glass. While grinding process was exceedingly boring and took a long
time, but cutting of the glass (about 3/4" thick) was fairly easy. I was using
a piece of steel tubing of 5" in diameter, attached to a wooden handle across
it so I coud rotate it on a glass and abrasive paste. Took me few hours to cut
through without any electric drills. It was an easiest part of whole project.

Mike.

1787. Re: mods needed for kenwood ts830s and vfo230

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <918848597.387490@cs1.sdd.hp.com>
Source record: 73512

Hi Bill OM,

Even though it appears you are averse to spelling and punctuation, it would
be helpful if you could describe your needs more accurately. What does
"mw bands" mean. Do you mean "Microwave Bands"? If so, it should
be obvious that you cannot extend the basic design of an HF transceiver like
the TS830S and convert it into a microwave transceiver. You could
build a transverter to reach microwave bands. However, this is a major
project, best built in modules, and is not a beginner's project. If you want
to tackle it, I suggest reviewing the many articles in the literature over the
years describing transverters and converters from HF to UHF and higher
bands.

73 and GL,
Don, W6JL

Bill wrote in message <36C3A959.16F0@NOREPLY.inreach.com>...
>hi all, I have a kenwood ts830s and vfo 230, and wouldlike to extend the
>recieve coverage into the mw band. Anyone know hwo to extend the
>frequency? thanks
>--
>Please remove the word "NOREPLY" from the email adress. Sorry for the
>inconvenience, but it helps keep down the spam.

1788. Charging NiCads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: fantbb@yahoo.com
Message-ID: <7a23ieqbc1@nnrp1.dejanews.com>
Source record: 73513

Want to build my own nicad power pack for my NorCal 40A. I have some 12VDC wall cubes laying around to use with it. What I would like to do is make sure I have nicads charged up for whenever I want to operate portable. The battery holder I am using can take either AA nicads or AA alkalines. Are there some construction projects some where out there on the internet that I can take a look at? Sources? Past experiences of others here? Thanks for any and all help!

Jeff Jones
AB6MB
NorCal QRP #65
CW Forever!!!

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1789. Re: mods needed for kenwood ts830s and vfo230

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Bill <whagen@NOREPLY.inreach.com>
Message-ID: <36C495AC.6445@NOREPLY.inreach.com>
Source record: 73514

Don W6JL wrote:
>
> Hi Bill OM,
>
> Even though it appears you are averse to spelling and punctuation, it
> would
> be helpful if you could describe your needs more accurately. What does
> "mw bands" mean. Do you mean "Microwave Bands"? If so, it should
> be obvious that you cannot extend the basic design of an HF transceiver like
> the TS830S and convert it into a microwave transceiver. You could
> build a transverter to reach microwave bands. However, this is a major
> project, best built in modules, and is not a beginner's project. If you
> want
> to tackle it, I suggest reviewing the many articles in the literature over
> the
> years describing transverters and converters from HF to UHF and higher
> bands.
>
> 73 and GL,
> Don, W6JL
>
> Bill wrote in message <36C3A959.16F0@NOREPLY.inreach.com>...
> >hi all, I have a kenwood ts830s and vfo 230, and wouldlike to extend the
> >recieve coverage into the mw band. Anyone know hwo to extend the
> >frequency? thanks
> >--
> >Please remove the word "NOREPLY" from the email adress. Sorry for the
> >inconvenience, but it helps keep down the spam.
Yes, that would be obvious to anyone that knows anything. What I meant
was the medium wave band, the AM band, below 1650. Currently the low end
of the recieve is about 1400 kilocycles. I would like to know if there
is a way to extend the recieve freq of the vfo230 to below this value.
No one grades the newsgroups on punctuation.

--
Please remove the word "NOREPLY" from the email adress. Sorry for the
inconvenience, but it helps keep down the spam.

1790. Re: Info - PC parallel port pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Dieter <d.mayr@salzburg.co.at>
Message-ID: <36C4A214.FACD1D94@salzburg.co.at>
Source record: 73515
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin Birch schrieb:

> I know this is off topic - but...
>
> Can someone tell me the pinouts for a PC parallel port, the D type
> connector that is.
>
> I am setting up a non pc computer to talk to a printer and need to make
> up a connector for it. It has a parallel port that will talk centronics
> but doesn't have a lead, so I'm going to make up a lead that connects to
> a PC lead. I just need to know what the various pins do.
>
> Rgds
>
> Robin
> ____
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

Hi Robin

Here is the pin layout from a D25 paralell port connector:

Pin 1 -strobe
2 data 0
3 data 1
4 data 2
5 data 3
6 data 4
7 data 5
8 data 6
9 data 7
10 -ack
11 -busy
12 paper error
13 select
14 -auto feed
15 -error
16 -init
17 select in
18-25 gnd

Hope this is helpfull

greetings

Dieter

1791. Re: Info - PC parallel port pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Dieter <d.mayr@salzburg.co.at>
Message-ID: <36C4A223.8ED1F069@salzburg.co.at>
Source record: 73516
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin Birch schrieb:

> I know this is off topic - but...
>
> Can someone tell me the pinouts for a PC parallel port, the D type
> connector that is.
>
> I am setting up a non pc computer to talk to a printer and need to make
> up a connector for it. It has a parallel port that will talk centronics
> but doesn't have a lead, so I'm going to make up a lead that connects to
> a PC lead. I just need to know what the various pins do.
>
> Rgds
>
> Robin
> ____
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

Hi Robin

Here is the pin layout from a D25 paralell port connector:

Pin 1 -strobe
2 data 0
3 data 1
4 data 2
5 data 3
6 data 4
7 data 5
8 data 6
9 data 7
10 -ack
11 -busy
12 paper error
13 select
14 -auto feed
15 -error
16 -init
17 select in
18-25 gnd

Hope this is helpfull

greetings

Dieter

1792. FS: Vectron 8 Mhz TCXO (new)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <36C4C289.55183F23@calweb.com>
Source record: 73517
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,rec.radio.swap,sci.electronics.equipment

For sale: New Vectron 8 Mhz TCXO model CO-231T-4Y part number 3400-0054. Adjustabable unit, 5vdc operation at approximately 20 ma, PC board mount, with pinout data. I do not have any performance specs as unit was not listed on the Vectron web site. Size is approximately 1.25 inches square and about 1/2 inch high.

$20 post paid conus

Tnx for the read

73

Bob, KE6F

1793. Re: Wondering if solder will wet etched glass?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <36C4FA7A.2ADE@csolve.net>
Source record: 73518
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

James Meyer wrote:

[...]

>
> The old proximity fuses were built with vacuum tubes too. They were
> rugged enough to survive being used in mortar shells.
>
> Jim

See "Crosley's Secret War Effort", the development
of the proximity fuse:

http://www.ggw.org/cac/Proximity_Fuze.html

Best Regards,

Michael R. Monett,
Automated Production Test
mailto:add@csolve.net

1794. WTB 6 PIN TUBE BASES, LESS THE TUBE. WA0ABI

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <18776-36C4F5EC-99@newsd-152.iap.bryant.webtv.net>
Source record: 73519

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1795. Re: Capacitor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <18775-36C4F3FE-144@newsd-152.iap.bryant.webtv.net>
Source record: 73520

BETTER BUY A BOOK.

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1796. Simpson v.o.m. Manual f.s.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <7a30al$9fk$1@news.ispn.net>
Source record: 73521
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap

For Sale:

Simpson 250, 260, 270 series original manuals - many different specific models.

$5.00 ea.

Ron, W0NYQ

1797. Re: Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-12 00:00:00 UTC
From: Kevin White <kevinwhite@earthlink.net>
Message-ID: <36C505FA.C817B603@earthlink.net>
Source record: 73522

There was an article in the January 54 issue of Wireless World
describing exactly this approach. You have to "form" point contact
transistors with a high voltage pulse before they will function and the
circuit arrangment required is radically different from that needed for
junction transistors.

I can email you a copy of the article if you wish.

cheers

Kevin White

Doug Hancock wrote:

> Having constructed several homebrew receivers with discreet parts and
>
> ic's, I think it would be very interesting to build one with homebrew
> amplifying devices. I thought a triode would be the simplest to try ,
> even if it worked only for a short time. But im not a glass blower, so
>
> thinking the next most feasible device would be a point contact
> transistor, I took apart some germanium diodes (1N34) and tried to get
>
> some amplification. I fooled around placing the two cat-whiskers very
> close together on a single piece of germanium while using the
> germanium
> as base. Using a volt ohm meter for my test instrument (I dont own a
> scope) , I couldnt seem to get any amplifying effect. Even tried
> changing polarities and cat-whisker pressure.
> Now from what Ive read, the newer point contact transistors seem to
> have been fused together , creating holes or electrons. But I dont
> think
> the first ones were.
> I would like to know if any one out there has experience with this ,
>
> any other amplifying device useful at rf,or any suggestions. Thanks.
> Doug N0WVA

1798. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: mortis421@aol.comspam
Message-ID: <19990212224833.01973.00000791@ng138.aol.com>
Source record: 73523

>Keep in mind that by the time you finish designing your reciever, there
>will surely be a few parts that Radio Shaft no longer carries :)
>
Or You'll just have to "ORDER" the parts from their warehouse... It's called "RSU" Or Radio Shack Unlimited... Unlimited is correct... the prices are HIGH! Also TECH America is a catalog Tandy puts out with similar part numbers... If you see one you'll know what I mean.
I worked for the "Corporation" for just about 2 years... If the pay was higher... I'd consider going back... I felt I was one of the few guys that would help customers... To this day I speak to some of my "shackie" friends and one manager has told me some of my customers still ask for me... this was 3 years ago!!

"It's better to be thought a fool, than to open one's mouth and remove all doubt."

1799. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <D3ax2.2547$xu3.1215@news9.ispnews.com>
Source record: 73524

Johnson wrote in message ...
+AD4-Trying to find info for substitution or a source for transistor CP640.
+AD4-Appears to be a JFET in a TO-5 case. Logo on case looks like +ACI-C+ACI-. About
1980
+AD4-vintage. Would appreciate any help.

If I remember correctly, it was made by Teledyne Cyrstalonics. It think it
dated more like 1985 or so.
It is a high current device and was used as +ACI-bullet-proof+ACI- wideband
receiver RF amplifiers.

I know of no sources for anything similar today. One possibility would be
to parallel several conventional JFETs.

I have a data sheet somewhere but it might take months to find it+ACE- :-)

73, Barry L. Ornitz WA4VZQ ornitz+-U+AEA-dpnet.net

1800. Re: Amplifier Help Needed 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: Robin Greenwood <robin@g3lba.freeserve.co.uk>
Message-ID: <7a3kdajoo1@news4.svr.pol.co.uk>
Source record: 73625

Because of the slow power drift down it sounds like something is getting
hot! Maybe is changes a capacitor somewhere?
G3LBA

1801. Re: Amplifier Help Needed 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <36C55A30.85EE695D@ameritech.net>
Source record: 73626

OK so something is changing;
0.) Did you have this problem with 120VAC input? If not you might have something wrong with your transformer or PSU
1.) What is your SWR into your amp? Is your rig shutting down as the input circuits warm up? as the tubes get to their real operating temp?
If yes use a separate tuner between the '570 and amp and see what happens or retune your '570 after "warmup". . . however, the auto tuner may not be able to do the job after the tubes get hot. . .
2.) Does your PSU voltage sag under load more when your power is "drooping" (see 0)
3.) Is your dummy load overheating and presenting a different load to your amp? (get a bigger d/l)
4.) What color are the plates of your tubes while your power is "drooping". Does your Ip also sag?
The tubes could be doing their thing correctly and you have a series component from the PSU to the anode that is changing value under load. OR if your tubes are redding up nicely and your power out is decreasing look at your output network for components (probably a cap) that are flaky under load. (unfortunately, this is a replace and try function)
5.) Can you smell anything from the amp while you are operating at full power? If yes what does it smell like? Acrid? Sweet? Like paper burning? Like tar?
Lemme know. . .
Art k9xf

Scott Gordon wrote:

> Here is some background. The amp is running two 3-500Z. I just changed
> out the power supply from 100v to 220v.
> Let's take 40 meters into a dummy load:
> I thought I may have a soft tube, but now I don't think so..
> 1 - Tube installed driving from the Kenwood TS-570 100 watts of power
> using the auto tuner for my tuned inputs.. 1100 Watts out on 40 m
> I can put the other tube in and replace this one and get the same
> thing. I key down and talked for 20 min in the dummy load on each tube
> and they hung in there at 1100 watts. I have since tried each tube
> seperatley in both sockets. Same thing 1100 Watts.
> If I put two tubes in there retune the the auto tuner and the amp, I get
>
> nearly 1500 Watts out. But this never last very long. It keeps falling
>
> back to 1000 to 1100 watts with two tubes.
> Now I understand I am really driving that one tube with 100 watts less
> some percent of loss via the auto tuner. And when I put two tubes in
> there impedence changes and now I am only driving each tube half the 100

>
> watts or so.
> So straighten me out? Why am I seeing 1400 to 1500 at the beginning and
>
> then it falls back with two tubes? But with one tube it stays pretty
> constant at 1100?
> Any info would be appreciated,

1802. FS Amperex 5894, Military Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: Lucian Rusu <rusu@bnr.ca>
Message-ID: <36C55D69.1035902@bnr.ca>
Source record: 73627

Absolutely never used, original boxes, gold pins.
About $40/pce.
Also a wide variety of NOS military tubes (CV2243, 2209, 2128, etc).

1803. Cable TV Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: ronh1@idt.net
Message-ID: <36c58ba6.1439027@news.idt.net>
Source record: 73628

What is the designation for the cable TV connectors generally used in the home? Also, is there a web page that shows how to connect them to the cable?

1804. Re: Grid Dip Meter Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <7a4ieq$p7i$1@nnrp1.dejanews.com>
Source record: 73629

In article <36c43299.1352967@news.azstarnet.com>,
n7ws@azstarnet.com (Wes Stewart N7WS) wrote:
> On Fri, 12 Feb 1999 01:38:11 GMT, 8877@my-dejanews.com wrote:
>
> >In article <bchv2.503$VQ5.9145146@news1.i1.net>,
> > ddoss@<nospam>i1.net wrote:
> >> Can anyone explain the procedure for using a grid dip meter for
> >> checking resonances in amplifier tank circuits, chokes, etc? I know a
> >> little about the principle of the dipper, but need some clarification
> >> on the exact procedure.
> >>
> >> TIA - Dan
> >>----------
> >DO NOT USE IT !!
> >Instaed use a noise bridge.
> >The GDM is an oscilator that is adjusted with the dial to a certain frequency
> >And it runs prety stable on the selected frequency. when coupled to a resonant tank
> >the load kills the oscilation, the grid curent went up (the old days of tubes) and the
user took a measurement.
> >Before the oscilation died because of the heavy coupling, the oscilator changed
frequency, some times A LOT!
> >Therefor the grequency it was set and the frequency it died, to give an indication can
be from wide, to
> >very wide.
> >A noise bridge on the other hand, generates a wide band noise, you tune a receiver to
the dsired frequency, and
> >adjust the tank until the noise goes down on that frequency. this way you KNOW what
frequency you are working.
> >CT
>
> Please disregard everything posted above. The poster soes not know
> what he is talking about.

Having a roomful of equipment and knowing what they do should go together, in
my lifetime I have seen a lot, including arogant people who (know better).
It does not bother me a bit, from what you say, it is not me that is
rediculed, so why wory? Only one thing, while cuting coils for a ten meter
amplifier, and if you do it with your trusty GDO turn your reveiver on and
mark down the drift, of the GDO, from very light coupling to enough coupling
to know you are coupling to the coil under test. When you do the same on two
meters where even the chassis its' self can be resonated, well! i guess a few
kilohzrtz like perhaps 10 is of no impotrance, specialy if you have a roomful
of equipment

Throw the GDO, better yet sell the darn think in the next fleamarket.
CT
> 73,
> N7WS
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1805. VHF Oscillator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: im@home.now
Message-ID: <36c5e9e1.5520342@news.atl.mindspring.com>
Source record: 73630

Hi all I am in the process of designing a vco type vhf
oscillator based on a N ch J fet. ... It is very similar to a
common clapp type oscillator.... 60 - 75 mhz

Normally one would couple the rf from the source of the jfet to
the next stage buffer via a coupling cap of a few pico farads.

My question is has anyone had any success in using a 4 to 1
transformer for this conected in series with the drain of the
fet and the power supply...Thus the secondry of the transformer
would feed the next stage through inductive coupling thus providing
better isolation for the oscillator...

Also how would one go about calculating the correct type of
transformer for this application. I had in mind using some micrometals
broadband bauin cores...

Its kind of an odd ball question but hopefully some of you might
be able to provide some help...

Thanks Jd....

1806. Re: Cable TV Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36c6ff46.72972001@netnews.worldnet.att.net>
Source record: 73631

If memory serves they are F/59, F/56, and F/56QS.

F/59 is designed for RG/59 coax, F/56 for RG/6, and F/56QS for RG/6QS (Quad Shield).

I haven't seen such a Web page but if you pick up a package at a local RadioShack there is a fairly decent instruction set on the back of the blister pack.

On Sat, 13 Feb 1999 14:29:09 GMT, ronh1@idt.net (Ron Hellmann) wrote:

>What is the designation for the cable TV connectors generally used in
>the home? Also, is there a web page that shows how to connect them to
>the cable?

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

1807. Re: VHF Oscillator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990213174546.18597.00001283@ng93.aol.com>
Source record: 73632

JD wrote:

>I am in the process of designing a vco type vhf
>oscillator based on a N ch J fet. ... It is very similar to a
> common clapp type oscillator.... 60 - 75 mhz

...
>My question is has anyone had any success in using a 4 to 1
>transformer for this conected in series with the drain of the
>fet and the power supply...Thus the secondry of the transformer
>would feed the next stage through inductive coupling thus providing
>better isolation for the oscillator...
>

I assume it's on 60-75MHz, not mhz. Sure, transformers work fine for coupling. As for better isolation, you my wish to consider running the drain into a common-base stage to really get better isolation. Otherwise, you'll find that changing the drain load will surely change the oscillator frequency anyway. Then it's a matter of design: what load do you want to present to the collector of that common base amplifier (or to the drain of the jfet)? You can use whatever turns ratio you want (well, over some range anyway) to transform impedances. It doesn't have to be 4:1. Seems to me there is an example of transformer coupling out of an LC oscillator in the ARRL "Solid State Design" book, in the 2-transistor 10MHz oscillator.

73,
Jay

1808. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36c59e6a.1890178602@news.online.no>
Source record: 73633

On Sat, 13 Feb 1999 02:43:06 -0500, "Barry L. Ornitz"
<ornitz+U@dpnet.net> wrote:

>
>Johnson wrote in message ...
>+AD4-Trying to find info for substitution or a source for transistor CP640.
>+AD4-Appears to be a JFET in a TO-5 case. Logo on case looks like +ACI-C+ACI-. About
>1980
>+AD4-vintage. Would appreciate any help.
>
>
>If I remember correctly, it was made by Teledyne Cyrstalonics. It think it
>dated more like 1985 or so.
>It is a high current device and was used as +ACI-bullet-proof+ACI- wideband
>receiver RF amplifiers.
>
>I know of no sources for anything similar today. One possibility would be
>to parallel several conventional JFETs.
>
or use P8000 (Texas instruments?)
According to G4DGU at Mutek J310 has 20mmho forward conductance with
18 ohm source resistor, but certainly not 100 ohm as Yaesu seems to
believe

73 Jan-Martin LA8AK
now using win98 and Free-Agent

1809. WTB: 24VDC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be5790$4c7fbea0$01eee6ce@kovar.inav.net>
Source record: 73634

I need some 24VDC power supplies for testing some Telco stuff here in Iowa
Any one have anything With 10 amps capacity or better.

Thanks,
--
Jack Kovar
k0var
Iowa

1810. Wanted: 6550's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: Digital InterActive Solutions <bna@interactivesolutions.net>
Message-ID: <7a5af9sbh1@ligarius.ultra.net>
Source record: 73635

I'm looking for some good to new 6550 tubes. Thanks.

Nick W1QLF

w1qlf@reinventtech.com

1811. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <36C63E7A.4722@northwest.com>
Source record: 73636

Teledyne Crystalonics refuses to sell in quantities under 5000pcs. Been attempting to buy small lots from them on and off since 1988. Teledyne sell these parts to OEMs ****only***, not to consumers, as I was told in 1993 by Teledyne.

U310 or the (obsolete?) P8000 are the most likely substitutes.

Good luck.
==========
dan rae wrote:
>
> Johnson wrote:
> >
> > Trying to find info for substitution or a source for transistor CP640.
> > Appears to be a JFET in a TO-5 case. Logo on case looks like "C". About 1980
> > vintage. Would appreciate any help.
> > Thanks, Greg K3EWZ
> Greg,
> It was a power fet made by Teledyne Crystalonics in Mass. Phone # was
> (617)491 1670. I have no idea if the company is still in business.
> This and the others in the series were designed for low IMD high dynamic
> range vhf/hf RF amps in the common gate configuration, and were pretty
> unique. I don't think there are any modern equivalents. The CP640 and
> 643 were often specified for high end RF stages around that time (for
> example in Rhode's Transceiver design in Ham Radio magazine in 78)
> You can get similar performance now in other ways but the simplicity of
> the designs that these fets made possible was nice. A single grounded
> gate fet with matching transformers gave you +40dBm Intercept, +20dBm 1
> dB compression, a pretty good noise figure of 2.2 dB and a swr of less
> than 1.5 to 1 from 0.5 to 50 MHz.
>
> If you find an equivalent I'd be happy to hear about it!
>
> 73,
>
> Dan AC6AO / G3NCR

1812. Re: mods needed for kenwood ts830s and vfo230

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <36C5F5BB.93F7739E@tir.com>
Source record: 73637

W. Dean Milner wrote:

> x-no-archive: yes
>
> Bill <whagen@NOREPLY.inreach.com> wrote:
> >Yes, that would be obvious to anyone that knows anything. What I meant
> >was the medium wave band, the AM band, below 1650. Currently the low end
> >of the recieve is about 1400 kilocycles. I would like to know if there
> >is a way to extend the recieve freq of the vfo230 to below this value.
>
> I didn't reply to the original post as I didn't have an answer. In
> reading this it just came to me something you might consider trying.
> The TS830S has a position on the band switch for an Auxiliary band
> setting. The requirements for the coil that needs to be installed, are
> I beleive in either the regular or service manual. I had originally
> intened to try putting 6m here as I had heard that some had doen that
> mod (although I have never found any details on it) but I don't see
> why adding a band at the low end wouldn't work as well.
>
> Just a thought.
>
> 73 de VE1CBF
>
> Dean
>
> Note: remove the (.ns) from the user id before emailing.

My older Kenwood is a very different model, but has the "auxilliary" band
switch position, too. I would recommend using that for the mw band coverage.

Bill KU8H

1813. Re: Charging NiCads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-13 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <36C5FAF3.405FC09A@tir.com>
Source record: 73638

fantbb@yahoo.com wrote:

> Want to build my own nicad power pack for my NorCal 40A. I have some 12VDC
> wall cubes laying around to use with it. What I would like to do is make sure
> I have nicads charged up for whenever I want to operate portable. The battery
> holder I am using can take either AA nicads or AA alkalines. Are there some
> construction projects some where out there on the internet that I can take a
> look at? Sources? Past experiences of others here? Thanks for any and all
> help!
>
> Jeff Jones
> AB6MB
> NorCal QRP #65
> CW Forever!!!
>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

Jeff,

I'll let somebody else point to the project sites. I have used packs for AA cells in various projects. The idea works great but you must keep in mind that alkaline cells have about 1.5 volts per cell and ni-cads provide about 1.2 volts. Stacking them in series to achieve higher voltages emphasizes this difference.

Six alkalines will give you 9 volts, but if you substitute ni-cads you will only have 7.2 volts available. Eight alkalines give you 12 volts... ni-cads 9.6 volts. This is not a problem if the circuits will work at the lower voltage and you will be satisfied with reduced power.

Engineering from the other direction.... ten ni-cads will give you 12 volts. Put alkalines in the same pack and 15 volts are applied to your rig. Still not a problem if the rig can take it.

Assuming something like a "12 volt rig" consider using a nine cell pack. Ni-cads provide 10.8 volts and alkalines give 13.5... inside the range usually specified. Some commercially available equipment is supplied with dummy AA cells to reduce the voltage when using alkalines just because of this.

I build the pack for a cell count that will give acceptable results with either cell type. Commercial equipment may be designed to run from the "12 volt" automobile system. These thrive on 14 or 15 volts... so design for that.

All you need now is the info about how to care for and feed your new battery packs :)
Next post?

73,

Bill KU8H

1814. Motorola Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7a52r3sqg1@lola.ctv.es>
Source record: 73639

Hi all,
take a look at my homepage for a simple programming interface for the
Motorola GP300 and GM300 etc.

--
Take a look at my homepage, the URL is:
http://web.jet.es/colinlowe/index.htm

1815. Re: VHF Oscillator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: im@home.now
Message-ID: <36c6461f.1248310@news.atl.mindspring.com>
Source record: 73640

Hi jay thanks for the tip.... I am unsure of what would be a suitable load for the drain of the j-fet or collector of a transistor in this case. Is there a specific rule of thumb or a more precise way to calculate this...

thanks JD...

>changing the drain load will surely change the oscillator frequency anyway.
>Then it's a matter of design: what load do you want to present to the
>collector of that common base amplifier (or to the drain of the jfet)? You can
>use whatever turns ratio you want (well, over some range anyway) to transform
>impedances. It doesn't have to be 4:1. Seems to me there is an example of
>transformer coupling out of an LC oscillator in the ARRL "Solid State Design"
>book, in the 2-transistor 10MHz oscillator.
>
>73,
>Jay
>

1816. radio conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19990213225333.18056.00001179@ng-fb1.aol.com>
Source record: 73641

I have an old midland 13-892 ssb cb... I have heard of converting some of these older radios for 10 meter use... I believe there is a formula for the determination of crystal frequency useage... Any guys out there with info..
tnx
bill

1817. Re: TEN METER DIPOLE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: cb711mack@aol.com
Message-ID: <19990213233500.13934.00001404@ng90.aol.com>
Source record: 73642

Do like someone else suggested, and use the calculation for a half-wave dipole ...Divide 468 by the frequency you work the most, make the antenna using 12-14 guage wire, someone suggested hooking the soldering the coax to each leg, here is what I do, I get a cap(plastic) from a 20 ounce coke bottle, I drill three holes in it, one the size of the coax at the bottom, and one on each side 90 degrees from the big hole, feed each leg into the smaller holes, and make a small loop in the end that is inside the cap, feed the coax in the one larger hole, solder the center to one leg, the sheild to the other, pull the legs till they are tight, then either fill the cap with wax and tape it up or mix up some(J-B Weld) epoxy cement, and fill the cap up, let it harden, this makes it resistant to water and stress, solder some crimp on lugs on each end of each leg. This gives you something to tie off too.You might mark one leg as the center conductor if you choose to run it vertical, the center goes up.
I use a vertical dipole similar to this in design with 50 ohm cox with no problem. If you want, what I suggest is making the legs a bit longer, then gradually cutting them down till your SWR is flat. I have had great luck with this type of antenna, and it is entirely possible to get a flat SWR, the key to it is the spacing between the legs(where the coax attaches, the cap is just about perfect distance and the angle relative of the coax relative to the legs, experiment with it, the 50 ohm would be at a 90 degree angle from the legs). I use electrical conduit or copper water pipe instead of wire, handles alot of power, and RF likes "the skin effect" and it likes copper(coax solders to it easily). I read somewhere that the bigger diameter of the conduit/pipe made the antenna more broadbanded, but I am not so sure of that. Anyone have a guess??
CB711MACK@aol.com

1818. EBAY-Heath"twoer" $16, 22 hrs left!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990214001357.15895.00001455@ng-fp1.aol.com>
Source record: 73643

Check out this Twoer, looks like new!
Only 22 hours to go and its only $16 so far!
URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=64908487
Thanks es 73..........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

1819. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7a5ti6$7pn@newsops.execpc.com>
Source record: 73644

In article <36a3e082.3029132@news.io.com>, maddog@io.com says...
> Could the AC line be used as an endfed receiving antenna? Given that
> most houses have 50-100 ft of wiring between the house and pole
> transformer, does this imply that the performance would be similar?
> How would one best (and most safely) couple to it?

Yes. I did it for years. It's stupid and dangerous but it does work. The antenna is very simple

Take a piece of zipcord about 20 feet plus some. Use cord that you can ***CLEARLY*** make out which wire is which. I used the kind with the transparent cover and one copper wire one silver wire (maybe it was speaker cable. I dunno. It was in the junk box)

Strip off 10 feet of silver wire from one end and 10 feet of copper from the other end. It should look like this (not to scale):

```
-------------------------
-------------------------
10 feet 20 feet 10 feet
```

Put an electrical plug on one end and the antenna connector of your choice on the other end. Tape the ends of that middle section WELL.

Let's recap here. You have a single wire going to a single electrical blade on a plug and ONLY THAT. You also have a single wire connected to your radio. These wires are not connected to each other in any way whatsoever except for the insulation between them. There is no electrical contact between the wires. The ONLY contact between them is the insulated middle part. Tape the cut ends on that 20 foot section ***WELL*** and check it with your ohm-meter a bunch of times to make SURE there is NO electrical contact between the far ends of this thing.

There you go. I found the blade works best in the hot side of the outlet most of the time but sometimes putting it on the other side is actually better. I don't know why.

You can wrap that middle section in tinfoil to improve the capacitive connection a bit. It works great. It's better than my attic-wire.
(RECEIVE ONLY. DO NOT TRANSMIT WITH THIS!)

DISCLAIMER: THIS IS A REALLY MENTAL IDEA! DON'T DO IT!
IF YOU SCREW UP YOU WILL RUN 120 VOLTS INTO YOUR RADIO AND MAYBE KILL YOURSELF!

Sorry for all the yelling but I want to be clear about those points. :)

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1820. Re: VHF Oscillator Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990214023106.23308.00001397@ng96.aol.com>
Source record: 73645

JD wrote:

>Hi jay thanks for the tip.... I am unsure of what would be a suitable
>load for the drain of the j-fet or collector of a transistor in this
>case. Is there a specific rule of thumb or a more precise way to
>calculate this...

If you put a load directly on the oscillator transistor, try to make it as unvarying as you reasonably can. The idea of the common base stage as a drain load for the jfet is that the load it presents to the jfet is pretty constant, even though you may change the loading on the output from the collector of the common base stage. As for what a reasonable load for the common base stage would be, you'd generally not want it to saturate or come close to saturation. Then the load depends on the voltages and currents involved. For example, if you hold the base at +8 volts (the emitter then being at about 7.3 volts or so, and therefore the drain of the jfet is also at 7.3 volts, being directly connected to the emitter) and you have an overall +20 volt supply, and if the peak jfet current is 5mA, then you might reasonably put a 1500 ohm load in the collector of the common base stage. That would result in a minimum collector voltage of about 12.5 volts (20 volt supply, minus 1500 ohms times 5mA), for about 5 volts minimum drop across the output transistor, keeping it well out of saturation. But if your peak jfet current is 20mA, then you'd want to use a much lower load impedance to avoid saturation. Similarly, if you run on lower voltages, you'd want lower load impedances. In other words, there's no single correct answer. And the voltages and currents you choose (along with the load impedance) determine the power you'll get out. What you need depends on what you are trying to accomplish.

73,
Jay

1821. super xstal set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7a5v05$7pn@newsops.execpc.com>
Source record: 73646

Greets

I'm in the mood to build a super xtal set. I just know (hope) there are plans available to build a set that can wring every last little bit of power out of the signal. Maybe even enough to drive a speaker rather than those cheap little earplugs.

If it could go into the SW bands all the better!

Stupid question: Why are they all AM? Can't you build an FM xtal set?

Thank you

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1822. Re: Antenna question: DX-398

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7a63o2$8gv@newsops.execpc.com>
Source record: 73647
Cross-posted to: rec.radio.amateur.antenna,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <79e7ma$7pr$1@msunews.cl.msu.edu>, kh34@hotmail.com says...
> Would you go with either of the Shack antennas for this model, or would you

No way. You can MAKE a shortwave antenna for next to nothing.

1) Get as much wire as you can.
2) Mount it as high as you can.
3) Have fun.

Really. That's all. Run it around the room. Run it across the yard. Throw it in a tree. Drop it out the attic window.

As for the radio end, if you have an external antenna connector on the radio then find a plug that fits and solder the antenna wire onto it. If you don't, then use an alligator clip and clip it onto the built-in antenna.

About active antennas, sometimes they help, sometimes they hurt. They will amplify the noise as well as the signal and sometimes put too much signal into the front end of your radio. If you really want one you can MAKE one for about $0-10 depending on where you get your parts (new or from a junkbox).

Try http://www.ee.washington.edu/eeca/circuits/activeant.html

This one looks just like a device called the "TinyTenna" that some guy on the web is selling for $20. Some people like it, some hate it. I don't know the TT website URL. I don't know from Tinytennas, but I won't pay $20 (plus $5 shipping) for something I can make myself for FREE or close to it anyway. The only thing a guy might not have would be the MPF102 transistor.

I've seen this curcuit in magazines too. It's actually an impedence matcher. That makes sense. A random-wire antenna has a very high impendence. Your radio has a very low impedence (50 Ohms). If you can match them you'll get more signal power into the radio.

Also check out the rec.radio.shortwave newsgroup. Just don't say "tinytenna". Some jerk has been spamming us with hundreds of testimonials and other crap.

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1823. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: "Robinson, AB5VH" <rc@crusoe.org>
Message-ID: <7a68oj$ij7$1@news-1.news.gte.net>
Source record: 73648

Yup, that's right... it is make by sangean. I was just at the Rat Shack this morning and the dx-390 has the cassette so mine was a dx-380. not sure what sangean's model number is for that rx. Yeah, other than the front end being way too delicate for anything but sitting on a shelf in the box it came in, it was a decent receiver. But you know there must have been thousands brought back to the store with blown front ends... yet they still sel the damn things. So why not fix the design, instead of fixing the radios one by one?

--

-Robinson- (AB5VH)

for radio, maritime, and locks stuff go to:
http://crusoe.org and
http://www.geocities.com/capecanaveral/galaxy/7982
and my NEW, IMPROVED, BIGGER site at:
http://www.geocities.com/~robinsonab5vh/

dit diddy dit dit
---

hinermad@my-dejanews.com wrote in message
<7a1cie$4om$1@nnrp1.dejanews.com>...
>In article <79udf9$9ns$2@news-1.news.gte.net>,
> "Robinson, AB5VH" <rmcrusoe@do.not.spam.me.gte.net> wrote:
>> OTOH, I had a SWL Receiver from RS, I think the model # was DX-390 or
>> DX-380. Anyway, it was a mid size portable with BFO and no casette
recorder
>> built in. I actually used this as my first ham receiver, in conjunction
with
>> a crystal transmitter using a 2n2222 and a 2n2222A. Actually made a few
>> contacts with that clumsy lashup. Anyway, this was in a marine
environment.
>> The antenna was at about 85 feet. The static generated by the wind,
spray,
>> etc on my 40/15M dipole trashed the front end. There is evidently some
>> pretty delicate pre-amp circuitry there. I eventually ran the feedline
>> directly to the mixer and got it working again, though with rather
reduced
>> sensitivity.
>
>If I recall correctly, the RS DX-390 is built by Sangean. They use a couple
>of JFETs in the front end as preamps, and they are very sensitive to static
>discharge. I worked for a time in a Ham / SWL repair shop, and that was

>probably the most common repair for many of the Sangean portables, the Sony
>ICF-2010, and the occasional RS portable SW that came in. We had a
>"calibrated" AM broadcast station in town that we used for testing the
Sony -
>if it read S9 or better, the FETs were OK. If it read S4-5, one FET was
>blown. If it read S2 or less (or was inaudible) most likely both FETs were
>shot.
>
>While we tried to use original manufacturer's parts for repair, we found
that
>the venerable MPF102 was a suitable replacement. It seems to me, though,
that
>the FET pin arrangement was different, requiring leads to be swapped around
a
>bit. I think - I may be mistaken.
>
>Still, the Sangeans were generally decent SW radios for the money.
>
>Dave
>
>>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1824. Need variable vac. capacitor!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: syversen@online.no
Message-ID: <7a6dfcfpm1@readme.online.no>
Source record: 73649

Hello, do anyone have a variable vacuum capacitor 200v 1000pf aprox.
for sale?? the last part to complete my homebrew HF amp.
tnx in advance de Frode LA9WDA

1825. Design of a frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7a6hvt$qkc@eldborg.rhi.hi.is>
Source record: 73650

Hi

I'm in the process of designing/building a DC receiver for 14Mhz.
I'd like to add to it a display that shows the frequency of the
local oscillator. I was wondering how to design a frequency
counter for that purpose. My ideas so far are:
Use the signal from the LO to drive a binary counter for
a given period of time (f.x. 1 sec), when the time has elapsed, convert
the state of the counter to BCD digits and show on a display.
The counter and all other logic would be built using standard
TTL components or programmed on a PAL chip.

Any comments or references (web pages) to a similar design?

TIA
Hrafnkell
--
//----------------------//---
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

1826. RCA Series 700 UHF Repeater, need shop manual.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: ggately@my-dejanews.com
Message-ID: <7a6ttkjup1@nnrp1.dejanews.com>
Source record: 73651
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur

I have an RCA Series 700 UHF repeater. I
am looking for a a service, shop manual for it.
I need information for tuning up the RX/TX sections
and basic controller wiring (RX/TX audio, PTT and
REC COR) tap off points, for my external (CAT 300)
controller.

If you have such a manual for sale, or could copy
the appropriate sections and mail or fax them to me, I
would gladly pay for these services.

Thanks;
A-American Inc.
Gregory Gately (K9OYO)
Brookfield, Il. 60513
(708) 387-2474
(708) 387-2475 (FAX)

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1827. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <36C7253D.5647@ruraltel.net>
Source record: 73652

Hello,

It's a bit late to redesign something after it's out the factory door.
Why they still sell what thet still have I don't know. Perhaps the
right RS personell in position of power do do something isn't aware of
the problem, even then the choices are limited what they can do with
remaining inventory, to strike a balance between customer satisfaction
and company profit.

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net
Robinson, AB5VH wrote:
But you know there must have been thousands
> brought back to the store with blown front ends... yet they still sel the
> damn things. So why not fix the design, instead of fixing the radios one by
> one?
>
> --
>
> ----------
> -Robinson- (AB5VH)

1828. A:\ drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Henry Knoll <knoll003@tc.umn.edu>
Message-ID: <36C71B8F.B93@tc.umn.edu>
Source record: 73653

I have a situation that just started. When I place a disk in the 3 1/2 floppy A drive I get a "Drive not ready" message. If I re-boot, everything is OK. Anyone know what the problem is?

I'm running a P2-350Mhz, 64M RAM, Intel MB, and have checked the cables to make sure they are secure.

Thanks Henry

1829. NOS 3-500-Z tube, unused, original box FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990214143632.13935.00001566@ng90.aol.com>
Source record: 73654

Hello, one new OLD stock , unused 3-500Z, G.E., in it's neat, if lightly aged original, oversized box for sale. Tube is beautiful. 120.00 includes FREE INSURED SHIPPING in the continental USA.
Thank you,
Joe Pratt, Tubecntral@aol.com

1830. Re: Capacitor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: adam@onramp.net
Message-ID: <MPG.1130e85e350b4e6198968a@news.onramp.net>
Source record: 73655
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I want to thank everyone for the very detailed and informative responses
I have received about my questions. There were too many to respond to
individually, so please accept my thanks for your time and effort.

Adam, KM5SS

1831. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36c6ae7b.1959838345@news.online.no>
Source record: 73656

On Sat, 13 Feb 1999 19:09:46 -0800, larryc@northwest.com wrote:

>Teledyne Crystalonics refuses to sell in quantities under 5000pcs. Been
>attempting to buy small lots from them on and off since 1988. Teledyne
>sell these parts to OEMs ****only***, not to consumers, as I was told in
>1993 by Teledyne.
>
>U310 or the (obsolete?) P8000 are the most likely substitutes.
>

believe I have seen BF246(A,B,C) mentioned as a variant of P8000
now using win98 and Free-Agent

1832. Re: Cable TV Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Lee <lela@ficom.net>
Message-ID: <36C7448A.E54AC760@ficom.net>
Source record: 73657

Ron Hellmann wrote:

> What is the designation for the cable TV connectors generally used in
> the home? Also, is there a web page that shows how to connect them to
> the cable?

these are "F" connectors. there exists a large variety, the most common you will find is a one piece design that you would need the correct size of "hex" crimpers to attach the connector to the cable (matching the correct connector size to the specific cable, i.e. rg-59,rg-6, single braid, double braid, single foil, double foil, etc.) usually available at a local source would be a "screw-on" type that needs no special tool other than a knife and fingers to attach. try radio shack, walmart etc. if the cable company put the connectors on themselves, most of them have started using a two piece compression fitting that minimizes rf leakage (if properly installed) these require a tool specific for the brand of connector... so even if you could talk your local catv tech into a handfull of them, without the tool it is almost impossible to attach them. if you have several to attach to coax, radio shack has a prep tool for about $10, and a hex crimper for about $15 that will work with their coax, or most single braid, single foil rg-59 or rg-6. i believe the instruction are on the back of the package for the prep tool. sorry if this is 'too much info' on your question.

jim messerli n0tbv operating my xyl's computer

1833. WTB: Large Prop pitch motor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <GIHx2.234$0r2.557355@brnws01.ne.mediaone.net>
Source record: 73658
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I'm looking for a large prop pitch motor, the one with the 6 inch
diameter motor housing cover. Any one have one available?
Thanks!
Chuck...K1KW

1834. WTB: TRS-80 Model I

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Alan <alan.diaz@snet.net>
Message-ID: <7a7q1f$k9s@news1.snet.net>
Source record: 73659

I'm looking for a Radio Shack TRS-80 Model I...yes, Model I. It's a nostalgic request for something to add to my other dusty artifacts. If you have one and you want to dust it off and sell it, please respond to chipsndips@snet.net.

Alan

1835. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: John Lundgren <NOlundgrejSPAM@mail.rsccd.org>
Message-ID: <36C77600.70E6@mail.rsccd.org>
Source record: 73660
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Scott Stephens wrote:

> I want to tune a HF-UHF (10 MHz - 10 GHz) oscillator(s) a wide a range
> as possible, for my super-grid dip meter. Hyper-abrupt varactors and
> FET/Gasfet switched capactitor/inductors and/or descrete oscillators
> seem to be the best way to do this. Mixer schemes and YIG's are to
> expensive & complex.

> Isn't there some way to use capacitance multiplier, inductor
> simulator, or gyrator method to expand the tuning range of a varactor
> diode? This would involve a discrete transistor implementation, in
> contrast to Op-amp implementations I've seen.

> Could current-feedback op-amps be used? I've not seen any
> implementations.

> How about gain-tuning? I've seen state-variable filters gain or
> attenuation tuned. But once again, op-amps were used under 1 MHz.

I think it's wishful thinking to expect to get to 10GHz with lumped
constant devices.

I've seen simple circuits go from 10MHz to a couple hundred MHz. But
whatever you use, it will have to have some ALC.

> Any good references?

> Thanks,
> Scott Stephens, KB9ETU

--
Please remove NO and SPAM from my email addr to reply.
--
@@@@@@@@@@T@h@e@@I@n@t@e@r@n@e@t@@w@a@s@@c@o@o@l@@u@n@t@i@l@@@@@@@@@
@ John Lundgren Elec. Tech, Info. Tech. Svcs.| lundgrej <AT> mail @
@ Rancho Santiago Community College District | .rsccd.org @
@ 17th St. at Bristol \ Santa Ana, CA 92706 | www.rsccd.org @
@ My opinions are mine, NOT my employer's. |PGP key avail on req@
@ "Everything is InterTwingled" - Ted Nelson in ComputerLib @
@@@@@@@@@@e@v@e@r@y@o@n@e@@f@o@u@n@d@@o@u@t@@a@b@o@u@t@@i@t@@@@@@@@@@
I am a California Resident and ALL California Junk Email laws apply.
You must meet _all_ Calif Anti-SPAM laws. See www.leginfo.ca.gov
and search for 17538.4 in the business and professions code.

1836. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7a7u1c$8ad$1@winter.news.rcn.net>
Source record: 73661

This is dangerous, do not do it. A capacitor would have at least
a 3kv rating to be used safely on AC lines, and would be under
.01 mfd to limit AC currents.

Tony Hwang <2810311762@home.com> wrote in message
<36C7725E.5569630D@home.com>...
>Hi,
>You can pick a hot side of the house wiring, in the wall plate the side
>where narrower plug goes in, couple it thru a GOOD quality capacitor
>with at least 600 volts or so rating to antenna terminal. When I was a
>kid building crystal radio set, I used to do this all the time. Thru
>the cap. AC voltage is blocked but RF signal gets thru.
>
>Harvey W. Harbicht (http://come.to/stupidlaratricks) wrote:
>>
>> In article <36a3e082.3029132@news.io.com>, maddog@io.com says...
>> > Could the AC line be used as an endfed receiving antenna? Given that
>> > most houses have 50-100 ft of wiring between the house and pole
>> > transformer, does this imply that the performance would be similar?
>> > How would one best (and most safely) couple to it?
>>
>> Yes. I did it for years. It's stupid and dangerous but it does work. The
>> antenna is very simple
>>
>> Take a piece of zipcord about 20 feet plus some. Use cord that you can
>> ***CLEARLY*** make out which wire is which. I used the kind with the
>> transparent cover and one copper wire one silver wire (maybe it was
>> speaker cable. I dunno. It was in the junk box)
>>
>> Strip off 10 feet of silver wire from one end and 10 feet of copper from
>> the other end. It should look like this (not to scale):
>>
>> -------------------------
>> -------------------------
>> 10 feet 20 feet 10 feet
>>
>> Put an electrical plug on one end and the antenna connector of your
>> choice on the other end. Tape the ends of that middle section WELL.
>>
>> Let's recap here. You have a single wire going to a single electrical
>> blade on a plug and ONLY THAT. You also have a single wire connected to
>> your radio. These wires are not connected to each other in any way
>> whatsoever except for the insulation between them. There is no electrical
>> contact between the wires. The ONLY contact between them is the insulated

>> middle part. Tape the cut ends on that 20 foot section ***WELL*** and
>> check it with your ohm-meter a bunch of times to make SURE there is NO
>> electrical contact between the far ends of this thing.
>>
>> There you go. I found the blade works best in the hot side of the outlet
>> most of the time but sometimes putting it on the other side is actually
>> better. I don't know why.
>>
>> You can wrap that middle section in tinfoil to improve the capacitive
>> connection a bit. It works great. It's better than my attic-wire.
>> (RECEIVE ONLY. DO NOT TRANSMIT WITH THIS!)
>>
>> DISCLAIMER: THIS IS A REALLY MENTAL IDEA! DON'T DO IT!
>> IF YOU SCREW UP YOU WILL RUN 120 VOLTS INTO YOUR RADIO AND MAYBE KILL
>> YOURSELF!
>>
>> Sorry for all the yelling but I want to be clear about those points. :)
>>
>> --
>> ... Harvey W. Harbicht - hharbich@execpc.com
>> ... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1837. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7a7u47$8ss$1@winter.news.rcn.net>
Source record: 73662

Find an old metal based telephone with a rotary dial and
metal finger stop. Hook up to telco line.

Use a clip lead to connect the RX antenna to the finger stop.
Old trick, used for years.

Pete

Harvey W. Harbicht (http://come.to/stupidlaratricks) wrote in message
<7a5ti6$7pn@newsops.execpc.com>...
>In article <36a3e082.3029132@news.io.com>, maddog@io.com says...
>> Could the AC line be used as an endfed receiving antenna? Given that
>> most houses have 50-100 ft of wiring between the house and pole
>> transformer, does this imply that the performance would be similar?
>> How would one best (and most safely) couple to it?
>
>file at: http://www.execpc.com/~hharbich/siggy.htm

1838. Re: Car Radio Antenna impedance ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7a7tre$6s8$1@winter.news.rcn.net>
Source record: 73663

Jim

The coax is not 50 ohm, it is closer to 900 ohms.
The coax run is kept extremely short to minimize losses.
The receiver is not 50 ohms, and is matched to the antenna.

Peter

Jim wrote in message <7a7je3$8ds@sjx-ixn5.ix.netcom.com>...
> Hi, I have a problem.....
>
>
> The AM, on the other hand, is a physically SHORT antenna segment, which
>ought to make it a high impedance but they run it through the same coax.
>
> Do they use a low impedance at the radio, and eccept a major mismatch ?
>
> Or, is the AM in the radio a high impedance input, and they ignore the
>losses caused by the low impednace coax ?
>
>
>
> Thanks, Jim N6BIU
>
> Due to those DAMN spambots, my EMAIL is false. My real EMAIL is:
>
> jpennell (at) ix - dot - netcom - dot - com
>
> I hate bulk Email.....
>
>
>
>
>

1839. Re: super xstal set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7a7ueg$ap6$1@winter.news.rcn.net>
Source record: 73664

Wringing every last bit out of the signal would imply
a fairly lossless design. Most good designs allow
for variable coupling between the tuned stages to
permit trading off some signal for improved selectivity.
I have driven vintage 2k horn speakers with some sets,
using a good longwire and good ground. Don't expect
to rattle the windows, however.

Yes, you can build a FM xtal set. AM sets work well because
crystal sets are designed to demodulate AM signals. Most
FM designs depend on a high Q circuit so the set works on a
slope detection principle. 150kHz deviation at 90 MHz is operating
over a very small portion of the tuning slope of a simple LC circuit,
hence little audio recovery. If you are line of site to a strong FM
transmitter, it will work.

Peter

Harvey W. Harbicht (http://come.to/stupidlaratricks) wrote in message
<7a5v05$7pn@newsops.execpc.com>...
>Greets
>
>I'm in the mood to build a super xtal set. I just know (hope) there are
>plans available to build a set that can wring every last little bit of
>power out of the signal. Maybe even enough to drive a speaker rather than
>those cheap little earplugs.
>
>If it could go into the SW bands all the better!
>----------------
>Stupid question: Why are they all AM? Can't you build an FM xtal set?
>
>
>Thank you
>
>--
>... Harvey W. Harbicht - hharbich@execpc.com
>... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1840. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36C78985.7301@pop.removethistomailme.net>
Source record: 73665
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Scott Stephens wrote:
>
> I want to tune a HF-UHF (10 MHz - 10 GHz) oscillator(s) a wide a range
> as possible, for my super-grid dip meter. Hyper-abrupt varactors and
> FET/Gasfet switched capactitor/inductors and/or descrete oscillators
> seem to be the best way to do this. Mixer schemes and YIG's are to
> expensive & complex.
>
> Isn't there some way to use capacitance multiplier, inductor
> simulator, or gyrator method to expand the tuning range of a varactor
> diode? This would involve a discrete transistor implementation, in
> contrast to Op-amp implementations I've seen.
>
> Could current-feedback op-amps be used? I've not seen any
> implementations.
>
> How about gain-tuning? I've seen state-variable filters gain or
> attenuation tuned. But once again, op-amps were used under 1 MHz.
>
> Any good references?
>
> Thanks,
>
> Scott Stephens, KB9ETU

I think you are in trouble. :-)

The ONLY way you are going to get that kind of coverage in a practical, homebuilt design is to use a YIG and broadband mixer. You will need to use harmonic mixing and filtering on a (for example) 2 - 4 GHz YIG. Your only hope is to buy a crateload of scrapped spectrum analyzers and other assorted microwave junk and scavenge the parts. (BTW it is hard to imagine anything simpler than a YIG oscillator, and they are dirt cheap on the surplus market as well.)

You will want to examine your assumptions behind the need for this project, in general. I am not sure you can buy a commercial network analyzer (aka a "super grid-dip meter") that covers that range in one monolithic block, at least not for less than the price of a brand-new Porsche.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1841. How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: bogus@supernews.com
Message-ID: <bogus-1402991843080001@dnai-207-181-237-96.dialup.dnai.com>
Source record: 73666
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

How can one get microfiche images (each 6mm x 9mm, 180 per film) into
digital form? Printing the pages (via microfiche printer) and then
scanning the printouts was suggested. Any possibility of direct scanning?

May be interested in equipment to do this, if you have a solution.

Suggestions are welcome.

Sorry about the modified return address, but I hate getting spammed.
The correct address is listed below, if you chose to e-mail me.

Thanks.

Enjoy,
Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

1842. Re: Car Radio Antenna impedance ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <9PMx2.200$qo.949@news9.ispnews.com>
Source record: 73667

Jim (jpennell+AEA-ix.netcom.com) wrote in message
+ADw-7a7je3+ACQ-8ds+AEA-sjx-ixn5.ix.netcom.com+AD4-...
+AD4- Does anyone know what the typical impedance the radio is designed for
in
+AD4-AM and FM operation ?
+AD4-
+AD4- I'd guess the FM is around 50 ohms, the whip looks like 1/4 wave.
+AD4-
+AD4- The AM, on the other hand, is a physically SHORT antenna segment, which
+AD4-ought to make it a high impedance but they run it through the same coax.
+AD4-
+AD4- Do they use a low impedance at the radio, and eccept a major mismatch ?
+AD4-
+AD4- Or, is the AM in the radio a high impedance input, and they ignore the
+AD4-losses caused by the low impednace coax ?
+AD4-
+AD4- It's true that, due to the general noise level at 1 MHz, a relatively
+AD4-non-sensitive system might be an advantage. I can live with whatever
it
+AD4-is, but it would help my design to know what I'm starting with.

I would have normally ignored posting to this person because of his own use of forged headers, but his questions are specific unlike the open-ended +ACI-what is the best radio+ACI- usually seen...

The impedance seen on FM is much like you anticipated. A one meter monopole antenna at 100 MHz will present an impedance of about 148 ohms in series with about 212 ohms of inductive reactance. This will be transformed by the section of coax from the antenna to the radio.

At 530 kHz, the low end of the band, a one meter vertical antenna working against the grounded car body will have an impedance of slightly over a milliohm in series with a capacitive reactance of almost 26000 ohms (almost 12 pF). At 1700 kHz, the high end of the band, the same antenna will present an impedance of approximately 12 milliohms in series with a capacitive reactance of approximately 8200 ohms (almost 12.5 pF). You can alternately view these as a parallel combination of a high resistance in parallel with a capacitance. At these low frequencies, the coax adds additional capacitance as any reasonable length is such a small fraction of a wavelength.

Normally an automobile AM receiver is designed for high impedance input. You are correct that normal background noise at these frequencies totally swamps out weak signals. Thus true impedance matching is rarely necessary.

Dr. Barry L. Ornitz WA4VZQ ornitz+-U+AEA-dpnet.net

1843. Re: How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Brad Boegler <indigo2@mich.com>
Message-ID: <36C79A9A.E12E735@mich.com>
Source record: 73668
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

While not the greatest quality, I used a digital camera to take a picture of the blown up image on a microfiche viewer. It worked ok and was quick. Just an idea...

Brad

DaveC wrote:

> How can one get microfiche images (each 6mm x 9mm, 180 per film) into
> digital form? Printing the pages (via microfiche printer) and then
> scanning the printouts was suggested. Any possibility of direct scanning?
>
> May be interested in equipment to do this, if you have a solution.
>
> Suggestions are welcome.
>
> Sorry about the modified return address, but I hate getting spammed.
> The correct address is listed below, if you chose to e-mail me.
>
> Thanks.
>
> Enjoy,
> Dave
>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

1844. Re: super xstal set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7a88iv$f2t@newsops.execpc.com>
Source record: 73669

In article <7a7ueg$ap6$1@winter.news.rcn.net>, commquart@erols.com
says...
> I have driven vintage 2k horn speakers with some [crystal] sets,
> using a good longwire and good ground. Don't expect
> to rattle the windows, however.

Of course not :) I would just like to be able to hear it in a reasonably quiet room. My plan was to mount the radio as part of the bedroom furniture. Perhaps on a high shelf up in the corner. Sort of a permanent background thing. If I fry the "front end" during a lightning storm I won't cry about it. <grin>

Oh no! My 20 cent diode blew out!

As long as it's hearable at night when I go to sleep that'd be fine.

>
> Yes, you can build a FM xtal set. AM sets work well because
> If you are line of site to a strong FM
> transmitter, it will work.

Interesting. I thought FM radios needed a "product detector" or whatever it's called. I see. am FM xtal set will work OK in theory, but so-so in real life.

Thanks
--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1845. Re: TRS-80 Model I

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-14 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <7a8fcg$2bq$1@camel21.mindspring.com>
Source record: 73670

Alan wrote in message <7a7q1f$k9s@news1.snet.net>...
>I'm looking for a Radio Shack TRS-80 Model I...yes, Model I. It's a
>nostalgic request for something to add to my other dusty artifacts.
If you
>have one and you want to dust it off and sell it, please respond to
>chipsndips@snet.net.
>
>Alan
>
How about a Heathkit Z-80 all in one? Runs at a breakneck speed of
1.2 mHz (or was it 2 mHz? I forgot)! :)

Dean

1846. Re: Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <hiKx2.12302$jd2.32564241@rmnws01.ce.mediaone.net>
Source record: 73375

electronstream@webtv.net (Doug Hancock) wrote:

> Having constructed several homebrew receivers with discreet parts and
>ic's, I think it would be very interesting to build one with homebrew
>amplifying devices.

> I would like to know if any one out there has experience with this ,
>any other amplifying device useful at rf,or any suggestions. Thanks.
>Doug N0WVA

I would try taking a silicon solar cell, and spot-welding (via
capacitve discharge) wires of appropriate material to it.

IIRC solar cells are highly doped, so they may not be usefull. I think
uni-junction transistors (strange transistors designed for relaxation
oscillators) are made by spot-welding aluminum wires to the substrate,
the spot welding causes diffusion and thus dopes the NPN/PNP sandwich
structure.

Power transistors have large die's, but are well protected by thick
oxide coatings. And that would be cheating, wouldn't it?

I've wanted to experiment with tunnel junctions, made by adjusting a
sub-angstrom length gap piezo-electricaly. They have semiconductor
properties and may function as tera-hertz range negative resistance
junctions.

1847. FS: Heathkit CO-1 Code Oscillator---$5

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: mmoss@mindspring.com
Message-ID: <36c774c1.8831070@news.mindspring.com>
Source record: 73376

The classic code practice oscillator with audio tone or light. Works great. Sorry but don't have a code key to go with it. Only $5 plus shipping.

Marv

1848. Re: A:\ drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36C7CB3B.A34E5148@bellsouth.net>
Source record: 73377

Henry Knoll wrote:
> I have a situation that just started. When I place a disk in the
> 3 1/2 floppy A drive I get a "Drive not ready" message. If I
> re-boot, everything is OK. Anyone know what the problem is?

Have you run a virus scan? We caught a nasty infection of Monkey B at
work which causes that kind of symptom.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

1849. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Jim-T@analog_innovations.com
Message-ID: <36c77e18.24236826@news.primenet.com>
Source record: 73378
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Mon, 15 Feb 1999 02:44:28 GMT, Scott2@mediaone.net (Scott Stephens)
wrote:

|I want to tune a HF-UHF (10 MHz - 10 GHz) oscillator(s) a wide a range
|as possible, for my super-grid dip meter. Hyper-abrupt varactors and
|FET/Gasfet switched capactitor/inductors and/or descrete oscillators
|seem to be the best way to do this. Mixer schemes and YIG's are to
|expensive & complex.
|
|Isn't there some way to use capacitance multiplier, inductor
|simulator, or gyrator method to expand the tuning range of a varactor
|diode? This would involve a discrete transistor implementation, in
|contrast to Op-amp implementations I've seen.
|
|Could current-feedback op-amps be used? I've not seen any
|implementations.
|
|How about gain-tuning? I've seen state-variable filters gain or
|attenuation tuned. But once again, op-amps were used under 1 MHz.
|
|Any good references?
|
|Thanks,
|
|Scott Stephens, KB9ETU

About the best you can do with a hyper-abrupt varicap is a 2:1 tuning
range. More than that will require some kind of range switching. To
10GHz is somewhat optimistic...that frequency will require a stripline
or ceramic resonator.

(If replying by E-mail please observe method of anti-spam.)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(602)460-2350	
Jim-T@analog_innovations.com Fax:(602)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replys SWAP "-" and "_".

1850. Re: Car Radio Antenna impedance ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36de8c8e.84167729@news.atl.bellsouth.net>
Source record: 73379
Body handling: HTML body converted to readable text

On Sun, 14 Feb 1999 14:41:02 -0800, "Jim" wrote:
> Or, is the AM in the radio a high impedance input, and they ignore the
>losses caused by the low impednace coax ?

The "coax" that they use between the antenna and the radio is very high
impedance, with a very thin center conductor. The antenna behaves as
a high impedance voltage probe.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1851. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <36C79F05.B081E137@home.com>
Source record: 73380

Hi,
100 to 250 Pf will do.
H.V. mica type cap. is prefered.
For added safety, you can install a fuse in series.
And keep it out of the way.
Same thing can be tried on the telephone line.
My neighborhood has all the utilities including cable TV underground,
so can't do this trick.
Tony

CommQuart wrote:
>
> This is dangerous, do not do it. A capacitor would have at least
> a 3kv rating to be used safely on AC lines, and would be under
> .01 mfd to limit AC currents.
>
> Tony Hwang <2810311762@home.com> wrote in message
> <36C7725E.5569630D@home.com>...
> >Hi,
> >You can pick a hot side of the house wiring, in the wall plate the side
> >where narrower plug goes in, couple it thru a GOOD quality capacitor
> >with at least 600 volts or so rating to antenna terminal. When I was a
> >kid building crystal radio set, I used to do this all the time. Thru
> >the cap. AC voltage is blocked but RF signal gets thru.
> >
> >Harvey W. Harbicht (http://come.to/stupidlaratricks) wrote:
> >>
> >> In article <36a3e082.3029132@news.io.com>, maddog@io.com says...
> >> > Could the AC line be used as an endfed receiving antenna? Given that
> >> > most houses have 50-100 ft of wiring between the house and pole
> >> > transformer, does this imply that the performance would be similar?
> >> > How would one best (and most safely) couple to it?
> >>
> >> Yes. I did it for years. It's stupid and dangerous but it does work. The
> >> antenna is very simple
> >>
> >> Take a piece of zipcord about 20 feet plus some. Use cord that you can
> >> ***CLEARLY*** make out which wire is which. I used the kind with the
> >> transparent cover and one copper wire one silver wire (maybe it was
> >> speaker cable. I dunno. It was in the junk box)
> >>
> >> Strip off 10 feet of silver wire from one end and 10 feet of copper from
> >> the other end. It should look like this (not to scale):
> >>

> >> -------------------------
> >> -------------------------
> >> 10 feet 20 feet 10 feet
> >>
> >> Put an electrical plug on one end and the antenna connector of your
> >> choice on the other end. Tape the ends of that middle section WELL.
> >>
> >> Let's recap here. You have a single wire going to a single electrical
> >> blade on a plug and ONLY THAT. You also have a single wire connected to
> >> your radio. These wires are not connected to each other in any way
> >> whatsoever except for the insulation between them. There is no electrical
> >> contact between the wires. The ONLY contact between them is the insulated
> >> middle part. Tape the cut ends on that 20 foot section ***WELL*** and
> >> check it with your ohm-meter a bunch of times to make SURE there is NO
> >> electrical contact between the far ends of this thing.
> >>
> >> There you go. I found the blade works best in the hot side of the outlet
> >> most of the time but sometimes putting it on the other side is actually
> >> better. I don't know why.
> >>
> >> You can wrap that middle section in tinfoil to improve the capacitive
> >> connection a bit. It works great. It's better than my attic-wire.
> >> (RECEIVE ONLY. DO NOT TRANSMIT WITH THIS!)
> >>
> >> DISCLAIMER: THIS IS A REALLY MENTAL IDEA! DON'T DO IT!
> >> IF YOU SCREW UP YOU WILL RUN 120 VOLTS INTO YOUR RADIO AND MAYBE KILL
> >> YOURSELF!
> >>
> >> Sorry for all the yelling but I want to be clear about those points. :)
> >>
> >> --
> >> ... Harvey W. Harbicht - hharbich@execpc.com
> >> ... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1852. Re: Cable TV Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: ronh1@idt.net
Message-ID: <36c7b246.1240088@news.idt.net>
Source record: 73381

On Sat, 13 Feb 1999 14:29:09 GMT, ronh1@idt.net (Ron Hellmann) wrote:

>What is the designation for the cable TV connectors generally used in
>the home? Also, is there a web page that shows how to connect them to
>the cable?

My thanks to all who responded.

1853. Re: Charging NiCads

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36C7D760.B39B310E@teleport.com>
Source record: 73382

Bill wrote:
>
> I'll let somebody else point to the project sites. I have used packs for AA cells
> in various projects. The idea works great but you must keep in mind that alkaline
> cells have about 1.5 volts per cell and ni-cads provide about 1.2 volts. Stacking
> them in series to achieve higher voltages emphasizes this difference.
>
> Six alkalines will give you 9 volts, but if you substitute ni-cads you will only
> have 7.2 volts available. Eight alkalines give you 12 volts... ni-cads 9.6 volts.
> This is not a problem if the circuits will work at the lower voltage and you will
> be satisfied with reduced power.
> . . .

Various arguments can be made that alkaline cells are better for some applications than NiCds, but this isn't a valid one. The reason is that the voltage of an alkaline cell drops a great deal more than a NiCd's over the discharge cycle. A NiCd will maintain a cell voltage of 1.2 - 1.25 volts during almost the entire discharge period, even at heavy current levels. But take a look at some measurements I made of a typical AA alkaline cell discharged at 250 mA.

At the end of one hour, the cell voltage was 1.26V.
At 2-1/2 hours, the cell voltage was 1.15 volts.
It reached 1.0 volts at about 4-1/2 hours.
It was 0.9 volts after 5-3/4 hours.
(The drop from there to 0.8 volts was rapid.)

This illustrates why the battery manufacturers state that alkaline-battery powered equipment must be designed to work at voltages down to 0.9 volt/cell in order to extract most of the energy from the battery. If your equipment requires 1.2 volts/cell or more to operate, you'd have to discard an alkaline cell after it had delivered only 1/3 or less of its energy. If you're depending on 1.5 volts, you'll only be able to use a new cell for a few minutes before replacing it.

The voltages will differ some from the ones I reported, depending on the current drain. At currents higher than 250 mA, the voltages will be lower, and at lower currents, higher. And cells will vary with manufaturer and lot. But at any current drain, you'll have to allow the alkaline cell voltage to drop below 1 volt/cell to extract most of its energy, while a NiCd is just about totally exhausted when it drops much below 1.2 volts.

Roy Lewallen, W7EL

1854. Re: Homemade transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7a8n9v$bq7$1@news8.svr.pol.co.uk>
Source record: 73383

I also have wanted to try to make either a diode or simple transistor.

I have a 12 inch Edwards high vacuum coater so can lay down thin
films of various metals / substances. Anyone know if I could use this
to make simple diodes or transistors in some way ??

John

Scott Stephens wrote in message ...
>electronstream@webtv.net (Doug Hancock) wrote:
>
>> Having constructed several homebrew receivers with discreet parts and
>>ic's, I think it would be very interesting to build one with homebrew
>>amplifying devices.
>
>> I would like to know if any one out there has experience with this ,
>>any other amplifying device useful at rf,or any suggestions. Thanks.
>>Doug N0WVA
>
>I would try taking a silicon solar cell, and spot-welding (via
>capacitve discharge) wires of appropriate material to it.
>
>IIRC solar cells are highly doped, so they may not be usefull. I think
>uni-junction transistors (strange transistors designed for relaxation
>oscillators) are made by spot-welding aluminum wires to the substrate,
>the spot welding causes diffusion and thus dopes the NPN/PNP sandwich
>structure.
>
>Power transistors have large die's, but are well protected by thick
>oxide coatings. And that would be cheating, wouldn't it?
>
>I've wanted to experiment with tunnel junctions, made by adjusting a
>sub-angstrom length gap piezo-electricaly. They have semiconductor
>properties and may function as tera-hertz range negative resistance
>junctions.
>

1855. REQ coil making software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7a8net$mvk@newsops.execpc.com>
Source record: 73384

I need some kind of program that will design coils for me. I have a few,
but none of them are just right. I want to input the value, wire size and
coil form....then have it tell me how many turns at what spacing.
For existing plans I want to input the form, wire and turns and have it
tell me the value of the coil. Mayeb even show me all the values using
different types or forms; air core, solid core, ferrite........

tnx es 73 de kg9ev

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1856. Re: How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: mroberds@worldnet.att.net
Message-ID: <7a8t54$afq@bgtnsc01.worldnet.att.net>
Source record: 73385
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

In article <bogus-14029918430800001@dnai-207-181-237-96.dialup.dnai.com>,
bogus@supernews.com blathered on about...
>
>How can one get microfiche images (each 6mm x 9mm, 180 per film) into
>digital form? Printing the pages (via microfiche printer) and then
>scanning the printouts was suggested. Any possibility of direct scanning?

I know that you can get scanners designed to directly scan 35mm
photographic slides or negatives. Perhaps such a scanner could be
used with or modified for microfiche. Check with people like Nikon,
Xerox, and Kodak - this has probably come up before.

If these have been reduced from a "standard" sheet of paper, about
216x279 mm, then it's about a 35x reduction. Some flatbed scanners
can be set to scan transparencies, and can get hardware resolutions
of 1200 dpi or more. This only translates into about a 35 dpi
resolution for each frame on the microfilm, but if the information is
not too detailed, might be marginally useful. Higher hardware
resolutions will get better results. Some scanners use software
interpolation, but for this application, you probably want the
resolution in hardware.

Good luck!

Matt Roberds
mroberds@worldnet.att.net

1857. Re: How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: "Jerry G." <jerryg50@hotmail.com>
Message-ID: <gJUx2.619$T8.25549@news.total.net>
Source record: 73386
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

If you contact the company that supply microfish equipment for your
microfish type, they should have scanners that are designed for the
job. You should get discent results with the proper one...

--

Jerry Greenberg
http://www.zoom-one.com/electron.htm
==========

Quick Reply To: jerryg50@hotmail.com
We Specialize In Elecronic Componets

WebSite 1: http://www.total.net/~jerryg
Website 2: http://www.zoom-one.com
Find CD's: http://www.zoom-one.com/selling.htm

If It Works, Don't Fix It !
If It Don't Move, Slap It !
If It Don't Make Noise, Shake It !
If It's Broke, Then Fix It ... !
If You Don't Know How To Fix It, Give It Out !

========== Message Separator ==========

DaveC wrote in message ...
|How can one get microfiche images (each 6mm x 9mm, 180 per film) into
|digital form? Printing the pages (via microfiche printer) and then
|scanning the printouts was suggested. Any possibility of direct
scanning?
|
|May be interested in equipment to do this, if you have a solution.
|
|Suggestions are welcome.
|
|Sorry about the modified return address, but I hate getting spammed.
|The correct address is listed below, if you chose to e-mail me.
|
|Thanks.
|
|Enjoy,
|Dave
|
|--
|Dave Carpenter

|Sound Logic
|
|Note: "From" address is invalid.
|Use: "voicebox at dnai dot com" with the"@"and"."inserted
appropriately.

1858. DALTON,GA SWAPFEST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Leon Snider <leons@worldnet.att.net>
Message-ID: <7a96lt$o2h@bgtnsc01.worldnet.att.net>
Source record: 73387

February 27,'99 It's GREAT!!!

1859. Re: SSB by the "fourth" (switching) method.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be58e8$441c12a0$fd193bcb@default>
Source record: 73388

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Phil Rice <rice@ironbark.bendigo.latrobe.edu.au> wrote in article
<rice-ya02408000R1502991102550001@news.latrobe.edu.au>...
> Some time ago, I had an article published in the Australian Amateur Radio
> journal on generating SSB directly using a switching modulator. Various
> discussions in this newsgroup (on I/Q modulators & demodulators) prompted
> me to finish putting the details on the web.
>
We published a couple of articles in E+WW usimg the sequencing network
described. It was otherwise known as the polyphase network. Its advantages
are
- almost limitless suppression/quadrature accuracy depending on how close/
how many poles you have.
- bandwidth is also determined by how many poles and their spacing - we got
50 dB suppression from 300Hz to 8 KHz.
- it is quite tolerant of component variation - 5% components are probably
OK. In fact you can have a short in some parts of the network and it still
function!

The disadvantages are
- loss - the 6 pole network described will have about 20 dB loss
- many passive components.

BTW you can improve the dynamic range of switch mixers by placing them at
the "virtual earth" point of an opamp. The input resistor and feedback
resistor of an inverting opamp are arranged around the switch such that the
swicth on resistance forms part of the input resistor to the opamp. My
friend Rod Green has got a dynamic range of about 130dB (?) using this idea
which would work well in a receiver

Richard

1860. Elektor Journal (UK)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990215090256.29129.00001894@ng114.aol.com>
Source record: 73389

Does anyone subscribe to this electronic journal? I would like a copy of an article in 1998 . Any charge acceptable. George W3ASE
G345CDE

1861. Re: Cable TV Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: wb0tcz@aol.com
Message-ID: <19990215092903.07967.00000069@ngol07.aol.com>
Source record: 73390

I believe cable TV coax connectors are referred to as "F" connectors, and your best source of information about them may be your local Radio Shack store, believe it or not! They have a wide selection of these connectors, crimping tools and the packages show how to install them.

You might want to look in your ARRL handbook as well...

73, --Marty WB0TCZ/7

1862. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36C831FF.C121C972@hevanet.com>
Source record: 73391
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Miles wrote:

> Scott Stephens wrote:
> >
> > I want to tune a HF-UHF (10 MHz - 10 GHz) oscillator(s) a wide a range
> > as possible, for my super-grid dip meter. Hyper-abrupt varactors and
> > FET/Gasfet switched capactitor/inductors and/or descrete oscillators
> > seem to be the best way to do this. Mixer schemes and YIG's are to
> > expensive & complex.
> >
> > Isn't there some way to use capacitance multiplier, inductor
> > simulator, or gyrator method to expand the tuning range of a varactor
> > diode? This would involve a discrete transistor implementation, in
> > contrast to Op-amp implementations I've seen.
> >
> > Could current-feedback op-amps be used? I've not seen any
> > implementations.
> >
> > How about gain-tuning? I've seen state-variable filters gain or
> > attenuation tuned. But once again, op-amps were used under 1 MHz.
> >
> > Any good references?
> >
> > Thanks,
> >
> > Scott Stephens, KB9ETU
>
> I think you are in trouble. :-)
>
> The ONLY way you are going to get that kind of coverage in a practical,
> homebuilt design is to use a YIG and broadband mixer. You will need to
> use harmonic mixing and filtering on a (for example) 2 - 4 GHz YIG.
> Your only hope is to buy a crateload of scrapped spectrum analyzers and
> other assorted microwave junk and scavenge the parts. (BTW it is hard
> to imagine anything simpler than a YIG oscillator, and they are dirt
> cheap on the surplus market as well.)

YIGs are cool, but they're damned hard to apply. Many have a tuning
sensitivity
of 20mhz/ma. So you'll get 20Hz of incidental FM for each nanoamp of noise
on the
tune voltage. If that sound easy, try it.....

>
>
> You will want to examine your assumptions behind the need for this
> project, in general. I am not sure you can buy a commercial network
> analyzer (aka a "super grid-dip meter") that covers that range in one
> monolithic block, at least not for less than the price of a brand-new
> Porsche.
>
> -- jm KE5FX
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

1863. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: wb0poz <wb0poz@cwix.com>
Message-ID: <_tXx2.1537$KI2.2514@news.cwix.com>
Source record: 73392

1
Don wrote in message <36C328E4.E8FEE836@usit.net>...
>Robinson, AB5VH wrote:
>
>> Sometimes it is nice to be able to run right in and buy a part or some
wire,
>> even at their prices. I am currently pondering designing a receiver built
>> with just stuff that Rat Shack stocks. That might be tough, but it would
be
>> nice if a newbie homebrewer could just go there and buy all the parts for
a
>> project.
>
>
>Keep in mind that by the time you finish designing your reciever, there
>will surely be a few parts that Radio Shaft no longer carries :)
>
>Don

Would you rather have Radio Shacks, or not? I love all the bitching about
the 'Shack' by people who depend on them for parts at 6PM on a Satu. night.

Speaking for myself I'd MUCH rather have them than not. Nobody's forcing
anyone to shop there.

73 John

1864. Re: How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36c85889.0@news.netwalk.com>
Source record: 73393
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote in message ...
>How can one get microfiche images (each 6mm x 9mm, 180 per film) into
>digital form? Printing the pages (via microfiche printer) and then
>scanning the printouts was suggested. Any possibility of direct scanning?
>
>May be interested in equipment to do this, if you have a solution.
>
>Suggestions are welcome.

I do not know what the resolution is (in pixels/inch), but my Dad has a nifty little scanner that can scan negatives and color slides directly into his computer. He can then manipulate them with his graphics program. I know it can do 35 mm slides and negatives and I think it can also do larger formats.

Sorry, I do not know the name of who made it, but you may want to look into this.

Jim
N8EE

1865. FS.rummage sale website

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Jim <jimbaran@execpc.com>
Message-ID: <7a9m9u$8iu@newsops.execpc.com>
Source record: 73394

Hi,

I have this rummage sale that I add to as I get time. You might want to bookmark it and check back..I keep finding things in the garage, basement and attic and make a new page for each item I find. I will have alot more radio stuff listed as I dig it out.

Thanks for your time!

Jim

http://www.execpc.com/~jimbaran/index.html

1866. A question/complaint

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36c85fb7.0@news.netwalk.com>
Source record: 73395

This may be off topic for this group.

But then, maybe it isn't since it involves something of interest to homebrewing 'TechnoJunkies'. And I am sure that many homebrewers have asked themselves the same question about their own projects. I even see another post on here on a similar topic.

I just bought a new 'boom box' for use here at work (to help drown out the background 'monkey chatter'). It has AM/FM stereo, cassette deck, and CD player.

Now, here is the interesting part. The CD player has an LCD read out and electronic buttons (as opposed to mechanical on the cassette deck). There is, presumably, some type of embedded microchip running the thing---real state of the art stuff.

Ok, but then why did they put an old fashioned slide rule dial on the AM/FM radio? I think that another LCD readout (or even use the same one) with a simple counter (or even a synthesizer) would be cheaper than paying someone to string the dial cord. It is particularly annoying in that I have to stand up and bend over the thing (or pick it up and tip it on its front) to see the pointer when tuning---not to mention that the pointer is about 2 MHz wide on FM!

Jim
N8EE

1867. Re: super xstal set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <36e66108.138567810@news.atl.bellsouth.net>
Source record: 73396

On Sun, 14 Feb 1999 22:40:03 -0600, hharbich@NOSPAMexecpc.com (Harvey W. Harbicht (http://come.to/stupidlaratricks)) wrote:

>Interesting. I thought FM radios needed a "product detector" or whatever
>it's called. I see. am FM xtal set will work OK in theory, but so-so in
>real life.

The word you are looking for is "discriminator". To do effective slope detection of FM, the tuned circuit has to be *sharp*, in other words, it needs to be high Q. Now there is something simple that is very high Q, and that's a *crystal* (the frequency determining type, not the signal detecting type). So you *could* make a crystal controlled crystal radio and get good slope detection results. I've never heard of anyone doing this, but the theory is sound.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1868. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <XwZx2.12325$jd2.32877855@rmnws01.ce.mediaone.net>
Source record: 73397
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

John Lundgren <NOlundgrejSPAM@mail.rsccd.org> wrote:

>Scott Stephens wrote:

>> I want to tune a HF-UHF (10 MHz - 10 GHz) oscillator(s)
...
>>. Hyper-abrupt varactors and
>> FET/Gasfet switched capactitor/inductors and/or descrete oscillators
>> seem to be the best way to do this.

>> How about gain-tuning? I've seen state-variable filters gain or
>> attenuation tuned. But once again, op-amps were used under 1 MHz.

>I think it's wishful thinking to expect to get to 10GHz with lumped
>constant devices.

Ok. How about using an active reactance multiplier to cover a 10:1 to
100:1 range from 1 MHz to 100 MHz?

>I've seen simple circuits go from 10MHz to a couple hundred MHz. But
>whatever you use, it will have to have some ALC.

Where!?!? I want to see them. I plan on using vector (phase &
amplitude) ALC anyways.

1869. Re: Cable TV Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990215154850704 32@zetnet.co.uk>
Source record: 73398

> The second type is a single piece that goes over the end of the coax.
> Like the first type, line up the inner flange to go between the
> insulator and braid and then screw the connector down until firmly
> seated. The outer sleeve may then be crimped down over the jacket to
> hold it in place.
==========
The above type I consider the most reliable one ,in the absence of a
proper crimping tool
They are available for different types of cable .
Here in the UK they cost approx GBP 1.00 incl tax = US$ 1.60 (approx.)

Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

1870. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990115113005.OUI69.ejune@intuitive-data.com>
Source record: 73399

I don't think you are going to be able to tune that kind of a frequency range with just a single osciallator.

I used to engineer microwave signal generators for a living. The way we covered that kind of frequency range was to use a YIG oscillator that covered the S/C bands (2-8 GHz). We took the 2-4 GHz signal and downconverted it (mixed with a 2 GHz osciallator) to cover the 10 MHz-2 GHz range. Other YIGs were used to cover 8-12 GHz, 12-20 GHz, 20-26.5 GHz. We doubled to get up to 60 GHz. PIN switches were used to multiplex the bands < 40 GHz and a coupler was used to combine in the 40-60 GHz band. The YIGs were all phase locked to a low frequency (apprx 10 MHz) reference oscillator.

--
- Eric June ejune@intuitive-data.com

1871. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: rick@area.com
Message-ID: <7a9snscqs1@vax.area.com>
Source record: 73400
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <36c77e18.24236826@news.primenet.com>,
Jim_Thompson <Jim-T@analog_innovations.com> wrote:
>
>About the best you can do with a hyper-abrupt varicap is a 2:1 tuning
>range. More than that will require some kind of range switching. To

Uh, what about AM broadcast receivers? They routinely tune 3:1.
You can take a pair of MV1401's and an MC1648 and easily make
a 50 to 150 MHz VCO.

Rick Karlquist N6RK
rick@area.com

1872. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: "Robinson, AB5VH" <rc@crusoe.org>
Message-ID: <7a9u9erl4@news-2.news.gte.net>
Source record: 73401

Yeah, you are correct, Doug... but I bought my set in 93 or 94, when I first started getting interested in getting licensed. You would think that the bug would be fixed by now, in current production, especially since Sangean also sells it under their own label too. Did they make a half million of them, enough to satisfy demand for the next 20 years, and then say "okay... that's it, we are through"? Surely they made a few hundred here, few hundred after those shipped, maybe a thousand lot when those shipped, etc. It's been out long enough for simple but needed fixes to be seen on the street by now. And really, for the money, all that set needs is a more robust RF stage, and I would probably buy another one.

--

-Robinson- (AB5VH)

for radio, maritime, and locks stuff go to
my NEW, IMPROVED, BIGGER site at:
http://www.geocities.com/~robinsonab5vh/

dit diddy dit dit

Doug Younker wrote in message <36C7253D.5647@ruraltel.net>...
>Hello,
>
> It's a bit late to redesign something after it's out the factory door.
>Why they still sell what thet still have I don't know. Perhaps the
>right RS personell in position of power do do something isn't aware of
>the problem, even then the choices are limited what they can do with
>remaining inventory, to strike a balance between customer satisfaction
>and company profit.
>
>--
>73, Doug Younker N0LKK
>Near Plainville,KS
>dougy@ruraltel.net
>Robinson, AB5VH wrote:
> But you know there must have been thousands
>> brought back to the store with blown front ends... yet they still sel the
>> damn things. So why not fix the design, instead of fixing the radios one
by
>> one?
>>
>> --
>>

>> --
>> -Robinson- (AB5VH)
>

1873. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Jim-T@analog_innovations.com
Message-ID: <36cc7d27.89494489@news.primenet.com>
Source record: 73402
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On 15 Feb 1999 11:32:12 -0800, rick@area.com (Richard Karlquist)
wrote:

|In article <36c77e18.24236826@news.primenet.com>,
|Jim_Thompson <Jim-T@analog_innovations.com> wrote:
|>
|>About the best you can do with a hyper-abrupt varicap is a 2:1 tuning
|>range. More than that will require some kind of range switching. To
|
|Uh, what about AM broadcast receivers? They routinely tune 3:1.
|You can take a pair of MV1401's and an MC1648 and easily make
|a 50 to 150 MHz VCO.
|
|Rick Karlquist N6RK
|rick@area.com

I was thinking more towards the multi-GHz range of operation,
forgetting that there are other frequency bands ;-)

Glad to see people are still using the MC1648, I designed it in 1970.
Geeeez! I'm getting old! (And then my spell checker just suggested
"Geezer" for "Geeeez" :-)

(If replying by E-mail please observe method of anti-spam.)

...Jim Thompson
--
James E.Thompson, P.E.	mens
Analog Innovations, Inc.	et
Analog/Mixed-Signal ASIC's and Discrete Systems	manus
Phoenix, Arizona Voice:(602)460-2350	
Jim-T@analog_innovations.com Fax:(602)460-2142	Brass Rat
http://www.analog-innovations.com	1962

For proper E-mail replys SWAP "-" and "_".

1874. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36C894B2.F81C78F5@erols.com>
Source record: 73403

You have that right! My office spends about $10,000 a year at Radio Shack just because of the convience.

wb0poz wrote:

> 1
> Don wrote in message <36C328E4.E8FEE836@usit.net>...
> >Robinson, AB5VH wrote:
> >
> >> Sometimes it is nice to be able to run right in and buy a part or some
> wire,
> >> even at their prices. I am currently pondering designing a receiver built
> >> with just stuff that Rat Shack stocks. That might be tough, but it would
> be
> >> nice if a newbie homebrewer could just go there and buy all the parts for
> a
> >> project.
> >
> >
> >Keep in mind that by the time you finish designing your reciever, there
> >will surely be a few parts that Radio Shaft no longer carries :)
> >
> >Don
>
> Would you rather have Radio Shacks, or not? I love all the bitching about
> the 'Shack' by people who depend on them for parts at 6PM on a Satu. night.
>
> Speaking for myself I'd MUCH rather have them than not. Nobody's forcing
> anyone to shop there.
>
> 73 John

1875. Re: A:\ drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: bb840@scn.org
Message-ID: <F77rLr.3tC@scn.org>
Source record: 73404

In a previous article, knoll003@tc.umn.edu (Henry Knoll) says:

>I have a situation that just started. When I place a disk in the
>3 1/2 floppy A drive I get a "Drive not ready" message. If I
>re-boot, everything is OK. Anyone know what the problem is?
>
>I'm running a P2-350Mhz, 64M RAM, Intel MB, and have checked the
>cables to make sure they are secure.
>
It's a long shot, but check to see if there's dust in the drive. I had a
similar problem on a computer at work, blew out the dust, and the problem
went away.
--
A.D. 1999 - The LAST year of the 1900's.
A.D. 2000 - The LAST year of the 20th Century.
Jim Aeschliman, W7WJM
Black Diamond, Washington w7wjm@arrl.net

1876. How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: opefa@aol.com
Message-ID: <19990215181951.15989.00002162@ng102.aol.com>
Source record: 73405

I am planning to build an antenna coupler that requires a coil. My attempts to wind it myself were not satisfying. In the magazines you see perfectly wound homebrew coils. How do they do it? Any clue would be really appreciated.
Ray, KD6SXG

1877. Re: A question/complaint

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <36C8B342.EE0B643D@cadvision.com>
Source record: 73406

The CD portion is available as a module in itself, and is by nature inherently "digital" including the readout. The only thing it shares with the rest of the "boom box" is the power supply and the audio amlification circuitry. The am/fm tuner, on the other hand, is simply a few relatively unsophisticated parts and does not cost much. A digital tuner would cost a few more bucks.
There are more expensive models which may have digital display for the tuner, but almost always, you will find that the CD has it's own diplay. To make a long story short -- it's probably to save costs of production.

Jim wrote:

> This may be off topic for this group.
>
> But then, maybe it isn't since it involves something of interest to
> homebrewing 'TechnoJunkies'. And I am sure that many homebrewers have asked
> themselves the same question about their own projects. I even see another
> post on here on a similar topic.
>
> I just bought a new 'boom box' for use here at work (to help drown out the
> background 'monkey chatter'). It has AM/FM stereo, cassette deck, and CD
> player.
>
> Now, here is the interesting part. The CD player has an LCD read out and
> electronic buttons (as opposed to mechanical on the cassette deck). There
> is, presumably, some type of embedded microchip running the thing---real
> state of the art stuff.
>
> Ok, but then why did they put an old fashioned slide rule dial on the AM/FM
> radio? I think that another LCD readout (or even use the same one) with a
> simple counter (or even a synthesizer) would be cheaper than paying someone
> to string the dial cord. It is particularly annoying in that I have to
> stand up and bend over the thing (or pick it up and tip it on its front) to
> see the pointer when tuning---not to mention that the pointer is about 2 MHz
> wide on FM!
>
> Jim
> N8EE

1878. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: "Harry, WA3PTG" <hhurst@delaware.infi.net>
Message-ID: <7aae15$v6h$1@nw001t.infi.net>
Source record: 73407

I think this one has already been done. Back in the early 80s I built a dc receiver from a 73 article, I think it was called the fun-ceiver. It used a dual-gate mosfet mixer on 40 meters, it was fine during the day, but at night...

and then there was the tuna-tin-2, and the sardine sender. If I remember right, there was a receiver too.....

I sure wouldn't want to be a newbie sent off to Radio Shack to buy parts.... Not with Mouser & Tech America just a phone call away...

Radio Shack is mostly a ripoff, except for a few items like the metal cases they sell.

Don wrote in message <36C328E4.E8FEE836@usit.net>...
>Robinson, AB5VH wrote:
>
>> Sometimes it is nice to be able to run right in and buy a part or some wire,
>> even at their prices. I am currently pondering designing a receiver built
>> with just stuff that Rat Shack stocks. That might be tough, but it would be
>> nice if a newbie homebrewer could just go there and buy all the parts for a
>> project.
>
>
>Keep in mind that by the time you finish designing your reciever, there
>will surely be a few parts that Radio Shaft no longer carries :)
>
>Don

1879. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36C8CFB0.9548D313@erols.com>
Source record: 73408

A phone call away and 3 days shipping.

"Harry, WA3PTG" wrote:

> I think this one has already been done. Back in the early 80s I built a dc
> receiver from a 73 article, I think it was called the fun-ceiver. It used a
> dual-gate mosfet mixer on 40 meters, it was fine during the day, but at
> night...
>
> and then there was the tuna-tin-2, and the sardine sender. If I remember
> right, there was a receiver too.....
>
> I sure wouldn't want to be a newbie sent off to Radio Shack to buy parts....
> Not with Mouser & Tech America just a phone call away...
>
> Radio Shack is mostly a ripoff, except for a few items like the metal cases
> they sell.
>
> Don wrote in message <36C328E4.E8FEE836@usit.net>...
> >Robinson, AB5VH wrote:
> >
> >> Sometimes it is nice to be able to run right in and buy a part or some
> wire,
> >> even at their prices. I am currently pondering designing a receiver built
> >> with just stuff that Rat Shack stocks. That might be tough, but it would
> be
> >> nice if a newbie homebrewer could just go there and buy all the parts for
> a
> >> project.
> >>
> >
> >Keep in mind that by the time you finish designing your reciever, there
> >will surely be a few parts that Radio Shaft no longer carries :)
> >
> >Don

1880. Re: Increasing varactor diode tuning span?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36C8DC9C.4905@pop.removethistomailme.net>
Source record: 73409
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

```
&NM7U wrote:
>
> John Miles wrote:
>
> > Scott Stephens wrote:
> > >
> > > I want to tune a HF-UHF (10 MHz - 10 GHz) oscillator(s) a wide a range
> > > as possible, for my super-grid dip meter. Hyper-abrupt varactors and
> > > FET/Gasfet switched capactitor/inductors and/or descrete oscillators
> > > seem to be the best way to do this. Mixer schemes and YIG's are to
> > > expensive & complex.
> > >
> > > Isn't there some way to use capacitance multiplier, inductor
> > > simulator, or gyrator method to expand the tuning range of a varactor
> > > diode? This would involve a discrete transistor implementation, in
> > > contrast to Op-amp implementations I've seen.
> > >
> > > Could current-feedback op-amps be used? I've not seen any
> > > implementations.
> > >
> > > How about gain-tuning? I've seen state-variable filters gain or
> > > attenuation tuned. But once again, op-amps were used under 1 MHz.
> > >
> > > Any good references?
> > >
> > > Thanks,
> > >
> > > Scott Stephens, KB9ETU
> >
> > I think you are in trouble. :-)
> >
> > The ONLY way you are going to get that kind of coverage in a practical,
> > homebuilt design is to use a YIG and broadband mixer. You will need to
> > use harmonic mixing and filtering on a (for example) 2 - 4 GHz YIG.
> > Your only hope is to buy a crateload of scrapped spectrum analyzers and
> > other assorted microwave junk and scavenge the parts. (BTW it is hard
> > to imagine anything simpler than a YIG oscillator, and they are dirt
> > cheap on the surplus market as well.)
>
> YIGs are cool, but they're damned hard to apply. Many have a tuning
> sensitivity
> of 20mhz/ma. So you'll get 20Hz of incidental FM for each nanoamp of noise
> on the
```

> tune voltage. If that sound easy, try it.....
>

I have, and it's true, noise is a challenge to get rid of in some applications. But this is not one of them. He could drive the tuning coil with a 741 and 2N3055 with no problem.

Any voltage- or current-controlled oscillator will have exactly the same problem. You want a broad tuning range in one device, you gotta pay the piper.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1881. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <36C8E51A.85B97E29@iag.net>
Source record: 73410

DEPENDS ON HOW BIG A COIL YOUR WINDING. IF YOUR WINDING SMALL COILS USE A STANDARD THREADED BOLT HOLD HEAD OF BOLT IN A VICE THEN WIND COIL ONTO THREADED PORTION OF BOLT.THEY COME IN VARIOUS DIAMETERS AND THREAD PER INCH SO YOU PICK THE CLOSEST ONE TO COIL NEEDED AND START WINDING,BEEN USING THIS METHOD FOR A LONG TIME ,IT BEATS ALL. HOPE YOU TRY IT 73 HARRY P.S FOR BIG DIAMETERS USE LARGE THREADED PIPE EITHER STEEL OR PVC.

Opefa wrote:

> I am planning to build an antenna coupler that requires a coil. My attempts to
> wind it myself were not satisfying. In the magazines you see perfectly wound
> homebrew coils. How do they do it? Any clue would be really appreciated.
> Ray, KD6SXG

1882. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7aanq5$6on@newsops.execpc.com>
Source record: 73411

In article <19990215181951.15989.00002162@ng102.aol.com>, opefa@aol.com says...
> I am planning to build an antenna coupler that requires a coil. My attempts to
> wind it myself were not satisfying. In the magazines you see perfectly wound
> homebrew coils. How do they do it? Any clue would be really appreciated.

Smart-ass but true answer: very carefully.

The trick is to do it slowly and keep smoothing your work. Wind 5-10 rows and then put a little piece of tape on it so it doesn't fly off. Keep the wire taunt. Wrap it by turning the form; NOT running your hand around and around. That will twist the wire. If you are using that thin enameled wire you can paint the finished coil with varnish. With regular insulated wire I just use duck tape. It's ugly but it holds everything down and works fine for double layered coils. You can also write on it so you know what the coil is. IE: Primary coil for 40-meter transmitter.

Some guys wind the huge coils by putting the form in a lathe and setting it for very very slow turning.

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1883. Re: super xstal set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7aaods$6on@newsops.execpc.com>
Source record: 73412

In article <36e66108.138567810@news.atl.bellsouth.net>,
ke4zv@bellsouth.net says...
> The word you are looking for is "discriminator". To do effective slope
> detection of FM, the tuned circuit has to be *sharp*, in other words,
> it needs to be high Q. Now there is something simple that is very high
> Q, and that's a *crystal* (the frequency determining type, not the signal
> detecting type). So you *could* make a crystal controlled crystal radio
> and get good slope detection results. I've never heard of anyone doing
> this, but the theory is sound.

A one channel radio <grin>. Might made a good promotional gimmick for
some radio station. A free-power radio that ONLY tunes their station.

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1884. Re: Elektor Journal (UK)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF79Cwu.H04@netcom.com>
Source record: 73413

In article <19990215090256.29129.00001894@ng114.aol.com>,
G345CDE <g345cde@aol.com> wrote:
>Does anyone subscribe to this electronic journal? I would like a copy of an
>article in 1998 . Any charge acceptable. George W3ASE

You can order back issues from their subscription fulfillment agency,
Worldwide Subscription Services, at a cost depending on how and
where it's shipped and wether or not it was one of the special issues
(July/August and December). UKP 5.50 and UKP 6.50 for international
airmail, or less for surface mail.

Their email is wws.subscription@virgin.net .

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

1885. Si4132 UHF synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7accefmgg1@news.netcologne.de>
Source record: 73414

Hi,

had someone here a chance to test the Si4132 synthesizer IC? Is the IC
already available? Price for 1 piece?

Peter

1886. SSB by the "fourth" (switching) method.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: rice@ironbark.bendigo.latrobe.edu.au
Message-ID: <rice-ya02408000R1502991102550001@news.latrobe.edu.au>
Source record: 73671

Some time ago, I had an article published in the Australian Amateur Radio journal on generating SSB directly using a switching modulator. Various discussions in this newsgroup (on I/Q modulators & demodulators) prompted me to finish putting the details on the web.

Its all at
http://ironbark.bendigo.latrobe.edu.au/~rice/ssb/ssb.html

The article text, circuit diagrams, PC board layout & performance figures are all there. (So warm up your soldering irons & start tinkering;-)

& for all those people who, like me, thought they had discovered a new mixer or modulator using analogue switches, have a look at:

J. D. K. West - COMSIG 1991 Proceedings. South African Symposium on Communications and Signal Processing Published by IEEE, New York USA

we have all been thoroughly beaten to it!

1887. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-15 00:00:00 UTC
From: Tony Hwang <2810311762@home.com>
Message-ID: <36C7725E.5569630D@home.com>
Source record: 73672

Hi,
You can pick a hot side of the house wiring, in the wall plate the side
where narrower plug goes in, couple it thru a GOOD quality capacitor
with at least 600 volts or so rating to antenna terminal. When I was a
kid building crystal radio set, I used to do this all the time. Thru
the cap. AC voltage is blocked but RF signal gets thru.

Harvey W. Harbicht (http://come.to/stupidlaratricks) wrote:
>
> In article <36a3e082.3029132@news.io.com>, maddog@io.com says...
> > Could the AC line be used as an endfed receiving antenna? Given that
> > most houses have 50-100 ft of wiring between the house and pole
> > transformer, does this imply that the performance would be similar?
> > How would one best (and most safely) couple to it?
>
> Yes. I did it for years. It's stupid and dangerous but it does work. The
> antenna is very simple
>
> Take a piece of zipcord about 20 feet plus some. Use cord that you can
> ***CLEARLY*** make out which wire is which. I used the kind with the
> transparent cover and one copper wire one silver wire (maybe it was
> speaker cable. I dunno. It was in the junk box)
>
> Strip off 10 feet of silver wire from one end and 10 feet of copper from
> the other end. It should look like this (not to scale):
>
> -------------------------
> -------------------------
> 10 feet 20 feet 10 feet
>
> Put an electrical plug on one end and the antenna connector of your
> choice on the other end. Tape the ends of that middle section WELL.
>
> Let's recap here. You have a single wire going to a single electrical
> blade on a plug and ONLY THAT. You also have a single wire connected to
> your radio. These wires are not connected to each other in any way
> whatsoever except for the insulation between them. There is no electrical
> contact between the wires. The ONLY contact between them is the insulated
> middle part. Tape the cut ends on that 20 foot section ***WELL*** and
> check it with your ohm-meter a bunch of times to make SURE there is NO
> electrical contact between the far ends of this thing.
>
> There you go. I found the blade works best in the hot side of the outlet
> most of the time but sometimes putting it on the other side is actually

> better. I don't know why.
>
> You can wrap that middle section in tinfoil to improve the capacitive
> connection a bit. It works great. It's better than my attic-wire.
> (RECEIVE ONLY. DO NOT TRANSMIT WITH THIS!)
>
> DISCLAIMER: THIS IS A REALLY MENTAL IDEA! DON'T DO IT!
> IF YOU SCREW UP YOU WILL RUN 120 VOLTS INTO YOUR RADIO AND MAYBE KILL
> YOURSELF!
>
> Sorry for all the yelling but I want to be clear about those points. :)
>
> --
> ... Harvey W. Harbicht - hharbich@execpc.com
> ... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1888. Rcvrs using parts from RS? reader asks...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990215191142.21696.00002340@ng11.aol.com>
Source record: 73415

Yes, perhaps if you homebrew TRF you can use their RF bjt's, audio bjt's... maybe with their op amps build some crude rcvrs...maybe even some mixers might be possible.

However, if you are serious about homebrewing amateur or BC receivers, you can just about forget using RS for most of your linear needs. You can find Jfets for some projects but for the most part, RS caters to non-RF types.

What you will find handy are the cabinets, knobs, pwr xformers, rectifiers, wire for winding your own coils (i like to wind with #38 very fine wire for my IF transformers- RS doesnt carry wire that fine...), hook up wire, solder etc etc..

What you wont find when you start REALLY homebrewing are the hot-carrier diodes/wire/torroids, tuning diodes, air variable capacitors, limited values of capacitance suitable for HF work, mosfets etc etc...

Used to...back in the before times.. back when you could buy one resistor if you wanted.

I heard that RS will be getting out of the component buisness anyway, their partner TECHamerica is doing a fine job and I use their catalog and Dan's small parts...as well as local hobby electronics suppliers for my SBL-1's and stuff. But I would be hard pressed to be able to come up with a nice homebrew receiver of any sort using just what was available inside most RS stores. Like spock said...'bearskins and stone knives'

1889. Are you using a Kansas City Tracker ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <7aagh5$3g$1@news3.Belgium.EU.net>
Source record: 73416
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hello.

Are you an Kansas City Tracker user ?

Than mabe you wil share some information ?

I'm collect all the names of programs that works with the KCT !
It doesnt matter what for program !
Than I'll make a list of it of all available programs and put it on my home page so that all user of this card can see the software possibillities !

PLEASE, vissit my homepage http://www.ping.be/~p4u11324/ and fill in the KCT Question form.

Geert Pirens
Vissit my home page: http://www.ping.be/~p4u11324/

1890. ATTENTION to all Kansas City Tracker USERS !!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <7aagh6$3g$2@news3.Belgium.EU.net>
Source record: 73417
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hello Kansas City Tracker Users.

I'm collect the names of all the available programs that being written, or suppot the kansas city tracker.

All these information wil be placed in a Database and wil be available to all of you.

On my homepage http://www.ping.be/~p4u11324/ you wil find a list of all available software.
If you know a program that not being in the list, PLEASE fill in the Question form:

If you click here, you go wright to the question form
http://www.ping.be/~p4u11324/KCT_Ques.html

Thanks to all of you !

Geert Pirens
Vissit my home page: http://www.ping.be/~p4u11324/

1891. Re: Elektor Journal (UK)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: crabtreejr@aol.com
Message-ID: <19990215193313.27072.00002367@ng05.aol.com>
Source record: 73418

Hello George

You can contact Elecktor directly at:
http://www.elektor-electronics.co.uk/
They will supply copies of articles for a nominal charge.

73's

John Crabtree

1892. EPROM programming for Standard Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: "Keith E. Spainhour" <kspainhour@wilkes.net>
Message-ID: <01be594e$c0ec8600$8eb174cc@xx>
Source record: 73419

Hello,
I am in need of information on how to generate a binary
file for programming of an eprom for a standard VHF mobile.
I don't recall the model number right off, I believe it is G?3000.
Any Info. would be appreciated

Thank you,

--
73 DE KT4XW
Keith E. Spainhour
KSpainhour@wilkes.net

1893. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: MICHAEL NEIDICH <neidich@worldnet.att.net>
Message-ID: <7aamvk$ft0@bgtnsc03.worldnet.att.net>
Source record: 73420

One tip is to wind two wires at a time on the form of your choice, staking the first, say, and then unwinding the second. You get a coil with even spacing. Technically, it doesn't matter much if the wires are that perfectly spaced. The other way is to use a coil form with grooves in it, if you can find one. Self supporting coils need to be annealed to fix the new shape.
Mike

Opefa wrote in message <19990215181951.15989.00002162@ng102.aol.com>...
>I am planning to build an antenna coupler that requires a coil. My attempts to
>wind it myself were not satisfying. In the magazines you see perfectly wound
>homebrew coils. How do they do it? Any clue would be really appreciated.
>Ray, KD6SXG

1894. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: veeduber@aol.com
Message-ID: <19990215222428.05874.00002279@ng126.aol.com>
Source record: 73421

>
>I am planning to build an antenna coupler that requires a coil. My attempts
>to
>wind it myself were not satisfying. In the magazines you see perfectly wound
>homebrew coils. How do they do it? Any clue would be really appreciated.
>Ray, KD6SXG
><

Ray (and the Mailing List),

One method that delivers high quality results is to wind your coils on a lathe using demountable coil forms.

The forms are made of hardwood blocks about ten inches long fastened together with a recessed brass screw at each end, installed from opposite sides. The screws are installed at an angle so as to be parallel to the ends of the form. The ends of the block are then cut parallel to each other but at an angle to the parting line. The centers are then found. Because the parting line is at an angle, the ends of the block are solid. A brass plate and dog may be installed to facilitate centering and turning. The block is turned to the desired diameter. If things have been properly laid out, removing the screws will allow the block -- now a cylinder -- to come apart in the form of a pair of tapered cylindical wedges which mate along their flat face.

You should end up with a cylindrical form about nine inches long on which you may wind a coil eight inches or less in length. You may of course make a longer form but since it is held together only on the ends the maximum length is a function of diameter. (My 1" form is about 4" long.)

The cylindrical form is then grooved with a router to accept styrene rod of a given diameter suitable to the coil, the grooves falling entirely within a given half of the form so as to leave the parting line unobstructed. Four grooves is the norm but with larger diameter coils six grooves are possible. Suitable styrene rod is available from plastic suppliers. Depending on the diameter of the coils you plan to make, you'll need several diameters of styrene rod, that is, small (1/8") for small diameter coils and heavier rod (5/16") for larger diameter coils made of heavier gauge wire.

The form is then finished with varnish, and marked according to diameter. If you do much building you'll eventually have half a dozen forms, from 3/4" to 3" diameter.

The form is used with a wire feed and tensioner which you'll also have to make. Coils are normally wound from tin-plated solid copper wire, which is fairly expensive stuff. Even so, it is best to buy an entire roll of the wire and design your wire feeder to accept the standard rolls.

In use, the form of the desired diameter is chucked into the lathe, styrene rods cut to length and attached to the form with tape or wire and the lathe set to feed wire at the desired pitch and tension. Tension is kept fairly high in order to accomodate the following step.

Once the coil is wound -- it takes only a few minutes -- the wire may be cut and secured to the form, either to an eyelet or by threading the free end of the wire into a hole drilled in the form for that purpose. The completed coil is then HEATED, usually with an industrial grade hot-air gun such as you'd use for heat-shrinking. The heat softens the styrene. The highly tensioned coil then melts itself into the styrene rods.

A fair degree of experience is needed in the heating, especially with smaller coils. The object is to melt the wire into the rods so that the styrene covers the wire. But if you let it melt too deeply you will upset the process for the remaining rods and may alter the diameter of the finished coil. The depth of the grooves you've cut to accept the styrene rod has a lot to do with your success, as does the pitch of the winding -- you may find it more convenient to make forms of identical diameters but having slightly deeper grooves for coils having a finer pitch. But in most cases, the diameter of the wooden form determines the depth to which the wire can melt into the styrene.

Once melted all around, the styrene is allowed to cool. The brass screws are removed and the wooden form driven apart, leaving you with a air-wound coil indistinguisable from those commercially available.

I'm sorry I can't provide you with a sketch. My operating system does not support any of the commonly available CAD programs and what it does support, no one else seems to have :-) (ie, NT 3.51)

-Bob Hoover
-KA6HZF

1895. Re: PL177A info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: jfriley@no.thanks.airmail.net
Message-ID: <36c8e9a3.11202475@netnews.worldnet.att.net>
Source record: 73422

On Sun, 14 Feb 1999 23:26:10 -0000, "Eamon Skelton"
<die.all@spammers.org> wrote:

>Has anyone got information about a PL177A valve?
Think 4CX1000A with a septar base.

Fred, W8OY
jfriley@airmail.net

1896. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: maddog@io.com
Message-ID: <36c8fb34.21571719@news.io.com>
Source record: 73423

On Sun, 14 Feb 1999 01:19:45 -0600, hharbich@NOSPAMexecpc.com (Harvey W. Harbicht (http://come.to/stupidlaratricks)) wrote:

Re: Zip cord to AC Receiving antenna

>DISCLAIMER: THIS IS A REALLY MENTAL IDEA! DON'T DO IT!
>IF YOU SCREW UP YOU WILL RUN 120 VOLTS INTO YOUR RADIO AND MAYBE KILL
>YOURSELF!

I understand the inclination to caution people about the use of the zip-cord coupling capacitor; but, homebrewers routinely build equipment powered from the AC lines. Some level of competence has to be assumed in a newsgroup about amateur radio and homemade equipment. Don't get me wrong, we all need to be careful about *all* homebrew equipment that connects to potentially lethal voltages...but... assuming such an antenna is properly constructed and insulated, I don't understand why its use is any more risky than (for example) touching the cord on your living room lamp while it is plugged in.

Perhaps the risk is in having a transient coupled to the receiver front end, but then any long wire antenna carries this same kind of risk, does it not?

In the days of AC-DC table-top radios, wasn't it common practice to use a small value, high voltage capacitor coupled to the AC line as a "built-in" antenna?

Straighten me out here, gang!

monty

1897. Re: Design of a frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990216034359.26021.00001765@ng147.aol.com>
Source record: 73424

Hrafnkell Eiriksson wrote:

>I'm in the process of designing/building a DC receiver for 14Mhz.
>I'd like to add to it a display that shows the frequency of the
>local oscillator. I was wondering how to design a frequency
>counter for that purpose. My ideas so far are:
>Use the signal from the LO to drive a binary counter for
>a given period of time (f.x. 1 sec), when the time has elapsed, convert
>the state of the counter to BCD digits and show on a display.
>

Unless you want to do something else with the binary representation of the frequency, it's most likely much easier to simply do the counting with decimal counters. As you figured, it's common to use a count time of 1 second, but you may not need that much resolution. Perhaps 1/10 second would be OK, giving 10Hz resolution and faster response time. It's up to you. It's common to have latches which hold the previous count for display while the counter is performing another count. Also, since you know the LO is within some small range of frequencies, you don't necessarily have to count all the digits. Perhaps just 100kHz, 10kHz, ..., 10Hz are enough, and you can assume the 14MHz (but if the display reads 990kHz, you know it's really 13.99, etc.)

You could do the whole counter in a field programmable gate array or a medium size CPLD. You could also use a simple microcontroller to do almost all of it...perhaps everything. I think that a 20MHz PIC processor can count up to 20MHz, but I'm not positive about that.

73,
Jay

1898. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Martin Ackroyd <martin.ackroyd@virgin.net>
Message-ID: <36C940B2.53362963@virgin.net>
Source record: 73425

BOB DUCKWORTH wrote:
>
> Dear friend of rat,
>
> IMHO more like mongoose than chicken.
> Good with pickled mustard green.
>
> In addition to point contact transistor,
> you might want to try biasing the diode
> and looking for a spot that results in a
> negative resistance,
> AKA tunnel diode.
> PLEASE document and write to me
> if you observe this effect!

When I was an electronic engineering student in the 1960's,
the teaching lab had a Tektronix transistor curve tracer.

I tried putting various old-time radio crystals on it.
Regions of negative resistance were relatively common to
find. Not sure if they were due to tunnelling or other
effefcts [eg avalanche breakdown?]

In the 1930's there were sometimes references to 'oscillating
crystals' [and they were not talking about quartz]. Sorry
I don't have any references now.

Take care,
Martin

1899. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: cjX@hth.com
Message-ID: <36c94bcc.84641090@news.buller.se>
Source record: 73426
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

1900. Transistor specs required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: gx0vzs@aol.com
Message-ID: <19990216054823.20272.00000374@ngol03.aol.com>
Source record: 73427

Please could anyone give me any information on the following transistors:-

2N1132
2N1302
2N1303
2N1305
2N1306
2N1613
2N2215
2N217
2N2222
2N2905A
2N2907
2N3054
2N3467
2N3707
2N3724
2N3736

These are some of the Transistors that I have in the 2N series and would like the specs for my list.

Also does anyone know of anywhere that I can find the information for alot of other transistors that I would like specs on, which include series...AC, AF, BC,
BF, ETC ETC.

Many thanks in advance

Bill - (15) - M0BTZ
Email - gx0vzs@aol.com

1901. CONVERSION KIT FOR MIDLAND

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19990216064249.16405.00002276@ng-ft1.aol.com>
Source record: 73428

I HAVE A MIDLAND 13-892 SSB CB. I DESIRE TO CONVERT IT TO AS MUCH OF A 10 METER RIG AS POSSIBLE. I HAVE HEARD AND UNDERSTAND THERE ARE KITS TO DO THIS..... ANY OF U TECHNICIAN TYPE FELLOWS GOT ANY IDEAS? EMAIL IF U DO.

TNX
BILL

1902. Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <01be59a5$47dd1660$LocalHost@simoncox>
Source record: 73429
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Can anyone point me in the direction of a UK company that
could repair / rewind old Ernest Turner moving coil meters as
used in Racal RA 17 receivers, thanks.

--

Peolpe worry about me, I ride a
Kawasaki Z1000 LTD and listen
to RA 17 valve radios.
simon.cox@breathe.co.uk

1903. alinco EL-2H

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Erkki <erkki@emt.ee>
Message-ID: <01be59ae$b5da0b60$cd01010a@erkki.emt.ee>
Source record: 73430

Hello

Does somebody have any information about Alinco EL-2H 2m PA (SSB/FM). I am interested in approximate outout power, type of PA transistors, perhaps schematics. It`s an old one and has lost the transist�rs but in general looks quite healthy to me so I am eager to restore it.

Thank you in advance

Erkki
ES1DC

1904. Re: Hbw transistors w/galena crystal?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: j.m.franke@larc.nasa.gov
Message-ID: <j.m.franke-1602990801030001@franke.larc.nasa.gov>
Source record: 73431

In article <36C940B2.53362963@virgin.net>, martin.ackroyd@virgin.net wrote:

> BOB DUCKWORTH wrote:
> >
> > In addition to point contact transistor,
> > you might want to try biasing the diode
> > and looking for a spot that results in a
> > negative resistance,
> > AKA tunnel diode.
> > PLEASE document and write to me
> > if you observe this effect!
>
>
> When I was an electronic engineering student in the 1960's,
> the teaching lab had a Tektronix transistor curve tracer.
>
> I tried putting various old-time radio crystals on it.
> Regions of negative resistance were relatively common to
> find. Not sure if they were due to tunnelling or other
> effefcts [eg avalanche breakdown?]
>
> In the 1930's there were sometimes references to 'oscillating
> crystals' [and they were not talking about quartz]. Sorry
> I don't have any references now.
>
> Take care,
> Martin

You can observe negative resistance in 1N35 diodes at the reverse voltage breakdown point. This is discussed in the Crystal Rectifiers volume, No. 15, of the MIT Radiation Lab Series and was even presented as a project in a Sylvania germanium diode booklet. I tried it, it worked well in an audio oscillator. Been meaning to go back and try it at RF frequencies.

John

1905. Re: REQ coil making software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be59f6$744294e0$223963c3@default>
Source record: 73432

Harvey,

Download in a few seconds, not zipped-up, program
SOLENOID.exe

Its just what you need to design air-core solenoids of any
length, diameter, turns, wire size, winding pitch. Other
programs, mainly antennas will design
loading/tuning/Z-match coils as part of an antenna's
performance analysis. Take a look at ENDFEED, TRAPDIP,
TANT136, VERTLOAD. All relatively new.

TOROID does what it says. But its no better than the
accuracy of data you put into it.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Harvey W. Harbicht (http://come.to/stupidlaratricks)
<hharbich@NOSPAMexecpc.com> wrote in article
<7a8net$mvk@newsops.execpc.com>...
>
> I need some kind of program that will design coils for
me. I have a few,
> but none of them are just right. I want to input the
value, wire size and
> coil form....then have it tell me how many turns at what
spacing.
> For existing plans I want to input the form, wire and
turns and have it
> tell me the value of the coil. Mayeb even show me all the
values using
> different types or forms; air core, solid core,
ferrite........
>
> tnx es 73 de kg9ev
>
>
> --
> ... Harvey W. Harbicht - hharbich@execpc.com
> ... Signature file at:
http://www.execpc.com/~hharbich/siggy.htm
>

1906. Re: A:\ drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be59f7$fb613ac0$223963c3@default>
Source record: 73433

From Windows go into DOS.
Against the DOS prompt type A:\
Then hit Return.

To get back to windows from A:
Type C:\
Then hit Return
Then Type Exit

1907. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36C978E7.6DF2@pop.valley.net>
Source record: 73434

Monty Northrup wrote:
>
> On Sun, 14 Feb 1999 01:19:45 -0600, hharbich@NOSPAMexecpc.com (Harvey
> W. Harbicht (http://come.to/stupidlaratricks)) wrote:
>
> Re: Zip cord to AC Receiving antenna
>
> >DISCLAIMER: THIS IS A REALLY MENTAL IDEA! DON'T DO IT!
> >IF YOU SCREW UP YOU WILL RUN 120 VOLTS INTO YOUR RADIO AND MAYBE KILL
> >YOURSELF!
> In the days of AC-DC table-top radios, wasn't it common practice to
> use a small value, high voltage capacitor coupled to the AC line as a
> "built-in" antenna?
>
> Straighten me out here, gang!

Hello--
Most AC/DC tube-type receivers used either a loop antenna wound onto the radio's read cover or (in later years) a ferrite loopstick. RCA used a Faraday-shielded loopstick in its 1960s models (IIRC) that worked better than average.

My folks owned a 1950-vintage Zenith AM/FM receivr that used an FM antenna coupler consisting of a metal clip that fitted over the AC line cord and connected to an antenna terminal.

Inside these receivers, a capacitor coupled the "low" side of the AC line to the chassis. If this capacitor leaked, the user (or repairman) had a 50-50 chance of getting zapped when touching the chassis, depending on which way the line cord was plugged in.

73,
Brad AA1IP

1908. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be59f9$38b57f20$223963c3@default>
Source record: 73435

Never use tinned or tin-plated copper wire for RF coils.
Considerably more lossy than bare copper.

Use silver plating if you like a pretty finish but silver
does not signicantly reduce loss relative to bare copper.
Silver also tarnishes rapidly.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Veeduber <veeduber@aol.com> wrote in article
<19990215222428.05874.00002279@ng126.aol.com>...
>
> >
> >I am planning to build an antenna coupler that requires
a coil. My attempts
> >to
> >wind it myself were not satisfying. In the magazines you
see perfectly wound
> >homebrew coils. How do they do it? Any clue would be
really appreciated.
> >Ray, KD6SXG
> ><
>
> Ray (and the Mailing List),
>
> One method that delivers high quality results is to wind
your coils on a lathe
> using demountable coil forms.
>
> The forms are made of hardwood blocks about ten inches
long fastened together
> with a recessed brass screw at each end, installed from
opposite sides. The
> screws are installed at an angle so as to be parallel to
the ends of the form.
> The ends of the block are then cut parallel to each other
but at an angle to
> the parting line. The centers are then found. Because
the parting line is at
> an angle, the ends of the block are solid. A brass plate
and dog may be

> installed to facilitate centering and turning. The block
is turned to the
> desired diameter. If things have been properly laid out,
removing the screws
> will allow the block -- now a cylinder -- to come apart
in the form of a pair
> of tapered cylindical wedges which mate along their flat
face.
>
> You should end up with a cylindrical form about nine
inches long on which you
> may wind a coil eight inches or less in length. You may
of course make a
> longer form but since it is held together only on the
ends the maximum length
> is a function of diameter. (My 1" form is about 4"
long.)
>
> The cylindrical form is then grooved with a router to
accept styrene rod of a
> given diameter suitable to the coil, the grooves falling
entirely within a
> given half of the form so as to leave the parting line
unobstructed. Four
> grooves is the norm but with larger diameter coils six
grooves are possible.
> Suitable styrene rod is available from plastic suppliers.
Depending on the
> diameter of the coils you plan to make, you'll need
several diameters of
> styrene rod, that is, small (1/8") for small diameter
coils and heavier rod
> (5/16") for larger diameter coils made of heavier gauge
wire.
>
> The form is then finished with varnish, and marked
according to diameter. If
> you do much building you'll eventually have half a dozen
forms, from 3/4" to 3"
> diameter.
>
> The form is used with a wire feed and tensioner which
you'll also have to make.
> Coils are normally wound from tin-plated solid copper
wire, which is fairly
> expensive stuff. Even so, it is best to buy an entire
roll of the wire and
> design your wire feeder to accept the standard rolls.
>
> In use, the form of the desired diameter is chucked into

the lathe, styrene
> rods cut to length and attached to the form with tape or
wire and the lathe set
> to feed wire at the desired pitch and tension. Tension
is kept fairly high in
> order to accomodate the following step.
>
> Once the coil is wound -- it takes only a few minutes --
the wire may be cut
> and secured to the form, either to an eyelet or by
threading the free end of
> the wire into a hole drilled in the form for that
purpose. The completed coil
> is then HEATED, usually with an industrial grade hot-air
gun such as you'd use
> for heat-shrinking. The heat softens the styrene. The
highly tensioned coil
> then melts itself into the styrene rods.
>
> A fair degree of experience is needed in the heating,
especially with smaller
> coils. The object is to melt the wire into the rods so
that the styrene covers
> the wire. But if you let it melt too deeply you will
upset the process for the
> remaining rods and may alter the diameter of the finished
coil. The depth of
> the grooves you've cut to accept the styrene rod has a
lot to do with your
> success, as does the pitch of the winding -- you may find
it more convenient to
> make forms of identical diameters but having slightly
deeper grooves for coils
> having a finer pitch. But in most cases, the diameter of
the wooden form
> determines the depth to which the wire can melt into the
styrene.
>
> Once melted all around, the styrene is allowed to cool.
The brass screws are
> removed and the wooden form driven apart, leaving you
with a air-wound coil
> indistinguisable from those commercially available.
>
> I'm sorry I can't provide you with a sketch. My
operating system does not
> support any of the commonly available CAD programs and
what it does support, no
> one else seems to have :-) (ie, NT 3.51)
>

> -Bob Hoover
> -KA6HZF
>

1909. Re: EPROM programming for Standard Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7abvmunpp1@nnrp1.dejanews.com>
Source record: 73436

In article <01be594e$c0ec8600$8eb174cc@xx>,
"Keith E. Spainhour" <kspainhour@wilkes.net> wrote:
> Hello,
> I am in need of information on how to generate a binary
> file for programming of an eprom for a standard VHF mobile.
> I don't recall the model number right off, I believe it is G?3000.
> Any Info. would be appreciated
>
> Thank you,
>
> --
> 73 DE KT4XW
> Keith E. Spainhour
> KSpainhour@wilkes.net
>

Keith, I have the EPROM burner you refer to. Unfortunately, I don't know what format Standard uses to burn the chip. I have a copy of a file that Standard sent me, but I have no idea what the different digits in the string represent (freq, CTCSS, channel, priority, etc.) If you send me a 2716 EPROM and the info you want burned, I can do it for you with the AR3400 (I think that's the burner model number).

VE6INM (Glenn)

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1910. Tower Electrical Length or Dipping a Tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Joe Shuey NE3H <ne3h@access.webcombo.net>
Message-ID: <36C98BAF.2B1E76D7@access.webcombo.net>
Source record: 73437

I've tried the determining the resonant height of my tower. I've climed it, attaching a wire at the top, and puttting a couple loops at the bottom. Then using a grid dip meter. But the was no distinct dip anywhere in the expected frequency range. I've talked to a couple others who have also tried (and failed) to get a reading by this method.

Anyone out there that has had success with this method?

Thanks

1911. FS/trade: SL6440 high level mixer ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: kb9olm@my-dejanews.com
Message-ID: <7ac66otsf1@nnrp1.dejanews.com>
Source record: 73438

For sale: SL6440 high level mixer ICs made by Plessey.
Package of four ICs is $20 plus shipping from San Francisco Bay Area.
Or will trade for WD11 RCA tube(s), dead or working.

Please reply to Vlad at kb9olm@hotmail.com
Always looking for German WWII radio equipment and old regenerative receivers.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1912. Re: Design of a frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36C98FA1.E1AE9205@hevanet.com>
Source record: 73439

Jay OmegaC wrote:

> Hrafnkell Eiriksson wrote:
>
> >I'm in the process of designing/building a DC receiver for 14Mhz.
> >I'd like to add to it a display that shows the frequency of the
> >local oscillator. I was wondering how to design a frequency
> >counter for that purpose. My ideas so far are:
> >Use the signal from the LO to drive a binary counter for
> >a given period of time (f.x. 1 sec), when the time has elapsed, convert
> >the state of the counter to BCD digits and show on a display.
> >
>
> Unless you want to do something else with the binary representation of the
> frequency, it's most likely much easier to simply do the counting with decimal
> counters. As you figured, it's common to use a count time of 1 second, but you
> may not need that much resolution. Perhaps 1/10 second would be OK, giving
> 10Hz resolution and faster response time. It's up to you. It's common to have
> latches which hold the previous count for display while the counter is
> performing another count. Also, since you know the LO is within some small
> range of frequencies, you don't necessarily have to count all the digits.
> Perhaps just 100kHz, 10kHz, ..., 10Hz are enough, and you can assume the 14MHz
> (but if the display reads 990kHz, you know it's really 13.99, etc.)
>
> You could do the whole counter in a field programmable gate array or a medium
> size CPLD. You could also use a simple microcontroller to do almost all of
> it...perhaps everything. I think that a 20MHz PIC processor can count up to
> 20MHz, but I'm not positive about that.
>
> 73,
> Jay

There are at least two issues here.
1) DC receivers are extremely sensitive to junk on the power supply. The counter
is gonna generate
a lot of junk on the power supply.
2) The counter is gonna generate huge signals at harmonics of all the frequencies
in the clock divider chain. It will also generate huge signals at harmonics of
subharmonics of the input
frequency. And the display update freauency...and...

I use an external counter on my spectrum analyzer/tracking generator to tune
cavities.
Plugging on the counter raises the noise floor about 20dB.

Shield and decouple it real good.

Why would anyone want to build a DC reciever??? Simplicity??? Low power????
Small size???? Not if you add a frequency counter.

miker

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

1913. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: chris@pooh.cc.ucf.edu
Message-ID: <7ac4f0$7ce$1@news.cc.ucf.edu>
Source record: 73440

In article <7a5ti6$7pn@newsops.execpc.com>,
hharbich@NOSPAMexecpc.com (Harvey W. Harbicht (http://come.to/stupidlaratricks)) writes:
> In article <36a3e082.3029132@news.io.com>, maddog@io.com says...

> (RECEIVE ONLY. DO NOT TRANSMIT WITH THIS!)
>
>
> DISCLAIMER: THIS IS A REALLY MENTAL IDEA! DON'T DO IT!
> IF YOU SCREW UP YOU WILL RUN 120 VOLTS INTO YOUR RADIO AND MAYBE KILL
> YOURSELF!
>
> Sorry for all the yelling but I want to be clear about those points. :)

Boy does this bring back some memories.
Actually this was done, at one time. It was known as carrior-current,
I beleave. (Correct me if I am wrong). The technique was use mostly
for limited range BC band stations. Either unlicensed or ristricted
licensed use. We had one on our campus, at one time.

They would couple the output of the transmitter to the AC line,
enabling the reciption of the station by people whose houses,
businesses etc. that where connected from the same feed from the
power sub-station. The transmitter was supposed to be low power,
10 watts or so.

I remember my grandfather telling me of instances, though, where
someone would use higher power.. 1000 watts or more. This created some
rather bizzar effects. Like talking washing machines and refridgerators,
lights that went on by themselves etc. Can you imagine the reaction
peole had to these accourances.

I do not know if this is still done or not. I have not heard of it
in a number of years.

Chris

--
==
Chris Maukonen "Change is not merely necessary
Sr. Systems Programmer to life - IT IS LIFE"
Univeristy of Central Florida Alvin Toffler
chris@.ucf.edu (407) 823 5460

1914. Test Equipment FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Ken Simpson <W8EK@usa.net>
Message-ID: <lZgy2.995$zc1.5630@monger.newsread.com>
Source record: 73441

For sale:

RCA WV-76 A, High Sensitivity AC VTVM, includes amplifier, measures down to 10 mV full scale, had dbm scale as well, INCLUDES PROBE. Physically and electrically in great shape. $ 30

Sencore TR-139 transistor tester. Can measure in circuit as well. Appears like it should work OK, but I can not seem to get it to zero correctly. It may be the tester has a problem, or it may be I have the problem knowing how it should work. Cosmetically in good shape. Probes included. $ 20

Keithley 169 DMM. This is a 3 1/2 digit DMM, with an LCD display. Auto polarity. Operates off of 6 "C" cells (or appropriate adapter). Fraction of a percent accuracy. Lab quality. Manual included $125

Prices do not include shipping from Florida.

E-Mail to W8EK@usa.net

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@usa.net or W8EK@fdt.net
http://www.gnv.fdt.net/~kenmar
Voice Phone (352) 732-8400

1915. Transvertors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36C9A1C3.500F@eece.maine.edu>
Source record: 73442

How are these typically made? I mean, you take a 10W radio, pump that
10W into a transvertor, and it outputs some greater amount on another
band. I'm only familiar with low-power mixers (like from MiniCircuits),
so do they use heavy duty mixers or just attenuate the input signal?

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

1916. Re: Transvertors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36C9AD8D.50CFC65B@hevanet.com>
Source record: 73443

Shawn Upton wrote:

> How are these typically made? I mean, you take a 10W radio, pump that
> 10W into a transvertor, and it outputs some greater amount on another
> band. I'm only familiar with low-power mixers (like from MiniCircuits),
> so do they use heavy duty mixers or just attenuate the input signal?
>
> --
> **********
> Shawn Upton
> Electrical Engineering Student
> University of Maine at Orono
> webpage: http://www.eece.maine.edu/~supton/
> mail: supton@eece.maine.edu
> KB1CKT Tech Plus
> **********

It is possible to build an active mixer that has gain.
Usually, the signal is attenuated, passed thru a low level lossy mixer
then amplified again.
miker

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

1917. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: G4XOU <g4xou@psilink.co.uk>
Message-ID: <36c9c54a.0@nnrp1.news.uk.psi.net>
Source record: 73444
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

try Anchor supplies cattlemarket road nottingham they may even sell you a
new meter

Simon Cox wrote in message <01be59a5$47dd1660$LocalHost@simoncox>...
>Can anyone point me in the direction of a UK company that
>could repair / rewind old Ernest Turner moving coil meters as
>used in Racal RA 17 receivers, thanks.
>
>--
>
>
>Peolpe worry about me, I ride a
>Kawasaki Z1000 LTD and listen
>to RA 17 valve radios.
>simon.cox@breathe.co.uk

1918. Re: Transvertors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7acl36$c67$1@nnrp1.dejanews.com>
Source record: 73445

In article <36C9AD8D.50CFC65B@hevanet.com>,
DontHitReplyUseTheHotLinkInTheSignature wrote:

> It is possible to build an active mixer that has gain.
> Usually, the signal is attenuated, passed thru a low level lossy mixer
> then amplified again.
> miker

One nice approach to this is to build a low-power radio expressly
for driving transverters. That way you get just the right transmit
power output, separate TX/RX paths, and all the proper control
signals. No messing around!

Since you will never hook it up to an antenna there is no
requirement for a ham band IF. This solves many problems.

High-level mixers were popular in the Time of Tubes, but tend to
be only an historical footnote now.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1919. 6146B-CHINA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Bruce Corbett <bcorbett@lucent.com>
Message-ID: <36C9C9AD.A12EBDE2@lucent.com>
Source record: 73446

Anyone try the 6146B-CHINA tubes? Are the worth saving the $12 on?

Bruce
bcorbett@lucent.com

1920. Variable vac. capacitor need!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: syversen@online.no
Message-ID: <7acmgp$33t$1@readme.online.no>
Source record: 73447

Hello, i need the last part to complete my home made HF AMP. The part is a variable vacuum capasitor. The values is aprox!, 2000v and 1000pf or more. Please drop me a mail if you have or know where to find this.... THANKS IN ADVANCE, De Frode LA9WDA

1921. Re: Tower Electrical Length or Dipping a Tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: rwalter7@aol.com
Message-ID: <19990216164943.11571.00000061@ng-fi1.aol.com>
Source record: 73448

>
>I've tried the determining the resonant height of my tower. I've climed
>it, attaching a wire at the top, and puttting a couple loops at the
>bottom. Then using a grid dip meter. But the was no distinct dip
>anywhere in the expected frequency range. I've talked to a couple others
>who have also tried (and failed) to get a reading by this method.
>
>Anyone out there that has had success with this method?
>
>Thanks
>
>

Sounds like a similar problem I had when I wanted to make a duplexer out of a
silo.
Bob
email: rwalter7@aol.com

1922. Re: PL177A info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: ax9909@aol.com
Message-ID: <19990216173106.17419.00002554@ng03.aol.com>
Source record: 73449

the pl-177a is a glass , 5 pin tetrode.

plate diss.=75 watts
plate volts=2000 dc
plate amps=150 mils.
screen diss.=10 watts
screen volts=600 dc
fillament voltage=6 ac
filament amps=3.5
class C output= 100 watts at 1000 vdc
" " " = 210 " " 2000 vdc
this tube is used in the final of the PRC-47

now for your other question, if this tube looks anything like a 4cx-1000 it's
not a pl-177
sounds like you have a pl-172 which is a 1000 watt tube like the 4cx-1000.
check the number again, i think you made a mistake!
good luck & 73.......george

1923. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: olympus@0spam.prestel.co.uk
Message-ID: <36c9e38a.13185379@news.prestel.co.uk>
Source record: 73450
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On 16 Feb 1999 12:10:52 GMT, "Simon Cox" <simon.cox@breathe.co.uk> wrote:

>People worry about me, I ride a
>Kawasaki Z1000 LTD and listen
>to RA 17 valve radios.

Surely not at the same time?

Incidentally, I found a '9-Pin Miniature Tall Test Socket Adapter'
Model 1449 by Pomona Electronics of Calif. It extends the valve base
of an awkwardly placed B9A valve base out by 5.5cms with a base on
top for the valve and nine tags to connect instruments to for
measurements. Do you want it?

--
- 73 de Jim, g(m)4rga | _______
olympus%jimdee.prestel.co.uk | | |
dynastic%cwcom.net | Only | 2 | more nights to do!!
marula%zdnetmail.com | |_____|
g4rga@gb7tjf.#45.gbr.eu |
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: pgpkeys.mit.edu:11371

1924. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Frank Erskine <frank@g3wte.demon.co.uk>
Message-ID: <XvZZLLArVfy2Ewgn@g3wte.demon.co.uk>
Source record: 73451
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <36c9e38a.13185379@news.prestel.co.uk>, Jim Dunnett
<olympus@0spam.prestel.co.uk> writes
>On 16 Feb 1999 12:10:52 GMT, "Simon Cox" <simon.cox@breathe.co.uk> wrote:
>
>>People worry about me, I ride a
>>Kawasaki Z1000 LTD and listen
>>to RA 17 valve radios.
>
>Surely not at the same time?
>
>Incidentally, I found a '9-Pin Miniature Tall Test Socket Adapter'
>Model 1449 by Pomona Electronics of Calif. It extends the valve base
>of an awkwardly placed B9A valve base out by 5.5cms
~~~~~~ ?

What's that in real money? A couple of inches, I'd imagine :-)

73 -
--
Frank Erskine
Sunderland
Don't go metric - feet, BSF, Whitworth and inches are miles better

Still looking for 67.5V and 100V HT batteries
~~~~~~

1925. Guide to the rec.radio Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7actgb$r7j@news.Hawaii.Edu>
Source record: 73452
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-intro

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups, as well as their Internet mailing list counterparts and complements. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to Jeffrey Herman, WH6U, (jeffreyh@hawaii.edu), or Paul Schleck, K3FU, pschleck@novia.net.

This message was last changed on 14 March, 1998.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

Over the years, as the net grew, the volume of discussion became progressively higher. First one by one, and then as part of two reorganizations, what was once one group became many. In the process, developments elsewhere on the net were reflected in the groups as they were created, most notably the change to place all of the ham radio groups in one hierarchy.

The collection of newsgroups continues to grow as more people join the net, and as more topics of discussion gain volume, I expect to see more groups be created as well. This follows what is happening on the rest of the net.

Nearly all of the radio newsgroups have corresponding mailing lists, the notable exception being rec.radio.swap. There are also a few mailing lists that don't have newsgroups.

The Current Groups
==================

It's important to post messages to the group that's appropriate for them, and not to the groups that aren't. The whole idea of having different newsgroups is so that folks who aren't interested in, say, homebrewing, don't have to wade through messages about homebrewing on the way to read about Field Day. Posting appropriately is just good etiquette.

The rec.radio.amateur.misc group is the catchall. It is what rec.ham-radio was renamed to during the first major reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, was removed on September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there. To answer a frequently asked question: No, there is no mailing list that goes along with this group. If you can't read Usenet news directly, you're out of luck.

The group rec.radio.amateur.policy was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate - it's now legal to order a pizza on the autopatch, if you're not in the pizza business - as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The group rec.radio.cb is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL

bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently David Dodell, WB7TPY. The email address for submissions to the group is rec.radio.info-moderator@primenet.com. Inquires and other adminis-trivia should be directed to rec.radio.info-request@primenet.com. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups r.r.amateur.antenna, .boatanchors, .dx, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, the older tube based amateur, military, and commercial gear, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter. The .dx group is devoted to long distance amateur communications. Each of these subgroups has its own charter and FAQ; please refer to the archives to find these documents.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

Mailing Lists

In addition to the mailing lists that mirror the Usenet newsgroups, there also are a few that stand alone. These cover specific areas of ham radio, and discussion is focused on just those areas.

The cq-contest mailing list is for discussions of contesting in ham radio. To join, send email with the word "subscribe" on a line by itself to cq-contest-request@tgv.com.

The DX mailing list covers the finer points of DXing. This one is also joined by mailing "subscribe" on a line by itself, this time to

dx-request@unbc.edu.

There's also a VHF mailing list, for VHF operators of the weak signal persuasion. You can join this one be sending "subscribe vhf" on a line by itself to vhf-request@w6yx.stanford.edu.

The QRP-L list is devoted to building and operating gear at low-power outputs. To subscribe, send an email to listproc@lehigh.edu and only write: subscribe qrp-l Your Name.

The TopBand e-list is devoted to all areas of operation on 160m. To subscribe, send an email to majordomo@contesting.com and only write: subscribe topband and follow the instructions you'll be sent.
This site, contesting.com, also hosts a couple dozen other ham-related e-lists. Use the above address, and only write: lists to get the entire index.

The Boatanchors e-list is devoted to the older tube-based ham, military, and commercial communications gear. To subscribe, send an email to: listserv@listserv.tempe.gov and only write: subscribe boatanchors

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to: majordomo@piobaire.mines.uidaho.edu and only write: subscribe glowbugs <your@address.here>

The VHF DX discussion list can be accessed by sending an email to: majordomo@blacksheep.org and only writing: subscribe VHF-DX-discuss.

We now have a list devoted to amateur radio history. To subscribe, send an email to: ham-radio-history-subscribe@egroups.com - leave the body of the message blank.

Qth.net hosts over 100 ham-related e-lists, including lists devoted to each state, manufacturer, mode, band - too many to state here. Send an email to majordomo@qth.net and only write: lists to get the complete index.

For one of the most complete indexes of email lists, see the excellent web site http://pw2.netcom.com/~ac6v/pageae.html

Please do NOT send subscription requests to the mailing lists themselves; that doesn't work very often, and is very annoying to those on the list. Also, please keep your electronic mail address current with any mailing lists you subscribe to, as dealing with returned email is a nuisance for the person maintaining the mailing list.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your

article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jeffrey Herman, WH6U, rec.radio.amateur working-group
jeffreyh@hawaii.edu

1926. Re: EPROM programming for Standard Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: "Keith E. Spainhour" <kspainhour@wilkes.net>
Message-ID: <01be5a04$bda18200$d0b174cc@xx>
Source record: 73453

Hello Glenn,

I'll check on the model number tomorrow.

Thank you,

--
73 DE KT4XW
Keith E. Spainhour
KSpainhour@wilkes.net

ve6inm@telusplanet.net wrote in article
<7abvmunpp1@nnrp1.dejanews.com>...
> In article <01be594e$c0ec8600$8eb174cc@xx>,
> "Keith E. Spainhour" <kspainhour@wilkes.net> wrote:
> > Hello,
> > I am in need of information on how to generate a binary
> > file for programming of an eprom for a standard VHF mobile.
> > I don't recall the model number right off, I believe it is G?3000.
> > Any Info. would be appreciated
> >
> > Thank you,
> >
> > --
> > 73 DE KT4XW
> > Keith E. Spainhour
> > KSpainhour@wilkes.net
> >
>
> Keith, I have the EPROM burner you refer to. Unfortunately, I don't know
> what format Standard uses to burn the chip. I have a copy of a file that
> Standard sent me, but I have no idea what the different digits in the
string
> represent (freq, CTCSS, channel, priority, etc.) If you send me a 2716
EPROM
> and the info you want burned, I can do it for you with the AR3400 (I
think
> that's the burner model number).
>
> VE6INM (Glenn)
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

>

1927. FS: 90 VCT 25 A power xfmr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: ns40ley@snowhill.com
Message-ID: <36CA3268.5A61@snowhill.com>
Source record: 73454
Cross-posted to: rec.radio.amateur.homebrew,rec.audio.marketplace

FS: one 90 volt, center-tapped 25 amp power transformer, input 120 v
Good for a +/- 40 volt 25 A supply for high powered audio amp or for a
50 amp supply up to 40 v. May be usable as an isolation transformer if
you can find a 20 or 30 volt high current transformer to place in series
with the output. Unit is unused, in original box, 7-1/2" x 7-1/2" x 6"
tall and weighs 60 lbs. $75 plus shipping (unless you pick up) from
36330 zip (Alabama). NOTE: Please REPLACE the "ns40" in my email with
"wor" to spell "worley" to repy or call 334-347-5281 day/eve/wknd.

1928. Re: How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: "Michael A. Covington" <covington@mindspring.com>
Message-ID: <7ad1g5ioa1@camel15.mindspring.com>
Source record: 73455
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

chuckle Has nobody here heard of 4x5-inch sheet film, or the scanners that scan them? They're used a fair bit in professional photography.

--

Michael A. Covington / AI Center / The University of Georgia
http://www.ai.uga.edu/~mc http://www.mindspring.com/~covington <><

1929. WTB: #24 & #26 magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: nospam@spamhill.com
Message-ID: <36CA3443.64C5@spamhill.com>
Source record: 73456
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

Wanted: surplus magnet wire, #24 and/or #26, pref. not over $1.75 per pound, need at least 2 or 3 lbs. of each, pref. from southeast region. If you have any to sell or know of a good cheap (no minimum) mail-order surplus source, call 334-347-5281. (don't reply to the email, it is bogus.)

1930. circulater freq.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <36CA0DE1.88688E66@iag.net>
Source record: 73457

FOUND A COUPLE CIRCULATERS AT HAMFEST.WHATS THE BEST WAY TO FIND
FREQUENCY THEY ARE SET FOR. HARRY

1931. Re: Tower Electrical Length or Dipping a Tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <7ad3i2jqs1@camel15.mindspring.com>
Source record: 73458

A grid dip meter is NOT the way to go about it. Use a RF bridge such as a General Radio 1606 or 916. You will have better luck. It will tell you the resistance and reactance at what ever frequency you want to look at. Sparks W4EAS

Joe Shuey NE3H wrote in message <36C98BAF.2B1E76D7@access.webcombo.net>...
>I've tried the determining the resonant height of my tower. I've climed
>it, attaching a wire at the top, and puttting a couple loops at the
>bottom. Then using a grid dip meter. But the was no distinct dip
>anywhere in the expected frequency range. I've talked to a couple others
>who have also tried (and failed) to get a reading by this method.
>
>Anyone out there that has had success with this method?
>
>Thanks
>

1932. Re: WTB: #24 & #26 magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <36CA1FA2.BA182DB4@hamradio.org>
Source record: 73459
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

I wonder how many people will make a long distance phone call to help someone who won't use a legitimate Email address so they can reply to him for free!!??

I don't feel like donating any more to the long distance carriers!

Al - K8EUR

nospam@spamhill.com wrote:

> Wanted: surplus magnet wire, #24 and/or #26, pref. not over $1.75 per
> pound, need at least 2 or 3 lbs. of each, pref. from southeast region.
> If you have any to sell or know of a good cheap (no minimum) mail-order
> surplus source, call 334-347-5281. (don't reply to the email, it is
> bogus.)

1933. FS 6GK5/6FQ5 NOS various brands.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36CA2818.A9DFC71C@herald.infi.net>
Source record: 73460
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

NIB 6GK5/6FQ5 NOS tubes for sale. Various brands; GE, RCA, Sylvania, Westinghouse, etc. Tested. $2.50 ea. + shipping.

Ken Chait

1934. FS 6GK5/6FQ5 NOS various brands.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36CA2840.A4469D2B@herald.infi.net>
Source record: 73461
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

NIB 6GK5/6FQ5 NOS tubes for sale. Various brands; GE, RCA, Sylvania, Westinghouse, etc. Tested. $2.50 ea. + shipping.

Ken Chait

1935. FA 6GK5 electron tubes, NIB.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36CA28B3.6B3B77A7@herald.infi.net>
Source record: 73462
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

NIB 6GK5/6FQ5 NOS tubes for sale. Various brands; GE, RCA, Sylvania, Westinghouse, etc. Tested. $2.50 ea. + shipping.

Ken Chait
http://www.electron-tube-audio.com

1936. Re: A question/complaint

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36CA300F.A924D294@eaglequest.com>
Source record: 73463

Jim wrote:

-edit for bevity-

>Now, here is the interesting part. The CD player has an LCD read out and

> electronic buttons (as opposed to mechanical on the cassette deck). There
> is, presumably, some type of embedded microchip running the thing---real
> state of the art stuff.
>
> Ok, but then why did they put an old fashioned slide rule dial on the AM/FM
> radio? I think that another LCD readout (or even use the same one) with a
> simple counter (or even a synthesizer) would be cheaper than paying someone
> to string the dial cord.

It begs the question, who strung the dial cord? more than likely a young asian girl making a dollar or so to string 300 units a day. Most of these "combo" radios are built from pre-existing components mixed and matched to come up with a finished product, the CD player was probably installed as a finished assembly and has no connection to the radio other that mabye interfacing with the audio amp. So building an interface so that the radio and CD player can share the same LCD display is definatly not cost effective. As a manufacture you could certainly design the radio from the ground up, but why when you can buy the CD player for $4.95 and the AM/FM board for another $1.97 and then build your system from existing components?

73, Tim

1937. AM from an FM only HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36CA31A1.7BBA20C@eaglequest.com>
Source record: 73464

I've picked up one of the Cherokee 6m FM HT's on closeout for $99.99 and let them keep the penny. I've been wanting to do some AM work on 50.4, can I tap into the last IF of the radio and just send it off to an AM radio at 455Khz? It seems to me it would work fine. Have I missed something? Oh, the transmit comes from an Ameco TX-62 not the HT :)

If this is OK, would I need to disconnect the discriminator or should there be enough signal there to just tap into?

Tim ka8ddz

1938. Re: EPROM programming for Standard Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Allan <doblera@cadvision.com>
Message-ID: <36CA37DA.C2BB16F7@cadvision.com>
Source record: 73465

If it is a GX3000, you don't need an eprom burner, you need the radio service software, and the right programming adaptor for your PC.

Allan

"Keith E. Spainhour" wrote:

> Hello Glenn,
>
> I'll check on the model number tomorrow.
>
> Thank you,
>
> --
> 73 DE KT4XW
> Keith E. Spainhour
> KSpainhour@wilkes.net
>
> ve6inm@telusplanet.net wrote in article
> <7abvmunpp1@nnrp1.dejanews.com>...
> > In article <01be594e$c0ec8600$8eb174cc@xx>,
> > "Keith E. Spainhour" <kspainhour@wilkes.net> wrote:
> > > Hello,
> > > I am in need of information on how to generate a binary
> > > file for programming of an eprom for a standard VHF mobile.
> > > I don't recall the model number right off, I believe it is G?3000.
> > > Any Info. would be appreciated
> > >
> > > Thank you,
> > >
> > > --
> > > 73 DE KT4XW
> > > Keith E. Spainhour
> > > KSpainhour@wilkes.net
> > >
> >
> > Keith, I have the EPROM burner you refer to. Unfortunately, I don't know
> > what format Standard uses to burn the chip. I have a copy of a file that
> > Standard sent me, but I have no idea what the different digits in the
> string
> > represent (freq, CTCSS, channel, priority, etc.) If you send me a 2716
> EPROM
> > and the info you want burned, I can do it for you with the AR3400 (I
> think
> > that's the burner model number).

> >
> > VE6INM (Glenn)
> >
> > ----------== Posted via Deja News, The Discussion Network ==----------
> > http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>
> >

1939. Re: REQ coil making software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7addpc$qf2@newsops.execpc.com>
Source record: 73466

In article <01be59f6$744294e0$223963c3@default>,
G4fgq.Regp@btinternet.com says...
> Harvey,
>
> Download in a few seconds, not zipped-up, program
> SOLENOID.exe

Will do. Thanks

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1940. Re: #24 & #26 magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: Ed Mielke <mrfred@provide.net>
Message-ID: <36ca3d1c.0@news.provide.net>
Source record: 73467
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

Try "Surplus Sales of Nebraska" at www.surplusales.com . Part numbers (WMG)GP200-24 and 200-26

nospam@spamhill.com wrote in message <36CA3443.64C5@spamhill.com>...
>Wanted: surplus magnet wire, #24 and/or #26, pref. not over $1.75 per
>pound, need at least 2 or 3 lbs. of each, pref. from southeast region.
>If you have any to sell or know of a good cheap (no minimum) mail-order
>surplus source, call 334-347-5281. (don't reply to the email, it is
>bogus.)

1941. Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-16 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7adef0$qf2@newsops.execpc.com>
Source record: 73468

In article <36C978E7.6DF2@pop.valley.net>, Brad_Thompson@pop.valley.net says...
> line to the chassis. If this capacitor leaked, the user (or repairman)
> had a 50-50 chance of getting zapped when touching the chassis,
> depending on which way the line cord was plugged in.

Hehe. Reminds me of my Pop's old Hallicrafter SW radio. Before I traced the wiring and put a 3-prong polarized plug on it, the radio use to bite me all the time. With the plug on one way the case was hot only when the radio was on. With the plug in the other way the case was hot all the time. I connected my voltmeter between the case and ground. You know what I found? 90 VOLTS on the case!!! It frightens me that he used it that way for over 50 years. Maybe that's why his hair is sticking up in all those old photos. :)

After installing that grounded 3-prong plug the case shows zero volts. Much better.

That radio is a real champ. Original tubes and still working.

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1942. Re: Transvertors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: gelleric@droste.informatik.uni-stuttgart.de
Message-ID: <7advoeoiu1@inf2.informatik.uni-stuttgart.de>
Source record: 73226

In article <36C9A1C3.500F@eece.maine.edu>, Shawn Upton <supton@eece.maine.edu> writes:
|> How are these typically made? I mean, you take a 10W radio, pump that
|> 10W into a transvertor, and it outputs some greater amount on another
|> band. I'm only familiar with low-power mixers (like from MiniCircuits),
|> so do they use heavy duty mixers or just attenuate the input signal?

Some radios like the Kenwood TS 850 can be programmes to turn off their
internal PA and the deliver only about 100 mW to the transverter.

73, Wolfgang DJ3TZ

1943. QST article needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <36CAC3B4.6DD504D@lafn.org>
Source record: 73277

Hi,

I am trying to make a variable RF attenuator using PIN (1N4007) diodes.
Apparently, in QST June, 1994, Ulrich Rohde, published such a project.
I do not know title or page numbers.

Local library is not helping me find QST magazines.

Really need help getting a copy of this.
I'll be happy to pay copy and postal costs for this article.
Thanks for any help.
73, W6MIK

--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

1944. Mail Delivery Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: MAILER-DAEMON@aol.COM
Message-ID: <199902171405.GAA28697@mailbox1.ucsd.edu>
Source record: 73278

Sorry Ham-Homebrew@ucsd.edu. Your mail to kc2we could not be delivered because kc2we is not accepting mail with attachments

1945. Re: EPROM programming for Standard Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7aen2r$440$1@nnrp1.dejanews.com>
Source record: 73279

Not quite so Allan. There are no programming ports on the GX3000M, U, V models. All radio specific data is stored on a 2716 EPROM. To change the data, you must erase the existing stored info (usually with UV light) and reprogram with the needed data for freqs, tones, priority, scan position, etc. Perhaps you are thinking of one of the newer Standard radios that do have an "RS-232" type port for direct data entry. 73 de VE6INM (Glenn) In article <36CA37DA.C2BB16F7@cadvision.com>, Allan <doblera@cadvision.com> wrote:

> If it is a GX3000, you don't need an eprom burner, you need the radio service
> software, and the right programming adaptor for your PC.
>
> Allan
>
> "Keith E. Spainhour" wrote:
>
> > Hello Glenn,
> >
> > I'll check on the model number tomorrow.
> >
> > Thank you,
> >
> > --
> > 73 DE KT4XW
> > Keith E. Spainhour
> > KSpainhour@wilkes.net
> >
> > ve6inm@telusplanet.net wrote in article
> > <7abvmunpp1@nnrp1.dejanews.com>...
> > > In article <01be594e$c0ec8600$8eb174cc@xx>,
> > > "Keith E. Spainhour" <kspainhour@wilkes.net> wrote:
> > > > Hello,
> > > > I am in need of information on how to generate a binary
> > > > file for programming of an eprom for a standard VHF mobile.
> > > > I don't recall the model number right off, I believe it is G?3000.
> > > > Any Info. would be appreciated
> > > >
> > > > Thank you,
> > > >
> > > > --
> > > > 73 DE KT4XW
> > > > Keith E. Spainhour
> > > > KSpainhour@wilkes.net
> > > >

> > >
> > > Keith, I have the EPROM burner you refer to. Unfortunately, I don't know
> > > what format Standard uses to burn the chip. I have a copy of a file that
> > > Standard sent me, but I have no idea what the different digits in the
> > string
> > > represent (freq, CTCSS, channel, priority, etc.) If you send me a 2716
> > EPROM
> > > and the info you want burned, I can do it for you with the AR3400 (I
> > think
> > > that's the burner model number).
> > >
> > > VE6INM (Glenn)
> > >
> > > -----------== Posted via Deja News, The Discussion Network ==----------
> > > http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
> >
> > >

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

1946. Re: QST article needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36CAC685.C3E5A963@mwci.net>
Source record: 73280

David Shalita wrote:

> Hi,
>
> I am trying to make a variable RF attenuator using PIN (1N4007) diodes.
> Apparently, in QST June, 1994, Ulrich Rohde, published such a project.
> I do not know title or page numbers.

I will e-mail a copy in .pdf format

Bill W0IYH

1947. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36CAD1E3.22C2@pop.valley.net>
Source record: 73281

Harvey W. Harbicht (http://come.to/stupidlaratricks) wrote:
>
> In article <36C978E7.6DF2@pop.valley.net>, Brad_Thompson@pop.valley.net
> says...
> > line to the chassis. If this capacitor leaked, the user (or repairman)
> > had a 50-50 chance of getting zapped when touching the chassis,
> > depending on which way the line cord was plugged in.
>
> Hehe. Reminds me of my Pop's old Hallicrafter SW radio. Before I traced
> the wiring and put a 3-prong polarized plug on it, the radio use to bite
> me all the time. With the plug on one way the case was hot only when the
> radio was on. With the plug in the other way the case was hot all the
> time. I connected my voltmeter between the case and ground. You know what
> I found? 90 VOLTS on the case!!! It frightens me that he used it that
> way for over 50 years. Maybe that's why his hair is sticking up in all
> those old photos. :)
>
> After installing that grounded 3-prong plug the case shows zero volts.
> Much better.
>
> That radio is a real champ. Original tubes and still working.

Hello--

Thanks for your comments which reminded me of another design "gotcha"
in these older radios. The designers frequently placed the on/off switch
in the return leg of the AC power cord. Depending on where the bypass
capacitor was connected, the chassis of the receiver could carry AC
all the time-- either directly through the bypass cap, or through the
series string of heaters and bypass cap.

With the switch on the hot leg of the ac line, at least the chassis was
"cold" half the time<g>.
73,
Brad AA1IP

1948. WTB Globe manual and equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: dave thomas <dethomas@hiwaay.net>
Message-ID: <36CAD863.8B80B32@hiwaay.net>
Source record: 73282

Hello,

I'm looking for:

1) manual for Globe Scout 65B. (offer $20+ for an original)
2) any Globe (WRL) equipment in any condition.

Thanks and I would appreciate any leads.....Please email direct.

73's

Dave Thomas N4CLR
Madison, AL

1949. ICOM CI-V manual here!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Paul N8PSM <psm@intrepid.net>
Message-ID: <36CB07DA.AB750A1D@intrepid.net>
Source record: 73283

I have had many requests for a copy of the CI-V manual in PDF format. I am concerned about distributing it without authorization from ICOM. So instead I am posting the URL for the web site where I found it. If you want the CI-V manual don't send me email as it will be ignored from this point on! Instead look here:

http://www.info-tel.com/areamarc/index.htm

Good luck and 73, to all you ICOM users.

Paul K8IDX

1950. Re: How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Mario K&#65533;ppen <koeppen@internet24.de>
Message-ID: <36CB151A.D2AEC987@internet24.de>
Source record: 73284
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

Michael A. Covington wrote:
>
> *chuckle* Has nobody here heard of 4x5-inch sheet film, or the scanners that
> scan them? They're used a fair bit in professional photography.

Correct. Have a look at www.heidelbergusa.com under products -
prepress - input - Topas XL.
It's a 11,000 dpi (!) drum scanner - should be sufficient for
micro films or alike. Try to find a company in printing / prepress
business they should have a drum scanner. I suppose you wouldn't
buy one for yourself as they are $100,000+ ;)

mk2

1951. DIY Wireless data communication (RS-232)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Mogwai <mogwai@smitsarnhem.com>
Message-ID: <7af587kod1@dinkel.civ.utwente.nl>
Source record: 73285
Cross-posted to:
alt.comp.hardware.homebuilt,alt.comp.hardware.homedesigned,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hi all,

I'd like to build a wireless RS-232 communication channel, so my robot can communicate with a PC. I searched the net for transmitter/receiver units, but only found commercial ones (which are far too expensive for a hobby project).

So can anyone point me to an online design/schematic that I can use for my project.....

Thanks,

mogwai

1952. GUNN Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Greg Flynn <gflynnNO_SPAM@mail.gl.com>
Message-ID: <VLEy2.14416$lx.9725@news2.giganews.com>
Source record: 73286
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Does anyone know a good cheap source for these components? I am interested in the K and X band.

Also if anyone knows a good source for electronic components in general? I know who the regulars are but I was hoping to save some money.

A website would be the best but a name would be just fine. Also please respond to email or email + newsgroup so that I don't miss your reply. You must remove NOSPAM from my email address.

Thanks Greg

1953. Homebrew 10Watt TRX Project 0..30MHz easy to build....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Falk Willberg <Falk.Willberg@home.ins.de>
Message-ID: <36CB1AE0.88190BE5@home.ins.de>
Source record: 73287

Hello,
three hams from Germany have started a project for a homebrew RF
transceiver.
If you are interested or wish to support us, please see
http://www.qsl.net/dl3daz .

Gd dx es 73 de DL3DAZ
--
Falk Willberg Voltastrasse 27
DL3DAZ Tel. : +49 172 2111663
44879 Bochum (Germany) Fax. : +49 234 9490504

1954. FORSALE - Variacs (large and small)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: jpl@hoserve.ho.lucent.com
Message-ID: <7af5vg$t0a@nntpa.cb.lucent.com>
Source record: 73288
Cross-posted to:
rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.misc,nj.forsale,sci.electronics.repair,rec.radio.amateur.homebrew

I have a pretty large variac transformer that I'd like to
sell. It's 7"diameter by 4"high, weights about 25lbs, in
excellent condition. It's marked as follows:

General Radio Co type V20H
"Volts shown for 8amp 0-270V 50-60Hz"

I assume that refers to the fixed voltages between
the various taps. It has 7 terminals; 1 terminal for
each end of the winding, 1 variable slider, and 4 fixed
taps for various fixed voltages.

This thing is quite substantial. I don't know what it's worth.
If interested, make me an offer.

Thanks,
Joe
KB2FSH

PS - I also have a couple of smaller ones. If your interested let
me know and take a look at them for the specs.

1955. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: "Al Lorona, Jr." <al_lorona@hp.com>
Message-ID: <36CB1FCB.2028@hp.com>
Source record: 73289

Gang,

In the world of boatanchors and the meticulous hobbyists who lovingly restore them, there are those who go absolutely ballistic when you suggest rewiring and old rig with a modern and safe 3-prong AC plug. In their minds, it is an unconscionable act of desecrating an original classic in it's historic but dangerous condition. The maintain-everything-original vs. bring-old-rigs-up-to-modern-safety-code debate still rages, and probably will never, ever be resolved.

R,

Al

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost
$USER@$HOST
-h1024@localhost
root@mailloop.com
Chairman Reed Hundt: rhundt@fcc.gov
Commissioner James Quello: jquello@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Rachelle Chong: rchong@fcc.gov
US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

1956. FS: MILITARY AN/PRT-4A EXELLENT COND. $18 EA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-1702991246560001@murphy1.cts.com>
Source record: 73290
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,misc.survivalism,alt.military.collecting

AN/PRT-4A TRANSMITTER.

GOV. OVERHAULED COND. LIKE NEW $18 EA.

PICT AT:

http://209.239.34.153/murphyjunk/1_SPECIALS_UPDATED_FREQUENTLY

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

1957. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36CB2A2E.22E0@pop.valley.net>
Source record: 73291

Al Lorona, Jr. wrote:
>
> Gang,
>
> In the world of boatanchors and the meticulous hobbyists who lovingly
> restore them, there are those who go absolutely ballistic when you
> suggest rewiring and old rig with a modern and safe 3-prong AC plug. In
> their minds, it is an unconscionable act of desecrating an original
> classic in it's historic but dangerous condition. The
> maintain-everything-original vs. bring-old-rigs-up-to-modern-safety-code
> debate still rages, and probably will never, ever be resolved.

Hello--
One can solve the problem neatly by purchasing a suitably-rated
isolation transformer and dedicating an isolated outlet strip to the
old equipment. Spending even $200 on an isolation transformer is
cheap insurance-- how much is one's life worth? And imagine all
that wonderful old equipment going to the dump because you wouldn't
be there to restore it....
73,
Brad AA1IP

1958. Re: Will the IC706MKII cross band repeat?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: nostep@flash.net
Message-ID: <xfGy2.337$GL1.563@news.flash.net>
Source record: 73292

No.

KC8JMP

In article <Cu5v2.741$Oa3.9632229@nnrp2.ni.net>, "John in Roseville CA 95678"
<nospam@nospam.net> wrote:
>Will the IC706MKII cross band repeat from HF to 2M?
>
>To avoid SPAM I changed the first letter of my
>e-mail address, It should be r not j.
>
>73 John in Roseville CA 95678
>jtwod2@ns.net
>
>
>

1959. Re: QST article needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Pierre Constantineau <pierre@cmpe.ubc.ca>
Message-ID: <36CB34AE.C7FE01BF@cmpe.ubc.ca>
Source record: 73293

Hi,

Could you send me a copy of the pdf files.

Thanks

David Shalita wrote:
>
> Hi,
>
> I am trying to make a variable RF attenuator using PIN (1N4007) diodes.
> Apparently, in QST June, 1994, Ulrich Rohde, published such a project.
> I do not know title or page numbers.
>
> Local library is not helping me find QST magazines.
>
> Really need help getting a copy of this.
> I'll be happy to pay copy and postal costs for this article.
> Thanks for any help.
> 73, W6MIK
>
> --
> David Shalita (Dave)
> af389@lafn.org
> Van Nuys, CA

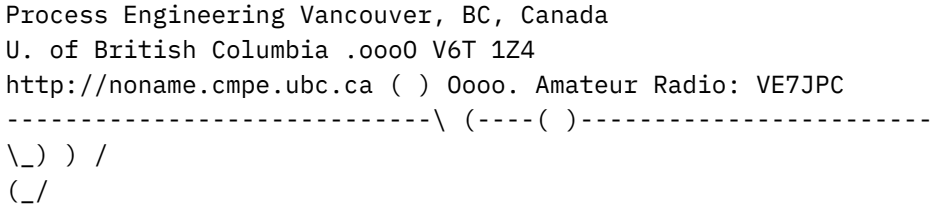
David Shalita wrote:

> Hi,
>
> I am trying to make a variable RF attenuator using PIN (1N4007) diodes.
> Apparently, in QST June, 1994, Ulrich Rohde, published such a project.
> I do not know title or page numbers.

I will e-mail a copy in .pdf format

Bill W0IYH

--
,,,
/'^'\
(o o)
----------oOOO--(_)--OOOo----------
Pierre Constantineau B.Eng Email: pierre@cmpe.ubc.ca
M. Applied Sciences Candidate Phone: (604) 822-2913
Flash Smelting Group Fax: (604) 822-4750
Centre For Metallurgical 111-2355 East Mall

Process Engineering Vancouver, BC, Canada
U. of British Columbia .oooO V6T 1Z4
http://noname.cmpe.ubc.ca ( ) Oooo. Amateur Radio: VE7JPC


1960. Wanted: manuals for ALfred 650 series plug-ins

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Stephen Schiller <polytope@prado.com>
Message-ID: <7afduaon0@209.66.82.22>
Source record: 73294

In particular the 651K, 658 and 659 model numbers
would be most helpful. But, I would be interested
in a manual for any PI for this mainframe. Willing
to pay (sort of) big bucks.

thanks,
Steve

1961. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36CB3DA9.A023C60D@teleport.com>
Source record: 73295

Brad Thompson wrote:
>
> Hello--
> One can solve the problem neatly by purchasing a suitably-rated
> isolation transformer and dedicating an isolated outlet strip to the
> old equipment. Spending even $200 on an isolation transformer is
> cheap insurance-- how much is one's life worth? And imagine all
> that wonderful old equipment going to the dump because you wouldn't
> be there to restore it....
> 73,
> Brad AA1IP

The power transformers in a lot of modern equipment have two primary windings which are normally connected in parallel for 115 volt and in series for 230 volt operation. You can often find these quite inexpensively on the surplus market, and can use the primaries as an isolation transformer.

I heartily recommend an isolation transformer for the old gear if you don't want to modify it. Connect the chassis to the mains safety ground (but only when it's powered through the isolation transformer).

Roy Lewallen, W7EL

1962. Re: DIY Wireless data communication (RS-232)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Ray Landers <rayl@northcoast.com>
Message-ID: <36CB3F23.960BB84C@northcoast.com>
Source record: 73296
Cross-posted to:
alt.comp.hardware.homebuilt,alt.comp.hardware.homedesigned,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

well, if the range is short, and you have good error correction, try the guts
out of a cordless phone. not a cell phone, just a plain old wireless phone.
i'm sure that it would get allot of static, but just be sure you have some
good error correction protocol. like using a couple of old HST 9600 baud
modems on each end of the connection, with some packet radio software that
will take care of data integrity.
all of those things could be had pretty cheaply.

Mogwai wrote:

> Hi all,
>
> I'd like to build a wireless RS-232 communication channel, so my robot can
> communicate with a PC. I searched the net for transmitter/receiver units,
> but only found commercial ones (which are far too expensive for a hobby
> project).
>
> So can anyone point me to an online design/schematic that I can use for my
> project.....
>
> Thanks,
>
> mogwai

--
To reply Via e-mail use rayl (that's RAYL not RAY1) at northcoast.com the
reason i have nospam in the reply header of this message is because of all
those tricky junk mail people that pull addresses from the Reply to: part of
messages without ever reading them.
http://www.northcoast.com/~rayl/

1963. Re: GUNN Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36CB560F.5A69@pop.removethistomailme.net>
Source record: 73297
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Greg Flynn wrote:
>
> Does anyone know a good cheap source for these components? I am interested
> in the K and X band.

I've been very happy with http://www.shfmicro.com. Very responsive and knowledgeable "tech support" from Alan! They don't take credit cards or phone orders, though -- you have to order via email or fax, and pay via snail mail or COD.

>
> Also if anyone knows a good source for electronic components in general? I
> know who the regulars are but I was hoping to save some money.

http://www.newark.com has almost everything, but they can be somewhat expensive. Their printed catalog is the size of a major metropolitan telephone book, so the higher prices are somewhat justified IMHO.

http://www.digikey.com has less stuff, but it tends to be cheaper than Newark.

http://www.mouser.com and http://www.circuitspecialists.com can also be good places to look.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

1964. Re: cancel <36CA2818.A9DFC71C@herald.infi.net>

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: entropious <entropious@hotmail.com>
Message-ID: <7afksj$kf0$1@fir.prod.itd.earthlink.net>
Source record: 73298
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

What is happy99.exe? It is attached to this post. Virus........

what a dickhead.

1965. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7ag4vk$2at@newsops.execpc.com>
Source record: 73299

In article <36CB1FCB.2028@hp.com>, al_lorona@hp.com says...

> their minds, it is an unconscionable act of desecrating an original
> classic in it's historic but dangerous condition. The

Better to desecrate the radio than my sweet little self! <grin>
I know what you mean though. No doubt I took a lot off the resale price.
Oh well.

I'm curious. In restoring a radio like that, where would you find one of
those antique cotton-covered powercords anyway? I'd think a "new" old
cord would be just as moldy and stiff as the 50 year old original was.

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1966. Re: QST article needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7ag54e$2at@newsops.execpc.com>
Source record: 73300

In article <36CB34AE.C7FE01BF@cmpe.ubc.ca>, pierre@cmpe.ubc.ca says...
> Hi,
>
> Could you send me a copy of the pdf files.
>
> Thanks

And me too please. Thanks

>
> David Shalita wrote:
> >
> > Hi,
> >
> > I am trying to make a variable RF attenuator using PIN (1N4007) diodes.
> > Apparently, in QST June, 1994, Ulrich Rohde, published such a project.
> > I do not know title or page numbers.
> >
> > Local library is not helping me find QST magazines.
> >
> > Really need help getting a copy of this.
> > I'll be happy to pay copy and postal costs for this article.
> > Thanks for any help.
> > 73, W6MIK
> >
> > --
> > David Shalita (Dave)
> > af389@lafn.org
> > Van Nuys, CA
>
>
> David Shalita wrote:
>
> > Hi,
> >
> > I am trying to make a variable RF attenuator using PIN (1N4007) diodes.
> > Apparently, in QST June, 1994, Ulrich Rohde, published such a project.
> > I do not know title or page numbers.
>
> I will e-mail a copy in .pdf format
>
> Bill W0IYH
>
>
>

>

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm

1967. Virus alert! (was: cancel <36CA2818.A9DFC71C@herald.infi.net>)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: KD5GEH <kd5geh@arrl.net>
Message-ID: <7ag8u2$2qp$1@newnews.startext.net>
Source record: 73301
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Might want to forward that post (with happy99.exe attachment), along with
the headers, to support@infi.net
and explain to 'em what it is...

PS. The attachment's not included with this follow-up...

Header...

From: KEN CHAIT <atsi@herald.infi.net>
Newsgroups:
rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.r
adio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment
Subject: cancel <36CA2818.A9DFC71C@herald.infi.net>
Date: 17 Feb 1999 23:27:38 GMT
Organization: InfiNet
Lines: 227
Message-ID: <7afj9a$989$2@nw001t.infi.net>
NNTP-Posting-Host: pm4-31.mia.infi.net
X-Spanska: Yes

KEN CHAIT <atsi@herald.infi.net> wrote in message
news:7afj9a$989$2@nw001t.infi.net...

1968. HELP: Multiple Antennas on Same Mast

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Christopher Heath <heath_filtered@s2i2.com>
Message-ID: <7aga80$g18$1@news.ncal.verio.com>
Source record: 73302

I have two tripods at the peak of my roof. I would like to consolidate all my VHF/UHF J-Poles onto one mast. That would be a 6-meter (yet to buy or make), a 2-meter, and a 70-centimeter.

I am thinking if I don't position these right, they will affect one another. I suspect I would never use more than one at any given time, as is the case now, but I believe I read somewhere that metal (like another antenna) within some specified distance of the the radiating element of an antenna puts it out of tune and affects the SWR.

I am also looking for design plans for a 6-meter J-pole. I have found one or two but if anyone has a favorite design thay want to point me to, I'd appreciate the input. Or maybe someone knows of a good retail source for a j-pole antenna.

Thanks.

1969. Re: WTB: #24 & #26 magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990116182413.OUI77.ejune@intuitive-data.com>
Source record: 73469

Best price I have seen is Dan's at:

http://www.fix.net/dans.html/

MAGNET WIRE

1/4 lb spools of Magnet Wire:

#22 $3.50 *** #24 $3.60 *** #26 $3.70

#28 $3.85 *** #30 $4.10 *** #32 $4.25

1/2 lb spools of Magnet Wire:

#16 $5.10 *** #18 $5.20 *** #20 $5.30

--
- Eric June ejune@intuitive-data.com

1970. Magnet Wire @ Electric Motor Shop

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be5a23$3d76bea0$c4864d0c@default>
Source record: 73470
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

I buy magnet wire at an electric motor repair shop.

nospam@spamhill.com wrote in article <36CA3443.64C5@spamhill.com>...
> Wanted: surplus magnet wire, #24 and/or #26, pref. not over $1.75 per
> pound, need at least 2 or 3 lbs. of each, pref. from southeast region.
> If you have any to sell or know of a good cheap (no minimum) mail-order
> surplus source, call 334-347-5281. (don't reply to the email, it is
> bogus.)
>

1971. Re: PL177A info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: jfriley@no.thanks.airmail.net
Message-ID: <36ca3a3f.8261645@netnews.worldnet.att.net>
Source record: 73471

On 16 Feb 1999 22:31:06 GMT, ax9909@aol.com (Ax9909) wrote:

>if this tube looks anything like a 4cx-1000 it's
>not a pl-177
>sounds like you have a pl-172

Good grief. I got them confused myself. One of these days I gotta
can that old PRC47 down in the basement.

Fred, W8OY
jfriley@airmail.net

1972. Re: REQ coil making software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <36CA4E8B.6778@csolve.net>
Source record: 73472

Reg Edwards wrote:
>
> Harvey,
>
> Download in a few seconds, not zipped-up, program
> SOLENOID.exe
>
> Its just what you need to design air-core solenoids of any
> length, diameter, turns, wire size, winding pitch. Other
> programs, mainly antennas will design
> loading/tuning/Z-match coils as part of an antenna's
> performance analysis. Take a look at ENDFEED, TRAPDIP,
> TANT136, VERTLOAD. All relatively new.
>
> TOROID does what it says. But its no better than the
> accuracy of data you put into it.
> --
> ******************************
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp
>
> ******************************

Very nice programs - Thanks for making them available!

Best Regards,

Michael R. Monett,
Automated Production Test
mailto:add@csolve.net

1973. Re: WTB 6 PIN TUBE BASES, LESS THE TUBE. WA0ABI

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: vhfmobile@aol.com
Message-ID: <19990217002100.03279.00000265@ng07.aol.com>
Source record: 73473

HI THERE BILL- I HAVEN'T TALKED TO YOU FOR YEARS AND YEARS-

GEORGE DOWELL K0FF/7 EX- WA0LGW

PS DON't YOU HATE THIS NEW STUFF?
I STILL HAVE THE OLD COLLINS AND JOHNSON....

1974. Ozradio Websites

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-17 00:00:00 UTC
From: Ozradio Websites <ozradio@webaxs.net>
Message-ID: <73xy2.38$C02.1118@vic.nntp.telstra.net>
Source record: 73474

All my websites have now been moved to the following locations:

OZRADIO WEBSITES

RADIO COMMUNICATIONS - SCANNING - MODS - ANTENNA DESIGN
****

AVALON INTERNATIONAL AIRSHOW 99 WEBSITE
MARITIME COMMUNICATIONS WEBSITE

****

Ozradio's website for the avalon airshow is now online!

This is the "Unofficial Avalon Airshow" website
containing info for scanning and aviation
enthuisiasts alike.

Available on the website is:

* Avalon Airfield Maps & Tracking Patterns

* Avalon Airfield & Geelong Location Maps

* Melbounre Air Traffic Channels / Freqs

* Avalon Air Traffic Channels / Freqs

* Geelong Air Traffic Channels / Freqs

* K & J District Police Channels

* Marine Rescue Channels (Plus Maps)

* Media & Taxi Frequency Allocations

* State Emergency Service & Ambulance Allocations

* MP3 Audio File Archives

* Real Audio HTTP Streams

Login at: www.webaxs.net/~ozradio/avalon
OR
203.55.252.4/~ozradio/avalon
****

This site has been officially authourised by
Airshows Downunder. All audio content has been
authourised by Airshows Downunder & the Australian

Communications Authority.

All material on the site is copyright:
"Airshows Downunder" & "Ozradio Websites" ©1999.

www.webaxs.net/~ozradio/avalon
203.55.252.4/~ozradio/avalon
ozradio@webaxs.net

****

MARITIME WEBSITE - CLOSURE OF 500 KHZ

* Recordings Of The Final Transmissions

* Transcriptions of the transmissions

Login At: www.webaxs.net/~ozradio/marine
OR
203.55.252.4/~ozradio/marine

www.webaxs.net/~ozradio/marine
203.55.252.4/~ozradio/marine
ozradio@webaxs.net

****

1975. Re: Pin diodes. using 1n4007

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36cc9ab3.2348049347@news.online.no>
Source record: 73227

On Thu, 18 Feb 1999 15:48:39 +1300, Winton Bell
<w.bell@psyc.canterbury.ac.nz> wrote:

>Hello Dave,
>
>Some paper was written on this in "Radio Communications" the RSGB
>Journal, it was called pin-diode attenuator.
>I have used this princple in providing automatic attenuation of signals
>arriving at my FT101 transciever years ago. I set the attenuator to
>automatically hold signals to the "S9" level when overloading.
>
>BTW: Many libraries hold QST, its a matter of the issue that the
>appropriate article is in.
>73, Winton at ZL3AO, Christchurch.
>
believe G3VA about 3 years ago referred to an article he found in QST

LA8AK@ONLINE.no

1976. Re: circulater freq.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36cc9b30.2348174216@news.online.no>
Source record: 73228

On Thu, 18 Feb 1999 16:23:24 +0000 (GMT), eenajp@impsun05.leeds.ac.uk
(Andy Panks) wrote:

>Harry wrote:
>
>> FOUND A COUPLE CIRCULATERS AT HAMFEST.WHATS THE BEST WAY TO FIND
>> FREQUENCY THEY ARE SET FOR. HARRY
>
>With a network analyser !!!!
>
>Andy
>

hi (or was it a joke?)
LA8AK@ONLINE.no

1977. Re: Virus alert! (was: cancel <36CA2818.A9DFC71C@herald.infi.net>)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: KD5GEH <kd5geh@arrl.net>
Message-ID: <7ai9g2pae1@newnews.startext.net>
Source record: 73229
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.cb

And just how does a bitmap (.bmp?) file execute?

Wildcat <wildcat@tp.net> wrote in message
news:jfVy2.11$bc4.34@news15.ispnews.com...
>The deadliest virus Ive seen lately is called DOOMSDAY 9. Someone will send
>you a Bitmap file via email and when you open it the virus is put into RAM.
>Its held there until the next startup (just like SAVE SETTINGS ON EXIT),
and
>then wraps itself around the registry upon reboot. The virus itself is
>triggered when a SCREEN SAVER program kicks in. The creators of the virus
>knew if you screen saver engages, you most likely wont be in front of your
>computer.
>
>The 1st thing it starts to gobble up (once the screen saver engages) is
>*.INI files. Once done it looks for *.DLL files and then finally *.EXE's.
By
>the time you realize (when you return to your system) happened, its usually
>too late. This one is nasty!
>
>A friend of mine sent a zipped up file of this virus to use on obnoxious
>jerks however, even they are too good for this bad-boy.
>
>--
>
>Some people look at what is and ask why.................
>Other people look at what isn't and ask why not......
>
>.
>KD5GEH wrote in message <7ag8u2$2qp$1@newnews.startext.net>...
>>Might want to forward that post (with happy99.exe attachment), along with
>>the headers, to support@infi.net
>>and explain to 'em what it is...
>>
>>PS. The attachment's not included with this follow-up...
>>
>>Header...
>>---
>>From: KEN CHAIT <atsi@herald.infi.net>
>>Newsgroups:
>>rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec
.
>r
>>adio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

>>Subject: cancel <36CA2818.A9DFC71C@herald.infi.net>
>>Date: 17 Feb 1999 23:27:38 GMT
>>Organization: InfiNet
>>Lines: 227
>>Message-ID: <7afj9a$989$2@nw001t.infi.net>
>>NNTP-Posting-Host: pm4-31.mia.infi.net
>>X-Spanska: Yes
>>
>>KEN CHAIT <atsi@herald.infi.net> wrote in message
>>news:7afj9a$989$2@nw001t.infi.net...
>>
>>
>
>

1978. Re: Virus alert! (was: cancel <36CA2818.A9DFC71C@herald.infi.net>)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Wildcat <wildcat@tp.net>
Message-ID: <ck4z2.204$Xs6.941@news3.ispnews.com>
Source record: 73230
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.cb

A bitmap file is a graphical file (LIKE A PICTURE or A DRAWING) however, a graphical file needs a program to view the graphic. Corel, Photomorph and even Internet Explorer can open a Bitmap image file. The virus uses certain setup files within the Bitmap viewing program to open it. It is this process that embeds the virus in the registry of the host computer. The rest is literally history.....Like I said, it is very, very nasty. Especially if one doesn't back up files on a zip drive or jazz drive often.

--

Some people look at what is and ask why.....
Other people look at what isn't and ask why not.....

.
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>and
>>then wraps itself around the registry upon reboot. The virus itself is
>>triggered when a SCREEN SAVER program kicks in. The creators of the virus
>>knew if you screen saver engages, you most likely wont be in front of your
>>computer.
>>
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>>*.INI files. Once done it looks for *.DLL files and then finally *.EXE's.
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>>the time you realize (when you return to your system) happened, its
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>>too late. This one is nasty!
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>>--
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>>>PS. The attachment's not included with this follow-up...
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>>>From: KEN CHAIT <atsi@herald.infi.net>
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>>>rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,re
c
>.
>>r
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>>>Subject: cancel <36CA2818.A9DFC71C@herald.infi.net>
>>>Date: 17 Feb 1999 23:27:38 GMT
>>>Organization: InfiNet
>>>Lines: 227
>>>Message-ID: <7afj9a$989$2@nw001t.infi.net>
>>>NNTP-Posting-Host: pm4-31.mia.infi.net
>>>X-Spanska: Yes
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>>>KEN CHAIT <atsi@herald.infi.net> wrote in message
>>>news:7afj9a$989$2@nw001t.infi.net...
>>>
>>>
>>
>>
>
>

1979. Re: Pin diodes. using 1n4007

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7aijnj$48c$1@news1.fast.net>
Source record: 73231

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

I didn't see the start of this thread, but in case it has not been
mentioned, readers should be aware that the 1N4007 is
the ONLY member of the 1N400x family that has a PIN
structure and is, I believe, the ONLY member which is
at all suitable for switching HF RF power.

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

Winton Bell wrote in message <36CB7F86.27DC@psyc.canterbury.ac.nz>...
>Hello Dave,
>
>Some paper was written on this in "Radio Communications" the RSGB
>Journal, it was called pin-diode attenuator.
>I have used this princple in providing automatic attenuation of signals
>arriving at my FT101 transciever years ago. I set the attenuator to
>automatically hold signals to the "S9" level when overloading.
>
>BTW: Many libraries hold QST, its a matter of the issue that the
>appropriate article is in.
>73, Winton at ZL3AO, Christchurch.
>
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBNszR65e+N6+q84HiEQIYfgCgqvVY4h5k2kcfYBqNm4Wm7QdSlBcAoK8w
T+qoQurgWsqeQE/yJegmAYMy
=1/SZ
-----END PGP SIGNATURE-----

1980. GE Custom MVP Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: "Ralph J. Gable" <rgable@cancom.net>
Message-ID: <36CCD9E7.6F93@cancom.net>
Source record: 73232
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

I have a GE Custom MVP single frequency radio transmitter-receiver.

The numbers on the back are
EU:CT56AAS66A
SERIAL: 9110909
KT: 134-A DOC: 101264429
ER: 92-A DOC: 101264430
OPTION: 1928

I have no data on this radio and am looking for manuals, schematics, or
any data that may be available on it

Please reply by e-mail to: rgable@cancom.net

Thanks . . .
--
Ralph
VE4PUX/WA2PUX
/==================================\
From the Desk of
Rev. Ralph J. Gable
\==================================/
"for all have sinned . . ." Romans 3:23
"for the wages of sin is death . . ." Romans 6:23a
"And anyone not found written in the Book
of Life was cast into the lake of fire."
Revelation 20:15
"But as many as received Him (Jesus), to them
He gave the right to become children of God,
to those who believe on His (Jesus') name."
John 1:12
". . . but the free gift of God is eternal life in
Jesus Christ our Lord."
Romans 6:23b

1981. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <7ais5kero1@remarQ.com>
Source record: 73233

>>U310 or the (obsolete?) P8000 are the most likely substitutes.
>>

I have seen folks parallel a number of U310's to get a higher
g-sub-m like the CP640 has. It might be worth a try.

73,

John, K6QQ

1982. FS:HW101

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: LEE <leel@uniserve.com>
Message-ID: <36CD0215.86541A4E@uniserve.com>
Source record: 73234

Hello, everyone, I have a mint shape HW101 (from Heathkit) to give to a new home. The unit doesn't have a vfo, but everything else in installed. The unit was put together by Heathkit many years ago, used for about 100 hours, then the vfo was removed(I was helping a friend out with his unit and gave him mine).

The chassis is mint, contains all tubes, parts, etc...anyone like to have this piece of history? Well, you pay shipping and the rest is yours...

Thanks Everyone,

Lee
leel@uniserve.com

1983. Pin diodes. using 1n4007

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Winton Bell <w.bell@psyc.canterbury.ac.nz>
Message-ID: <36CB7F86.27DC@psyc.canterbury.ac.nz>
Source record: 73303

Hello Dave,

Some paper was written on this in "Radio Communications" the RSGB
Journal, it was called pin-diode attenuator.
I have used this princple in providing automatic attenuation of signals
arriving at my FT101 transciever years ago. I set the attenuator to
automatically hold signals to the "S9" level when overloading.

BTW: Many libraries hold QST, its a matter of the issue that the
appropriate article is in.
73, Winton at ZL3AO, Christchurch.

1984. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <36CBCA9C.5BFB@ruraltel.net>
Source record: 73304

Hi,

What's the purists view one using polarized plugs instead of the 3
prong plugs? Not like I worry about it, like the man said the debate
will never be resolved.

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net
Brad Thompson wrote:
>
> Al Lorona, Jr. wrote:
> >
> > Gang,
> >
> > In the world of boatanchors and the meticulous hobbyists who lovingly
> > restore them, there are those who go absolutely ballistic when you
> > suggest rewiring and old rig with a modern and safe 3-prong AC plug. In
> > their minds, it is an unconscionable act of desecrating an original
> > classic in it's historic but dangerous condition. The
> > maintain-everything-original vs. bring-old-rigs-up-to-modern-safety-code
> > debate still rages, and probably will never, ever be resolved.
>
> Hello--
> One can solve the problem neatly by purchasing a suitably-rated
> isolation transformer and dedicating an isolated outlet strip to the
> old equipment. Spending even $200 on an isolation transformer is
> cheap insurance-- how much is one's life worth? And imagine all
> that wonderful old equipment going to the dump because you wouldn't
> be there to restore it....
> 73,
> Brad AA1IP

1985. Re: HELP: Multiple Antennas on Same Mast

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <36CBCB1E.2CDE193E@ameritech.net>
Source record: 73305

Picture this: a 6 meter jpole with a 2 m jpole using the same radiator only using the top 58" for the radiating element. . .and using the 2M jpole as a 3/4 wave stub matched j pole for 70cM. . .think about it. .
Art k9xf

Christopher Heath wrote:

> I have two tripods at the peak of my roof. I would like to consolidate all
> my VHF/UHF J-Poles onto one mast. That would be a 6-meter (yet to buy or
> make), a 2-meter, and a 70-centimeter.
>
> I am thinking if I don't position these right, they will affect one another.
> I suspect I would never use more than one at any given time, as is the case
> now, but I believe I read somewhere that metal (like another antenna) within
> some specified distance of the the radiating element of an antenna puts it
> out of tune and affects the SWR.
>
> I am also looking for design plans for a 6-meter J-pole. I have found one or
> two but if anyone has a favorite design thay want to point me to, I'd
> appreciate the input. Or maybe someone knows of a good retail source for a
> j-pole antenna.
>
> Thanks.

1986. Re: HELP: Multiple Antennas on Same Mast

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <36CBCB4A.49A8B99B@ameritech.net>
Source record: 73306

Picture this: a 6 meter jpole with a 2 m jpole using the same radiator only using the top 58" for the radiating element. . .and using the 2M jpole as a 3/4 wave stub matched j pole for 70cM. . .think about it. .
Art k9xf

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> two but if anyone has a favorite design thay want to point me to, I'd
> appreciate the input. Or maybe someone knows of a good retail source for a
> j-pole antenna.
>
> Thanks.

1987. Re: HELP: Multiple Antennas on Same Mast

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990118021512.OUI65.ejune@intuitive-data.com>
Source record: 73307

Here is a good design for a 6m (or 2m) j-pole:

http://www.packetradio.com/jpol2.htm

--
- Eric June ejune@intuitive-data.com

1988. Re: HELP: Multiple Antennas on Same Mast

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990218055147.07180.00003213@ng-cd1.aol.com>
Source record: 73308

Search out "Cactus Jpole"
28-1.2 Gigs.
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

1989. Re: super xstal set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Paul Bischoff <pbischoff@chesco.com>
Message-ID: <V3Ty2.111$vF1.1143@monger.newsread.com>
Source record: 73309

http://www.midnightscience.com/ here is the crystal set society URL. There is plans for several sets and links to more. Enjoy....

1990. Re: Amplifier Help Needed 3-500Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <36CC1960.EFA3FB10@rl.ac.uk>
Source record: 73310

Robin Greenwood wrote:

> Because of the slow power drift down it sounds like something is getting
> hot! Maybe is changes a capacitor somewhere?
> G3LBA

Or an inductor. I hope he is not using some form of lossy core in the input tuned circuit. The other possibility is the antenna or the coax. I found my RG213 coax was melting on 20m while trying to deal with 400W into the 80m vertical - must have been the VSWR. The ATU didn't mind at all. At 1kW type powers and a good VSWR, thinner type coax and thin wire dipoles will get hot.

1991. Re: Virus alert! (was: cancel <36CA2818.A9DFC71C@herald.infi.net>)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Wildcat <wildcat@tp.net>
Message-ID: <jfVy2.11$bc4.34@news15.ispnews.com>
Source record: 73311
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.cb

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>Newsgroups:
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>Organization: InfiNet
>Lines: 227
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>X-Spanska: Yes
>

>KEN CHAIT <atsi@herald.infi.net> wrote in message
>news:7afj9a$989$2@nw001t.infi.net...
>
>

1992. Re: super xstal set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <3268-36CC29D2-62@newsd-122.bryant.webtv.net>
Source record: 73312

I CAN PROVIDE A COPY OF AN ARTICLE ON HOW TO CONSTRUCT AN FM CRYASTAL
SET $3.00 INCLUDES POSTAGE

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1993. Re: AM from an FM only HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <370335a2.389625583@news.atl.bellsouth.net>
Source record: 73313

On Tue, 16 Feb 1999 22:04:01 -0500, Tim <ka8ddz@eaglequest.com> wrote:
>I've picked up one of the Cherokee 6m FM HT's on closeout for $99.99 and
>let them keep the penny. I've been wanting to do some AM work on 50.4,
>can I tap into the last IF of the radio and just send it off to an AM
>radio at 455Khz? It seems to me it would work fine. Have I missed
>something? Oh, the transmit comes from an Ameco TX-62 not the HT :)

You'll have to tap in before the limiter, or the AM will be gone. So you
need to tap at the output of the mixer, not the last IF stage, because
the limiting is done in the IF.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

1994. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <3270-36CC2C24-15@newsd-122.bryant.webtv.net>
Source record: 73314

I'LL NEVER FORGET THE LAMP IN THE PLANT MANAGERS OFFICE WITH THE 18/3 YELLOW CORD.

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1995. Re: Old radios and AC powerlines

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <3269-36CC2D1D-35@newsd-122.bryant.webtv.net>
Source record: 73315

YOUR FRIENDLY LOCAL LAMP DEALER CARRIES BROWN COTTON COVERED LAMP CORD
AS DOES "ANTIQUE RADIO SUPPLY"

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1996. Re: Power Lines for Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <3268-36CC2FE2-68@newsd-122.bryant.webtv.net>
Source record: 73316

IT WILL KILL YOU, IT WON'T KILL YOU. IT'S SAFER WITH A THREE WIRE CORD, BUY AN ISOLATION TRANSFORMER. IS TRUTH IS A POWER LINE DOESN'TMAKE THAT GOOD AN ANTENNA. YOU HAVE A PREMIUM SEAT FOR EVERY BURP IN THE LINE FOR TEN MILES AROUND.

IF YOU WANT TO TRY IT, DETERMINE WHICH WIRE IS WHICH AS COMPARED TO THE PLUG. HOOK ONE WIRE TO TO THE ANTENNA POST. DISCONNECT THE OTHER WIRE FROM ITS TERMINAL IN THE PLUG AND CUT IT BACK ABOUT TWO INCHES. THIS LEAVES A "CAPACITOR" OF INFINITE VOLTAGE RATING BETWEEN THE LINE AND THE ANTENNA POST. REVERSE THE PLUG TO SEE WHICH WORKS BEST.

P.S. DON'T EVER TRUST THE CONSTRUCTION (OR LATER) ELECTRICIAN TO WIRE THE SOCKET PROPERLY.

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1997. Re: WTB 6 PIN TUBE BASES, LESS THE TUBE. WA0ABI

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: dialcover@webtv.net
Message-ID: <3268-36CC3129-69@newsd-122.bryant.webtv.net>
Source record: 73317

NICE TO HEAR FROM YOU GEORGE. I SURELY REMEMBER THE CALL. I'M THINKING
I SHOULD EITHER BUY A RIG OR BUILD A TRANSVERTER FOR SIX WITH THE CYCLE
COMING 'ROUND AGAIN.

disregard caps, visual problem
Bill Turner, 1117 Pike Street
St, Charles, MO 63301-2907

1998. Trouble modulating old AM tcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Joel Govostes <jgovost1@twcny.rr.com>
Message-ID: <36CC3325.A515737B@twcny.rr.com>
Source record: 73318
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Having difficulty with modulation of the final amp of a 1960's era,
tube-type AM transceiver.
Modulation extremely low on the output. Not sure just why. Here's
something I've noticed; perhaps it could be diagnostic(?):

When I key the mic, the output level shoots right up, as read on a field
strength meter, but
immediately starts dropping back down gradually. Within seconds it
reaches a
final value partway down scale from the original instantaneous "peak,"
where it
remains. If I un-key the mic, and wait a couple seconds, then key up
again, I see the
instantaneous peak once again, followed by the drop. I do not see any
peak if
the mic is keyed rapidly in succession.

Besides this, I notice that the fluctuation on the rig's rel. pwr. meter
is only slight, while speaking/knocking/tapping the mic. There should
be a much more noticeable "flicker" on
the meter reading, according to the manual. What fluctuation there is,
is swinging *downward*,
instead of producing any increase in the relative pwr. output.

Any suggestions as to what might be going on here? The rig is a '60s
Lafayette, (HE45b, 6m): 2E26, plate modulated, single-ended mod.,
connected quasi-Heising style thru secondary of AF output tfmr).

Grateful for any help on this;

tnx vy
JWG

1999. Re: circulater freq.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: eenajp@impsun05.leeds.ac.uk
Message-ID: <36CC3DA1.7F52D241@impsun05.leeds.ac.uk>
Source record: 73319

Harry wrote:

> FOUND A COUPLE CIRCULATERS AT HAMFEST.WHATS THE BEST WAY TO FIND
> FREQUENCY THEY ARE SET FOR. HARRY

With a network analyser !!!!

Andy

2000. Re: AM from an FM only HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: "C.A.S." <aaaa@topher.net>
Message-ID: <36CC4F79.489B@topher.net>
Source record: 73320

Gary Coffman wrote:
>
> On Tue, 16 Feb 1999 22:04:01 -0500, Tim <ka8ddz@eaglequest.com> wrote:
> >I've picked up one of the Cherokee 6m FM HT's on closeout for $99.99 and
> >let them keep the penny. I've been wanting to do some AM work on 50.4,
> >can I tap into the last IF of the radio and just send it off to an AM
> >radio at 455Khz? It seems to me it would work fine. Have I missed
> >something? Oh, the transmit comes from an Ameco TX-62 not the HT :)
>
> You'll have to tap in before the limiter, or the AM will be gone. So you
> need to tap at the output of the mixer, not the last IF stage, because
> the limiting is done in the IF.
>
> Gary

****

Another thing to try is to tune it off channel so that one
of the AM sidebands is rolled off in the I F filter. This leaves you
with a carrier and one sideband that will undergo AM to PM
conversion in the limiter and the FM demodulator will
respond to it.

Depending on your channel steps and filter slope, it may
be all you need to monitor , and can give a reasonably
intelligible output to AM . Only takes a second to try it and
you could get lucky.

Transmitting is something else entirely... (grin)

Good Luck,

Andy in Dallas W4OAH

2001. Re: Trouble modulating old AM tcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Bob <rsrolfne@atnet.net>
Message-ID: <36CC5ED3.D38B88@atnet.net>
Source record: 73321

Joel - Its hard to tell from you words, but you might look at the plate voltage as you do the keying. Possible its not stable.

73's Bob W7AVK

Joel Govostes wrote:

> Having difficulty with modulation of the final amp of a 1960's era,
> tube-type AM transceiver.
> Modulation extremely low on the output. Not sure just why. Here's
> something I've noticed; perhaps it could be diagnostic(?):
>
> When I key the mic, the output level shoots right up, as read on a field
> strength meter, but
> immediately starts dropping back down gradually. Within seconds it
> reaches a
> final value partway down scale from the original instantaneous "peak,"
> where it
> remains. If I un-key the mic, and wait a couple seconds, then key up
> again, I see the
> instantaneous peak once again, followed by the drop. I do not see any
> peak if
> the mic is keyed rapidly in succession.
>
> Besides this, I notice that the fluctuation on the rig's rel. pwr. meter
> is only slight, while speaking/knocking/tapping the mic. There should
> be a much more noticeable "flicker" on
> the meter reading, according to the manual. What fluctuation there is,
> is swinging *downward*,
> instead of producing any increase in the relative pwr. output.
>
> Any suggestions as to what might be going on here? The rig is a '60s
> Lafayette, (HE45b, 6m): 2E26, plate modulated, single-ended mod.,
> connected quasi-Heising style thru secondary of AF output tfmr).
>
> Grateful for any help on this;
>
> tnx vy
> JWG

2002. FS: electronic-construction hardware (long posting)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36CC61C8.2B40@pop.valley.net>
Source record: 73322

FS: an assortment of NOS (new old-stock) electronic assembly hardware for constructing amplifiers, preamps, and other projects. Here, you'll find octal sockets, tie-point strips, turret-lug terminals and terminal boards, capacitor clamps and more. Reserve your choices via e-mail. Scanned images of any components are available upon request.
****

Capacitor mounting clamps, similar to Mallory type VR-3; plated steel
Accommodates capacitors or other cylindrical objects from
1.375" to 1.5" in diameter.
Dimensions: 0.75" high by 2" (across clamp and flange)
Mounting: two right-angle feet with holes on 1.75"- 1.875" centers
Clamping screw, nut and washer included.

Price: $.75 each, $6.00 for 10 pieces.
****
Six-lug terminal strips: like Keystone p/n 825: six isolated, tinned steel lugs mounted on a brown phenolic insulating strip, arranged in groups of three on either side of a central mounting bracket.

The lugs are spaced on 0.375-inch centers; mounting bracket has a 0.140-inch hole (use a 6-32 screw for chassis mounting).

Prices: $8.00 per 100 pieces, $15.00 per 200 pieces, $45.00 per 1,000 pieces.
****
Teflon (tm)-insulated turret lug standoffs: Cambion p/n 570-1511-01-05-19. White base, silver-plated terminal. Use a 6-32 screw for mounting; standoff voltage is 3300 VRMS.

Prices: $.15 each; $1.00 for 7 pieces; $12.00 per 100 pieces.
****
Spring-loaded component clips: Midland-Ross 410-4521-01-08-19 (Cambion p/n 4521-01-08-19). Use these where you need to substitute components or provide semipermanent connections to transformer leads; these are insulated feed-through terminals with spring-loaded grippers.

Install via press-fitting into a 0.215-inch dia. chamfered hole in panels
up to 0.125 inches thick. Flashover voltage is 2500VRMS with 0.032-inch panel. Tinned nickel-plate, white base. Accepts AWG#17-AWG#24 leads.

Prices: $1.25 each; $10.00 for 10 pieces; $20.00 per 25 pieces.
****
Terminal boards: these consist of turret lugs staked into epoxy-fiberglass boards. Use these when you need to mount components

in groups or rows.

Several styles are available:

Style 1: Interconnection Products Inc. p/n 200-1333-21-01-02 (similar to Cambion 1333-31 with type 2043 terminals):

Consists of two rows of 0.186-inch high turret terminals (5 per row) on 0.816-inch centers, staked in 0.0625-inch thick board. These include four mounting holes per strip.

Prices: $1.25 each; $5.00 for 5 pieces.

Style 2: Interconnection Products Inc. p/n 200-1405-25-01-02 (similar to Cambion 1405-21 with type 1558 terminals):

Consists of two rows of 0.219-inch high turret terminals (5 per row) on 0.750-inch centers, staked in 0.0625-inch thick board. Supplied as a single board combining five groups of 10 terminals in a single strip (i.e., 50 terminals total). The individual boards are not scored but could be separated to yield five individual boards per strip. These include four mounting holes per substrip.

Prices: $5.00 each; $24.00 for 6 pieces (factory-packed in pairs).

Style 3: Litton Inc. p/n 8001-B-16 (similar to Cambion 1403-55 with type 1724 terminals):

Consists of two rows of 0.359-inch high turret terminals (5 per row) on 2.0-inch centers, staked in 0.125-inch thick board. Supplied as a single board combining five groups of 10 terminals in a single strip i.e., 50 terminals total). The individual boards are scored for to yield five individual boards per strip. These include four mounting holes per substrip.

Prices: $7.50 each; $12.00 for 2 pieces.

****

Cable clamps: MIL- MS-21919WDG4 metal clamps with rubber liners; accept 0.25-inch cable bundle.
Prices: $.15 each; $1.00 for 7 pieces; $12.00 per 100 pieces

****
Octal wafer sockets: brown phenolic two-wafer style with mounting holes on 1.5-inch centers; two rivets hold wafers together.

These sockets were manufactured in 1950 and show some oxidation on the terminals (which may require selective retinning) and assembly rivets. However, the wrap-around style contacts' gripping force is adequate to make good electrical contact with tube pins. Not exactly premium quality,

but these inexpensive sockets will serve for breadboards and prototypes.

Prices: $1.00 for 5 pieces; $15.00 per 100 pieces.

****
Ordering information:
****

Reserve your purchase via e-mail, and pay by check or money order made
payable to "Brad Thompson". Add postage as shown:

Shipping for orders up to $50.00, add $4.00 for insured priority-mail
delivery to U.S. addresses. For orders over %40.00, add $5.00 for
insured priority-mail delivery.

Overseas purchasers: please inquire for postage.

****
Warranty and Warning:
****

If you purchase these components and find them unsatisfactory upon your
inspection, you can return your purchase for a refund within seven days.

These components are subject to prior sale and are supplied as-is, as
new-old-stock (NOS) merchandise, with all responsibility for safe and
successful application residing solely with the purchaser.

Brad Thompson, AA1IP
P.O. Box 307, 202 Whitaker Rd.
Meriden, NH 03770-0307

Voice: (603) 469-3351
Fax: (603) 469-3917
brad.thompson@valley.net

2003. Re: Trouble modulating old AM tcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7ahupk$68m$1@winter.news.rcn.net>
Source record: 73323

Perhaps a soft 2E26 output tube?

The only way to ascertain what the modulation is doing is
to use a scope on the RF envelope. Relying on "meter flicker"
is a very poor method. Average power does not change with
modulation, and there is no desirable meter indication for
showing modulation by monitoring RF output or plate current.

Peter

Bob wrote in message <36CC5ED3.D38B88@atnet.net>...
>Joel - Its hard to tell from you words, but you might look at the plate
>voltage as you do the keying. Possible its not stable.
>
>73's Bob W7AVK
>
>
>Joel Govostes wrote:
>
>> Having difficulty with modulation of the final amp of a 1960's era,
>> tube-type AM transceiver.
>> Modulation extremely low on the output. Not sure just why. Here's
>> something I've noticed; perhaps it could be diagnostic(?):
>>
>> When I key the mic, the output level shoots right up, as read on a field
>> strength meter, but
>> immediately starts dropping back down gradually. Within seconds it
>> reaches a
>> final value partway down scale from the original instantaneous "peak,"
>> where it
>> remains. If I un-key the mic, and wait a couple seconds, then key up
>> again, I see the
>> instantaneous peak once again, followed by the drop. I do not see any
>> peak if
>> the mic is keyed rapidly in succession.
>>
>> Besides this, I notice that the fluctuation on the rig's rel. pwr. meter
>> is only slight, while speaking/knocking/tapping the mic. There should
>> be a much more noticeable "flicker" on
>> the meter reading, according to the manual. What fluctuation there is,
>> is swinging *downward*,
>> instead of producing any increase in the relative pwr. output.
>>
>> Any suggestions as to what might be going on here? The rig is a '60s
>> Lafayette, (HE45b, 6m): 2E26, plate modulated, single-ended mod.,

>> connected quasi-Heising style thru secondary of AF output tfmr).
>>
>> Grateful for any help on this;
>>
>> tnx vy
>> JWG
>

2004. Re: AM from an FM only HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7ai03v$db5$1@winter.news.rcn.net>
Source record: 73324

You can recover AM from the RSSI output of FM receiver chips.
See if your receiver uses such a device. Output will be low, but
it does work.

Peter

Gary Coffman wrote in message <370335a2.389625583@news.atl.bellsouth.net>...
>On Tue, 16 Feb 1999 22:04:01 -0500, Tim <ka8ddz@eaglequest.com> wrote:
>>I've picked up one of the Cherokee 6m FM HT's on closeout for $99.99 and
>>let them keep the penny. I've been wanting to do some AM work on 50.4,
>>can I tap into the last IF of the radio and just send it off to an AM
>>radio at 455Khz? It seems to me it would work fine. Have I missed
>>something? Oh, the transmit comes from an Ameco TX-62 not the HT :)
>
>You'll have to tap in before the limiter, or the AM will be gone. So you
>need to tap at the output of the mixer, not the last IF stage, because
>the limiting is done in the IF.
>
>Gary
>Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>534 Shannon Way | We break it |
>Lawrenceville, GA | Guaranteed |

2005. ATTENTION to all Kansas City Tracker USERS !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-18 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <7ai2va$7sb$1@news3.Belgium.EU.net>
Source record: 73325
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hello Kansas City Tracker Users.

I'm collect the names of all the available programs that being written, or suppot the kansas city tracker.

All these information wil be placed in a Database and wil be available to all of you.

On my homepage http://www.ping.be/~p4u11324/ you wil find a list of all available software.
If you know a program that not being in the list, PLEASE fill in the Question form:

If you click here, you go wright to the question form
http://www.ping.be/~p4u11324/KCT_Ques.html

Thanks to all of you !

Geert Pirens
Vissit my home page: http://www.ping.be/~p4u11324/

2006. Re: AM from an FM only HT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <F7DpJu.w5@world.std.com>
Source record: 73235

In article <7ai03v$db5$1@winter.news.rcn.net>,
CommQuart <commquart@erols.com> wrote:
> You can recover AM from the RSSI output of FM receiver chips.
> See if your receiver uses such a device. Output will be low, but
> it does work.

Since the RSSI is used for things like AGC and squelch and
S-metering, shouldn't it be low-pass-filtered into sub-audio?
Or is that normally done off-chip before anyone else uses it?

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

2007. Looking for a "peculiar" power transformer for audio applications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Tom <tom22@verio.com>
Message-ID: <36CCC4AA.64744385@verio.com>
Source record: 73236
Cross-posted to: sci.electronics.design,rec.audio,rec.ham-radio,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi,

Actually, the transformer that I am looking for isn't THAT peculiar or unique, but I just can't find it anywhere. I am looking for a dual primary (for either 120VAC or 240VAC) triple secondary power transformer. One secondary winding is for, say, 10VAC from which +5 VDC will be made. The other two secondaries, which could be a center-tapped autotransformer, will be for 25VAC, from which +/- 15 VDC will be made. All that might seem strange to get from one transformer but if one looks around at power supplies, one sees that +5, +/-15 Volt supplies are quite common, especially for use with audio systems.

I have tried a number of web sites (all the obvious ones) but can not find the transformer that I am looking for. Please help if you can lead me to the right manufacturer.

Thank You
Tom
tom@antarestech.com

2008. Re: Looking for a "peculiar" power transformer for audio applications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <7aiht0$9km$1@news.interlog.com>
Source record: 73237
Cross-posted to: sci.electronics.design,rec.audio,rec.ham-radio,rec.radio.amateur.misc,rec.radio.amateur.homebrew

In sci.electronics.design Tom <tom22@verio.com> wrote:
> Hi,

> Actually, the transformer that I am looking for isn't THAT peculiar or
> unique, but I just can't find it anywhere. I am looking for a dual
> primary (for either 120VAC or 240VAC) triple secondary power
> transformer.

Microtran (digikey carries them) has a similar one to your description.
Actually the analog supply secondary is center tapped.
Expensive. Can't you use +/-5 for your analog supplies? Then you could use
a garden variety transformer.

Or, if your quantities justify it, have a custom tranformer wound with one
secondary at 10V and another at (say) 15V and use two half-wave rectifiers
(2 diodes) for the analog supplies.

In the case of the Microtran product you would just use a
bridge rectifier to create the two analog supplies.

--
=-=
Spehro Pefhany "The Journey is the reward"
speff@interlog.com
Fax:(905) 271-9838 (small micro system devt hw/sw + mfg)
=-=

2009. Re: Virus alert! (was: cancel <36CA2818.A9DFC71C@herald.infi.net>)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: maddog@io.com
Message-ID: <36cce53e.10187716@news.io.com>
Source record: 73238
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.cb

On Thu, 18 Feb 1999 21:51:11 -0500, "Wildcat" <wildcat@tp.net> wrote:

>A bitmap file is a graphical file (LIKE A PICTURE or A DRAWING) however, a
>graphical file needs a program to view the graphic. Corel, Photomorph and
>even Internet Explorer can open a Bitmap image file. The virus uses certain
>setup files within the Bitmap viewing program to open it. It is this process
>that embeds the virus in the registry of the host computer.

Oh, Puuhh-leeeze...

2010. Re: Looking for a "peculiar" power transformer for audio applications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7ais29$p84$1@winter.news.rcn.net>
Source record: 73239
Cross-posted to: sci.electronics.design,rec.audio,rec.ham-radio,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Check Hosfelt Electronics, they have a lot of surplus transformers
listed in their catalog.

Pete

Tom wrote in message <36CCC4AA.64744385@verio.com>...
>Hi,
>
>Actually, the transformer that I am looking for isn't THAT peculiar or
>unique, but I just can't find it anywhere. I am looking for a dual
>primary (for either 120VAC or 240VAC) triple secondary power
>transformer. One secondary winding is for, say, 10VAC from which +5 VDC
>will be made. The other two secondaries, which could be a center-tapped
>autotransformer, will be for 25VAC, from which +/- 15 VDC will be made.
>All that might seem strange to get from one transformer but if one looks
>around at power supplies, one sees that +5, +/-15 Volt supplies are
>quite common, especially for use with audio systems.
>
>I have tried a number of web sites (all the obvious ones) but can not
>find the transformer that I am looking for. Please help if you can lead
>me to the right manufacturer.
>
>Thank You
>Tom
>tom@antarestech.com
>
>

2011. Re: Looking for a "peculiar" power transformer for audio applications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <hyvLhlAjUSz2Ewek@jmwa.demon.co.uk>
Source record: 73240
Cross-posted to: sci.electronics.design,rec.audio,rec.ham-radio,rec.radio.amateur.misc,rec.radio.amateur.homebrew

<36CCC4AA.64744385@verio.com>, Tom <tom22@verio.com> inimitably wrote:
>I have tried a number of web sites (all the obvious ones) but can not
>find the transformer that I am looking for. Please help if you can lead
>me to the right manufacturer.

All transformers like that are regarded by the industry as 'custom' and
do not feature in catalogues or lists. How many of them do you want?
Some manufacturers will make you as few as 12 (although the price may
not be attractive, it wouldn't be unreasonable) whereas others won't
entertain any orders for less than tonnage.

You just have to call manufacturers with your spec and ask.
--
Regards, John Woodgate, Elector of Rayleigh, Grand
Four-cusped Astroid of the First Order of Magnitude.
OOO - Own Opinions Only. Phone +44 (0)1268 747839
Fax +44 (0)1268 777124.

2012. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990219065902.13515.00000001@ng52.aol.com>
Source record: 73241

>
>John, K6QQ
>
>

Hi John....Yes, you have!

W4ZCB

2013. ICQ7,ICR2,FT50,VX1, ... Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Ingra-Beton@t-online.de
Message-ID: <36CD711B.40620AA@t-online.de>
Source record: 73242

I have updated some Software of mine.

IC-R2 Manager 1.01 (new entry bug fixed)
IC-Q7 Manager 1.05 (Adjustment mode added)
Ft50 Manager, inclusive Software mods, Second generation too.
VX1 Manager, just Software mods for now, rest will come.
Generic Clone utility for all ICOM's
Generic Clone utility for others

And some nice GSM and Phonecard stuff.

Also links to a lot of Freeware Software, all working
With the MAKInterface, the best interface around.

Greetings, ï¿½

--

Goran Vlaski (Ingra-Beton@t-online.de)
http://mitglied.tripod.de/vlaski/INDEX.HTM
http://www2.crosswinds.net/frankfurt/~vlaski/

2014. Transistor tester and DMM FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Ken Simpson <W8EK@usa.net>
Message-ID: <WKez2.53$VP1.328@monger.newsread.com>
Source record: 73243

For Sale:

Sencore TR-139 transistor tester. Can measure in circuit as well.
Appears like it should work OK, but I can not seem to get it to zero
correctly. It may be the tester has a problem, or it may be I have
the problem knowing how it should work. Cosmetically in good shape.
Probes included. $ 20

Keithley 169 DMM. This is a 3 1/2 digit DMM, with an LCD display. Auto
polarity. Operates off of 6 "C" cells (or appropriate adapter).
Fraction of a percent accuracy. Lab quality. Manual included $125

Prices do not include shipping from Florida.

E-Mail to W8EK@usa.net

Thanks.

73,

Ken, W8EK

Ken Simpson
E-Mail to W8EK@usa.net or W8EK@fdt.net
http://www.gnv.fdt.net/~kenmar
Voice Phone (352) 732-8400

2015. Re: GUNN Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7ak0ps$oh1$1@nnrp1.dejanews.com>
Source record: 73244
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <VLEy2.14416$lx.9725@news2.giganews.com>,
"Greg Flynn" <gflynnNO_SPAM@mail.gl.com> wrote:

> Does anyone know a good cheap source for these components? I am interested
> in the K and X band.

Swap meets. Look for the ex-intruder alarm units. I've bought loose
Gunn diodes from Birkett in England. Mainline carry them too.

You might have a look in the Yellow Pages and see who sells/services
radar intruder alarms and automatic door openers in your area.

With that said, I'm still trying to find where the TTC get the
24 GHz Gunn units for the doors at Toronto subway stations... :-(

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2016. NEED INFO TUBE TESTER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Dee Almquist <w4pnt@rica.net>
Message-ID: <vdfz2.1116$n15.12916@newsfeed.slurp.net>
Source record: 73245
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hello All
Anyone own or know anything about a Triplet 3444A tubetester? I need some instruction/help getting mine going. Also any advanced info on this equip (tech & tube lists) would be greatly appreciated. Do you know of a reflector or group that caters towards test equipment? Thanks in advance for ANY help you can offer.
Regards
Dee
w4pnt@rica.net

2017. **** WANTED: Tannoy & Jensen speakers circa 1940's to 1960's ****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: lzayas@xsite.net
Message-ID: <36cd8723.4632596@nntp.xsite.net>
Source record: 73246
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

WANTED: old Jenzen corner speakers ,TRI-axials, drivers,tweeters from
the 40's,50's,60's
Dual concentric TANNOYS.

e-mail or call <LZAYAS@XSITE.NET>

(773-594-1041) Chgo.

Thank You Louis

Louis Zayas
lzayas@xsite.net
773.594.1041
Chicago Illinois

2018. Poor man's Spectrum Analyzer: Any one using one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: cmcdonld@thezone.net
Message-ID: <7ak20nrou1@nova.thezone.net>
Source record: 73247

Our club is looking at buying a Poor man's Spectrum Analyzer for working on the repeater's and we are looking for reviews (besides the ones on the page) and any other infomation on it .

2019. Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: bogus@supernews.com
Message-ID: <bogus-1902990824430001@dnai-207-181-237-109.dialup.dnai.com>
Source record: 73248
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

VCRs have disappeared repeatedly from the local volunteer center where I donate some of my time.

Others at the center suggested securing the equipment to tables, locking doors, etc, but since the general public doesn't have access to this part of the building, some of us feel that it is someone (or someone's child) who attends regularly. I want to get this (ahem...) individual on video "en flagrante" (in the act).

A camcorder (with auxiliary video input capability) will be used for the recorder, with a pinhole camera (NTSC output) placed either inconspicuously high in a corner of the room, or behind a panel in the TV/VCR stand/cabinet, providing the surveillance. (Placement of the camera will be determined by available light (we don't want to get just the silhouette of the thief walking away with yet another VCR) and probable entry/exit path into/out of the room.)

An alarm wouldn't be very helpful here, because there is seldom someone nearby when the thefts occur and by the time someone appeared on the scene, the thief would probably be gone (with or without the merchandise).

I need help with some of the planning:
1) How can I create a circuit that senses that the VCR has been picked up or unplugged: If I place the camera and recorder in the TV/VCR stand, triggering of the record mode can be via wire. If it's placed elsewhere in the room, triggering would be have to be done via RF or other link. Any sensing circuit must be unobtrusive; the thief will be unplugging the power cord from a standard extension cord into which the TV is also plugged, and so there can't be any suspicious circuitry between the VCR plug and the extension cord...

2) Triggering the record function on an old Sony CCD-V9, 8mm camcorder: how can the camcorder be put in record mode automatically?

Any suggestions would be greatly appreciated.

Sorry for the modified return address, but I hate getting spammed.
My correct return address is provided below if you choose to e-mail me.

Thanks,
Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2020. Passive Mixer for Mobile Rigs & External Speaker?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Paul Knight <paul.knight@prairiecomm.com>
Message-ID: <7ak6s3$kd9$1@eve.enteract.com>
Source record: 73249

Hi! What would be the right value resistor for making a passive audio mixer to combine the outputs of several mobile rigs into one? I'd like to connect them all up to the single external speaker I have mounted in the truck. I've seen such circuits for line-level audio signals, but not for speaker-level signals.

Thanks!

Paul WD8DKY
paul.knight@prairiecomm.com

2021. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: "Jerry G." <jerryg50@hotmail.com>
Message-ID: <cfhz2.292$uu3.12792@news.total.net>
Source record: 73250
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

What you can do is install a loud sono alert inside the machine.
These are easily available. You wire an AC relay that can work
accross the mains comming inside the machine. The relay contacts are
in series with a 9 volt battery to drive the sono alert. When the
machine is unplugged the relay snaps shut closing the n/c contacts,
and the alert screams away. Put a cheap keyswitch on the side to
allow you to move the machine. You can mount the sono alert on the
inside with some 2 way tape. You will have to drill a 1/8 inch hole
where the alert outlit is so that the alert can scream through the
metal cabinet.

For the moving switch, do not use a hidden switch or something like
that. The kids will learn that very very fast!!!

Remember to open and change the battery about once a year. And test
it periodocaly to see if the battery is good. The total cost is
about $40 in parts.

Don't forget that during powerfailures you will have the machines
screaming away. Just walk over and turn off the switches
temporarly... If it screams for a few hours you will have to change
the batteries...

I had a few contracts of this nature for some institutions. We had to
do about 100 VCR's and TV's for several places.

--

Jerry Greenberg
http://www.zoom-one.com/electron.htm
==========

Quick Reply To: jerryg50@hotmail.com
We Specialize In Elecronic Componets

WebSite 1: http://www.total.net/~jerryg
Website 2: http://www.zoom-one.com
Find CD's: http://www.zoom-one.com/selling.htm

If It Works, Don't Fix It !
If It Don't Move, Slap It !
If It Don't Make Noise, Shake It !
If It's Broke, Then Fix It ... !
If You Don't Know How To Fix It, Give It Out !

========== Message Separator ==========

DaveC wrote in message ...
|VCRs have disappeared repeatedly from the local volunteer center
where I
|donate some of my time.
|
|Others at the center suggested securing the equipment to tables,
locking
|doors, etc, but since the general public doesn't have access to this
part
|of the building, some of us feel that it is someone (or someone's
child)
|who attends regularly. I want to get this (ahem...) individual on
video
|"en flagrante" (in the act).
|
|A camcorder (with auxiliary video input capability) will be used for
the
|recorder, with a pinhole camera (NTSC output) placed either
|inconspicuously high in a corner of the room, or behind a panel in
the
|TV/VCR stand/cabinet, providing the surveillance. (Placement of the
camera
|will be determined by available light (we don't want to get just the
|silhouette of the thief walking away with yet another VCR) and
probable
|entry/exit path into/out of the room.)
|
|An alarm wouldn't be very helpful here, because there is seldom
someone
|nearby when the thefts occur and by the time someone appeared on the
|scene, the thief would probably be gone (with or without the
merchandise).
|
|
|I need help with some of the planning:
|1) How can I create a circuit that senses that the VCR has been
picked up
|or unplugged: If I place the camera and recorder in the TV/VCR stand,
|triggering of the record mode can be via wire. If it's placed
elsewhere in
|the room, triggering would be have to be done via RF or other link.
Any
|sensing circuit must be unobtrusive; the thief will be unplugging the
|power cord from a standard extension cord into which the TV is also
|plugged, and so there can't be any suspicious circuitry between the
VCR
|plug and the extension cord...
|
|2) Triggering the record function on an old Sony CCD-V9, 8mm
camcorder:
|how can the camcorder be put in record mode automatically?

```
|
|Any suggestions would be greatly appreciated.
|
|Sorry for the modified return address, but I hate getting spammed.
|My correct return address is provided below if you choose to e-mail
me.
|
|Thanks,
|Dave
|
|--
|Dave Carpenter
|Sound Logic
|
|Note: "From" address is invalid.
|Use: "voicebox at dnai dot com" with the"@"and"."inserted
appropriately.
```

2022. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Kelly Keaton <kkeaton@earthlink.net>
Message-ID: <7ak77v$c7o$1@fir.prod.itd.earthlink.net>
Source record: 73251
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

I have Bottles on Sale for 5.00 a case I have a large supply of them plus shipping and Handling!!!

Kelly!!!

E-Mail kkeaton@earthlink.net

Tom MC wrote in message ...
>Does anyone know where I can BUY some bottles?
>
>Thanks
>
>Tom MC
>
>

2023. Re: Poor man's Spectrum Analyzer: Any one using one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: &NM7U <&NM7U@hevanet.com>
Message-ID: <36CDACA7.46F6F1AC@hevanet.com>
Source record: 73252

Chris Mcdonald wrote:

> Our club is looking at buying a Poor man's Spectrum Analyzer for
> working on the repeater's and we are looking for reviews (besides the
> ones on the page) and any other infomation on it .

Consider carefully what you're trying to do.
A Rich man's spectrum analyzer with a very accurate counter
and a tracking generator is BARELY adequate to tune
3-cavity duplexers.

Consider the frequency stability and IF bandwidth required to look
at modulation or close-in spurs.

Will you be looking at small signals in the presence of large ones?
A HUGE (spurious free) dynamic range is critical.

If all you want to do is see if there's a big signal leaking out,
you might get some help from a cheapo analyzer,
if it tunes the harmonic range, if you can trust the calibration.
and it doesn't take three different boxes all cabled together.

There are reasons that a decent spectrum analyzer is EXPENSIVE.

Try to borrow one to verify it does what you need.
miker

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus.
TO REPLY CLICK HERE http://www.hevanet.com/nm7u
Or you can DELETE the & in the "from" address.

2024. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: bogus@supernews.com
Message-ID: <bogus-1902991055500001@dnai-207-181-237-24.dialup.dnai.com>
Source record: 73253
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

As I said in the original post, I don't want to go the alarm route. We can scare off the individual, but, as I said, we want to catch him/her on video.

Any suggestions as to how to do this will be greatly appreciated.

=====

> What you can do is install a loud sono alert inside the machine.

[major snip]

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2025. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: News Chang <mchang@cisdesign.com>
Message-ID: <Dshz2.9862$bP2.65813@typhoon-sf.pbi.net>
Source record: 73254
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

There is a sensor called "Videotector motion detector"
Here's what it say about it

"Attach the sensor on the video monitor. Any
movement in the picture triggers audible alarm
and contact closure. Use the contact closure to
start a VCR or trigger an external security system.
Adjustable sensitivity and alarm volume."

I think this could work, get a picture of
the VCR on the monitor, place the
sensor over that spot.
As soon as some one walks up to the
vcr, you are recording it.

Minus side - expensive - $100
from Home Automation Systems
800-762-7846

disclaimer - I don't work for them, just buy stuff from them.
Some people can get so flame happy.

mark

2026. Re: NEED INFO TUBE TESTER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <36cdbe07.1320380@news.nemaine.com>
Source record: 73255
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

see:

http://www.triplett.com/serv_faq.htm

Ken

On Fri, 19 Feb 1999 10:12:09 -0500, "Dee Almquist" <w4pnt@rica.net>
wrote:

>Hello All
>Anyone own or know anything about a Triplet 3444A tubetester? I need some
>instruction/help getting mine going. Also any advanced info on this equip
>(tech & tube lists) would be greatly appreciated. Do you know of a reflector
>or group that caters towards test equipment? Thanks in advance for ANY help
>you can offer.
>Regards
>Dee
>w4pnt@rica.net
>
>
>

2027. Re: Virus alert! (was: cancel <36CA2818.A9DFC71C@herald.infi.net>)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Jack Anderson <jander@home.com>
Message-ID: <36CDCA70.5F56E38B@home.com>
Source record: 73256
Cross-posted to: rec.audio.marketplace,rec.audio.misc,rec.audio.opinion,rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.cb

For those interested, I found info on the Happy99.exe virus at this.
http://www.datafellows.com/v-descs/ska.htm
I got this virus in an email from some one off the radio swap newsgroups
and it is for real. It went into my address book and sent a copy of
itself to every one in my address book.

"W. Dean Milner" wrote:
>
> x-no-archive: yes
>
> "KD5GEH" <kd5geh@arrl.net> wrote:
>
> >And just how does a bitmap (.bmp?) file execute?
>
> Actually it doesn't, and doesn't have to in this case. The "virus"
> code is embedded in the bmp file and loads along with it into memory
> when you look at the file. It remains there until overwritten by
> another program or cleared on system restart. It would appear, from
> the description that it is activated by a subsequent screen saver
> startup at which point it executes from memory. If the system cleared
> memory before a screen saver activation then you would be safe - till
> you viewed that BMP file again.
>
> Hiding code or data in graphics files is not new. In cryptography
> circles its called stegonography. Much like hiding a coded message in
> clear text. Unless you know where to look it is well nigh impossible
> to find.
>
> 73 de VE1CBF
>
> Dean
>
> Note: remove the (.ns) from the user id before emailing.

2028. Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: repatch@my-dejanews.com
Message-ID: <7aknok$dp3$1@nnrp1.dejanews.com>
Source record: 73257

I was wondering if anybody could refer me to a good web source on the design of antennas? I don't want to buy one because, well, I don't want to spend that much and I feel I could learn more by doing. What is a yagi, a dipole? that kind of stuff. How do you design the length, what is a groundplane good for. Most of the antennas I want to build will be receive only, in the 27MHZ, 49MHZ, 160MHZ and 412MHZ areas, all seperate. Any pointers? Thanks in advance for any info, including any info given here. TTYL

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2029. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: hapticz <hapticz@email.msn.com>
Message-ID: <#hz6d7EX#GA.317@upnetnews05>
Source record: 73258
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

i use one of those outside motion detecting flood light devices to control
turn on/off machine that is always set to +ACI-record+ACI-. it's an ancient vhs
clunker with mechanical switches, but it sure does work reliably+ACE-

really cheap too+ACE- about +ACQ-12.00 and some quick and dirty wire splices+ACE-

--
best regards
hapticz+AEA-email.msn.com

2030. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: dynastic@0spam.cwcom.net
Message-ID: <36cdce76.20738398@news.cwcom.net>
Source record: 73259
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Tue, 16 Feb 1999 22:47:07 +0000, Frank Erskine
<frank@g3wte.demon.co.uk> wrote:

>In article <36c9e38a.13185379@news.prestel.co.uk>, Jim Dunnett
><olympus@0spam.prestel.co.uk> writes
>>On 16 Feb 1999 12:10:52 GMT, "Simon Cox" <simon.cox@breathe.co.uk> wrote:
>>
>>>People worry about me, I ride a
>>>Kawasaki Z1000 LTD and listen
>>>to RA 17 valve radios.
>>
>>Surely not at the same time?
>>
>>Incidentally, I found a '9-Pin Miniature Tall Test Socket Adapter'
>>Model 1449 by Pomona Electronics of Calif. It extends the valve base
>>of an awkwardly placed B9A valve base out by 5.5cms
> ~~~~~~ ?
>
>What's that in real money? A couple of inches, I'd imagine :-)

No idea Frank. The ruler I used only gives standard measure.

(5.5cms is about 1.58 inches)

--
- 73 de Jim, g(m)4rga | ____
olympus%jimdee.prestel.co.uk | | |
dynastic%cwcom.net | Only | 0 | more nights!
marula%zdnetmail.com | -----
g4rga@gb7tjf.#45.gbr.eu |
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: pgpkeys.mit.edu:11371

2031. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Andy Lake <andy.lake@bt.com>
Message-ID: <36CDE607.7A73@bt.com>
Source record: 73260
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Jim Dunnett wrote:
>
> >>Incidentally, I found a '9-Pin Miniature Tall Test Socket Adapter'
> >>Model 1449 by Pomona Electronics of Calif. It extends the valve base
> >>of an awkwardly placed B9A valve base out by 5.5cms
> > ~~~~~~ ?
> >
> >What's that in real money? A couple of inches, I'd imagine :-)
>
> No idea Frank. The ruler I used only gives standard measure.
>
> (5.5cms is about 1.58 inches)

Uhh?????!!!!!!

2032. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: niallcw@btinternet.com
Message-ID: <36cde429.11258418@news.btinternet.com>
Source record: 73261
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 19 Feb 1999 08:24:42 -0800, bogus@supernews.com (DaveC) wrote:

>1) How can I create a circuit that senses that the VCR has been picked up
>or unplugged: If I place the camera and recorder in the TV/VCR stand,
>triggering of the record mode can be via wire. If it's placed elsewhere in
>the room, triggering would be have to be done via RF or other link. Any
>sensing circuit must be unobtrusive; the thief will be unplugging the
>power cord from a standard extension cord into which the TV is also
>plugged, and so there can't be any suspicious circuitry between the VCR
>plug and the extension cord...

Install a security alarm door reed switch under the vcr and glue the
operating magnet to the VCR base.
>
>2) Triggering the record function on an old Sony CCD-V9, 8mm camcorder:
>how can the camcorder be put in record mode automatically?
>
If it's an old one you could just solder a small relay contact across
the record button, as long as continuosly pushing "record" doesn't
affect the recording; if it does, use a pulse circuit to drive the
relay.
If the camcorder has an IR remote control, or you can attach it to an
old vcr which does, you could wire up the remote control handset as
above and conceal it in the VCR stand where the camera vcr can "see"
it.

Alternatively, for a completely self contained solution; build the
remote control into the casing of the VCR which is liable to be
stolen, along with a small battery powered circuit which is activated
by a tilt switch and continuously activates "record" on the remote as
above.
If the security vcr is concealed in a suitable place with a good view
of the room, there is a pretty good chance the theif will
inadvertantly "point" the remote at the security vcr on his way out.
--

Niall

2033. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Frank Erskine <frank@g3wte.demon.co.uk>
Message-ID: <+OBDDBAN+ez2Ewfc@g3wte.demon.co.uk>
Source record: 73262
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

In article <36cdce76.20738398@news.cwcom.net>, Jim Dunnett
<dynastic@0spam.cwcom.net> writes
>On Tue, 16 Feb 1999 22:47:07 +0000, Frank Erskine
><frank@g3wte.demon.co.uk> wrote:
>
>>In article <36c9e38a.13185379@news.prestel.co.uk>, Jim Dunnett
>><olympus@0spam.prestel.co.uk> writes
>>>On 16 Feb 1999 12:10:52 GMT, "Simon Cox" <simon.cox@breathe.co.uk> wrote:
>>>
>>>>People worry about me, I ride a
>>>>Kawasaki Z1000 LTD and listen
>>>>to RA 17 valve radios.
>>>
>>>Surely not at the same time?
>>>
>>>Incidentally, I found a '9-Pin Miniature Tall Test Socket Adapter'
>>>Model 1449 by Pomona Electronics of Calif. It extends the valve base
>>>of an awkwardly placed B9A valve base out by 5.5cms
>> ~~~~~~ ?
>>
>>What's that in real money? A couple of inches, I'd imagine :-)
>
>No idea Frank. The ruler I used only gives standard measure.
>
>(5.5cms is about 1.58 inches)
>
Not according to a steel tape measure I've just found, that has those
French units as well as real ones...

5.5 "cms" is roughly 2.25". Your 1.58" is about 4 "cms".

Forget those cheap foreign measuring units and stick with the real thing
:-)

73 -
--
Frank Erskine
Sunderland
Don't go metric - feet, BSF, Whitworth and inches are miles better

Still looking for 67.5V and 100V HT batteries

2034. Re: GUNN Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36CDFA2F.7B80@pop.removethistomailme.net>
Source record: 73263
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

marsgal42@hotmail.com wrote:
>
> In article <VLEy2.14416$lx.9725@news2.giganews.com>,
> "Greg Flynn" <gflynnNO_SPAM@mail.gl.com> wrote:
>
> > Does anyone know a good cheap source for these components? I am interested
> > in the K and X band.
>
> Swap meets. Look for the ex-intruder alarm units. I've bought loose
> Gunn diodes from Birkett in England. Mainline carry them too.
>
> You might have a look in the Yellow Pages and see who sells/services
> radar intruder alarms and automatic door openers in your area.
>
> With that said, I'm still trying to find where the TTC get the
> 24 GHz Gunn units for the doors at Toronto subway stations... :-(
>

I've been playing with the 24 GHz units from http://www.shfmicro.com for
awhile now; they're pretty nice 5mW units that include varactors for
modulation, which the subway units probably wouldn't. They sell them
for $58 each, which didn't strike me as unreasonably expensive.

I will probably end up not needing the two that I have, as a matter of
fact, because I am likely to need another 10 dB or so worth of ERP in
the project I'm working on. If you're just looking for a couple of
units to play with, I could probably be persuaded to sell 'em cheap.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2035. Re: cancel <36CA2818.A9DFC71C@herald.infi.net>

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7aktjfehg1@scotty.tinet.ie>
Source record: 73264

entropious wrote in message <7afksj$kf0$1@fir.prod.itd.earthlink.net>...

>
>what a dickhead.
>

No, it takes a real Dickhead to post a pointless message like this,
to seven different newsgroups.

Ed.

2036. Re: Poor man's Spectrum Analyzer: Any one using one?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36CDFB43.1E11@pop.removethistomailme.net>
Source record: 73265

&NM7U wrote:
>
> Chris Mcdonald wrote:
>
> > Our club is looking at buying a Poor man's Spectrum Analyzer for
> > working on the repeater's and we are looking for reviews (besides the
> > ones on the page) and any other infomation on it .
>
> Consider carefully what you're trying to do.
> A Rich man's spectrum analyzer with a very accurate counter
> and a tracking generator is BARELY adequate to tune
> 3-cavity duplexers.
>
> Consider the frequency stability and IF bandwidth required to look
> at modulation or close-in spurs.
>
> Will you be looking at small signals in the presence of large ones?
> A HUGE (spurious free) dynamic range is critical.
>
> If all you want to do is see if there's a big signal leaking out,
> you might get some help from a cheapo analyzer,
> if it tunes the harmonic range, if you can trust the calibration.
> and it doesn't take three different boxes all cabled together.
>
> There are reasons that a decent spectrum analyzer is EXPENSIVE.
>
> Try to borrow one to verify it does what you need.
> miker
>
> --
> Big list of WANTS and FORSALES at link below.
> Return Address is Bogus.
> TO REPLY CLICK HERE http://www.hevanet.com/nm7u
> Or you can DELETE the & in the "from" address.

Additionally, a "rich man's spectrum analyzer" doesn't cost that much these days. You could probably find an HP141T/8554B/8444A for less than $1200 or so without much effort. Hard to see spending money on one of those CATV-tuner jobs unless you're just looking for a fun construction project.

I think Wes Hayward has a good set of plans for a better-than-usual homebrew analyzer on his web site; I forget the address but you could probably look up W7ZOI on the various search engines and find it.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2037. Re: GUNN Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <F7FEKt.I32@world.std.com>
Source record: 73266

Laura Halliday VA3LDH replied to Greg Flynn:

> > Does anyone know a good cheap source for these components? ... K and X band

> Swap meets.

Yup. I found one table at last weekend's swap meet with
non-adjustable "radar detector testers" -- 10G diode/horn assemblies
with two capacitors and a cigar-lighter plug -- for $5, and another
table with tunable X-band Gunn modules for $10 (same as the above,
except without the plug and with a tuning screw in the cavity -- and
with a QST reprint on how to use 'em). Also found reasonable prices
on X-band waveguide and N-connector coax components, including a
load isolator.

Test equipment to tune it up is the hard part ... had to fork over
something apporaching real money for an 8-12G wavemeter (calibrated
tuned trap on a waveguide, looks like a whole-house water filter!)
last year, but haven't seen enough of these around to let it go.

Once I get my bench clear -- major project in itself -- using it to
tune 'em up will be my project ... and getting my 2m IF rig to work in
it's advertised SSB, CW, and WFM modes in addition to it's AOK NFM
mode. Anyone else in EMA looking to have X-band/10G for the summer?

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

2038. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: Gary Tait <taitg@zdnetmail.com>
Message-ID: <36CE3695.6FAB1030@zdnetmail.com>
Source record: 73267
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Since you state the VCR an TV is plugged into an extension cord ,you
can make a device that will detect a loss of current when the VCR is
unplugged (they always draw some current.) Have that circuit trigger the
camcorder somehow.

DaveC wrote:
>
> VCRs have disappeared repeatedly from the local volunteer center where I
> donate some of my time.
>
> Others at the center suggested securing the equipment to tables, locking
> doors, etc, but since the general public doesn't have access to this part
> of the building, some of us feel that it is someone (or someone's child)
> who attends regularly. I want to get this (ahem...) individual on video
> "en flagrante" (in the act).
>
> A camcorder (with auxiliary video input capability) will be used for the
> recorder, with a pinhole camera (NTSC output) placed either
> inconspicuously high in a corner of the room, or behind a panel in the
> TV/VCR stand/cabinet, providing the surveillance. (Placement of the camera
> will be determined by available light (we don't want to get just the
> silhouette of the thief walking away with yet another VCR) and probable
> entry/exit path into/out of the room.)
>
> An alarm wouldn't be very helpful here, because there is seldom someone
> nearby when the thefts occur and by the time someone appeared on the
> scene, the thief would probably be gone (with or without the merchandise).
>
> I need help with some of the planning:
> 1) How can I create a circuit that senses that the VCR has been picked up
> or unplugged: If I place the camera and recorder in the TV/VCR stand,
> triggering of the record mode can be via wire. If it's placed elsewhere in
> the room, triggering would be have to be done via RF or other link. Any
> sensing circuit must be unobtrusive; the thief will be unplugging the
> power cord from a standard extension cord into which the TV is also
> plugged, and so there can't be any suspicious circuitry between the VCR
> plug and the extension cord...
>
> 2) Triggering the record function on an old Sony CCD-V9, 8mm camcorder:
> how can the camcorder be put in record mode automatically?
>
> Any suggestions would be greatly appreciated.
>

> Sorry for the modified return address, but I hate getting spammed.
> My correct return address is provided below if you choose to e-mail me.
>
> Thanks,
> Dave
>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2039. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-19 00:00:00 UTC
From: bogus@supernews.com
Message-ID: <bogus-1902992132490001@dnai-207-181-238-124.dialup.dnai.com>
Source record: 73268
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thanks for the good idea.

But the room will be used by others, and the VCR will be used, probably.
Only when it is being unplugged, or picked up do I want to record the
video picture of who's doing the unplugging or picking up.

Any other creative suggestions?

Thanks,
Dave

=====

> i use one of those outside motion detecting flood light devices to control
> turn on/off machine that is always set to record. it's an ancient vhs
> clunker with mechanical switches, but it sure does work reliably
> really cheap too about 12.00 and some quick and dirty wire splices

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2040. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: tmacinty@highlander.cbnet.ns.ca
Message-ID: <36ce018e.155593143@news1.ns.sympatico.ca>
Source record: 73269
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

bogus@supernews.com (DaveC) wrote:

>As I said in the original post, I don't want to go the alarm route. We can
>scare off the individual, but, as I said, we want to catch him/her on
>video.
>
>Any suggestions as to how to do this will be greatly appreciated.

There was a similar thread within the last year...the solution was an
electrical shock setup, resulting in a volume of human urine on the
floor ...I thought it was funny at the time...

Tom>
>=====
>
> > What you can do is install a loud sono alert inside the machine.
>
> [major snip]
>
>--
>Dave Carpenter
>Sound Logic
>
>Note: "From" address is invalid.
>Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2041. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Kelly Bersch <not_kbersch@ncmg.com>
Message-ID: <01be5c6d$d02db680$2d00000a@NCMG217.ncmg.com>
Source record: 73270
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Check out www.prescientsys.com . They have a piece of software called
GOTCHA! that I've been looking at. It uses a computer with a video capture
device and camera. Stores the images on your hard drive. Only captures
images when there is movement. Sounds like it would work. Cost might be a
problem but f you could find people to lend you the parts (this sounds like
the problem will be solved once the thief is caught) you might be able to
get away with just the cost of the software. I don't remember what it
costs but I'm pretty sure it was under $80.00.

Kelly
KC7CSB

> I need help with some of the planning:
> 1) How can I create a circuit that senses that the VCR has been picked up
> or unplugged: If I place the camera and recorder in the TV/VCR stand,
> triggering of the record mode can be via wire. If it's placed elsewhere
in
> the room, triggering would be have to be done via RF or other link. Any
> sensing circuit must be unobtrusive; the thief will be unplugging the
> power cord from a standard extension cord into which the TV is also
> plugged, and so there can't be any suspicious circuitry between the VCR
> plug and the extension cord...
>
> 2) Triggering the record function on an old Sony CCD-V9, 8mm camcorder:
> how can the camcorder be put in record mode automatically?
>
> Any suggestions would be greatly appreciated.

2042. Re: GUNN Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: lothina1@my-dejanews.com
Message-ID: <7al7ed$qt6$1@nnrp1.dejanews.com>
Source record: 73271
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <VLEy2.14416$lx.9725@news2.giganews.com>,
"Greg Flynn" <gflynnNO_SPAM@mail.gl.com> wrote:
> Does anyone know a good cheap source for these components? I am interested
> in the K and X band.
>
> Also if anyone knows a good source for electronic components in general? I
> know who the regulars are but I was hoping to save some money.
>
> A website would be the best but a name would be just fine. Also please
> respond to email or email + newsgroup so that I don't miss your reply. You
> must remove NOSPAM from my email address.
>
> Thanks Greg
>

why do you want to deal with Gunn elements ? have you ever considered
building a DRO utilizing HEMT,S ? its cheaper and much more reliable, i build
24GHZ DRO utilizing 1 hemt with 13dBm output power at 5V Supply and the costs
including PCB are running around 20$.

lothar
>

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2043. Re: Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: xkmillerx@flash.net
Message-ID: <36cf2af0.94634419@news.flash.net>
Source record: 73272

Try an ARRL Antenna Book or Handbook.
Kerry, WD5ABC

On Fri, 19 Feb 1999 22:14:47 GMT, repatch@my-dejanews.com wrote:

> I was wondering if anybody could refer me to a good web source on the
>design of antennas? I don't want to buy one because, well, I don't want to
>spend that much and I feel I could learn more by doing. What is a yagi, a
>dipole? that kind of stuff. How do you design the length, what is a
>groundplane good for. Most of the antennas I want to build will be receive
>only, in the 27MHZ, 49MHZ, 160MHZ and 412MHZ areas, all seperate. Any
>pointers? Thanks in advance for any info, including any info given here. TTYL
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2044. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Elisabet Valls <valls@worldnet.att.net>
Message-ID: <7ala6j$aff@bgtnsc03.worldnet.att.net>
Source record: 73273
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Good idea on the reed switch but be careful when putting magnets near magnetic sensitive tapes as in VCR tapes find another method. Also check with an electronics supplier for level switches or contact switches such as in what is used on window alarm systems which are not magnetic. There are contact switches which will activate when they are not in contact with a surface or vice versa, usually a tiny plunger style device.

2045. Re: Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36CE2D2C.92F8AFD0@usit.net>
Source record: 73274

There are some web pages on antennas, but they are mostly fluff. What you need to do is get some books, a pencil, and a paper pad and study a while. Go to the library and check out some books. If you want to start building right away, try the arrl antenna book. After you have looked at some books, go ahead and buy one that you think will be a good reference.

Good luck

Don

repatch@my-dejanews.com wrote:
>
> I was wondering if anybody could refer me to a good web source on the
> design of antennas? I don't want to buy one because, well, I don't want to
> spend that much and I feel I could learn more by doing. What is a yagi, a
> dipole? that kind of stuff. How do you design the length, what is a
> groundplane good for. Most of the antennas I want to build will be receive
> only, in the 27MHZ, 49MHZ, 160MHZ and 412MHZ areas, all seperate. Any
> pointers? Thanks in advance for any info, including any info given here. TTYL
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2046. Q: MFJ-259 SWR Analyzer - Dip Meter Conv.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: "John C. Ko" <n2fno@qsl.net>
Message-ID: <7aleim$4jk@bgtnsc02.worldnet.att.net>
Source record: 73275

OMs,

I have MFJ-259 SWR Analyzer.
My question is how MFJ-259 works as a dip meter?
How can I make pick-up coils?

Any answers ?

N2FNO
n2fno@qsl.net

2047. Re: Transistor specs required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990220001849.01139.00000352@ng-cf1.aol.com>
Source record: 73276

gx0vzs@aol.com wrote:

>Please could anyone give me any information on the following transistors:-
>

Well, I do have info on them, but you're asking for someone else to do an awful lot of typing (or scanning or whatever). You can come over and look at my books if you'd like...this is just the sort of reason I keep old (ancient?) data books around. The first Motorola transistor data books had a wonderful listing of all the JEDEC-registered 1N and 2N numbers.

Seriously, though, at least spend some time looking at the National Semi and Motorola web sites, and maybe one or two others. You should be able to find many of the more modern ones there. Certainly so with the 2N2222, 2905A and 2907.

Regards,
Jay

2048. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37107094.535803679@news.atl.bellsouth.net>
Source record: 73326
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 19 Feb 1999 10:55:49 -0800, bogus@supernews.com (DaveC) wrote:

>As I said in the original post, I don't want to go the alarm route. We can
>scare off the individual, but, as I said, we want to catch him/her on
>video.
>
>Any suggestions as to how to do this will be greatly appreciated.
>
>=====
>
> > What you can do is install a loud sono alert inside the machine.
>
> [major snip]

The sonolert tone could be used to trigger the camcorder, hower.
Just use a electret mic element and a 567 tone decoder at the
camcorder to trigger it. You'll get pictures of your thief fleeing.

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2049. Re: Help: transistor CP640

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36cdf5fe.2436969240@news.online.no>
Source record: 73327

On Thu, 18 Feb 1999 21:20:54 -0800, "John Moriarity" <k6qq@hdo.net>
wrote:

>
>>>U310 or the (obsolete?) P8000 are the most likely substitutes.
>>>
>
>
>I have seen folks parallel a number of U310's to get a higher
>g-sub-m like the CP640 has. It might be worth a try.
>
>73,
>
>John, K6QQ
>
>
>
but if 20mmho is what you need (for 50 ohm) I don't see why one should
paralell them? or did they use MPF102? BF246C has 20mmho with -6V Vgs,
BF246A,B,C are commonly available types in Europe

73
Jan-Martin LA8AK
LA8AK@ONLINE.no

2050. Re: Q: MFJ-259 SWR Analyzer - Dip Meter Conv.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: "Dale R. Parfitt" <parinc@bellsouth.net>
Message-ID: <36CEA857.FD74FAE0@bellsouth.net>
Source record: 73328

John C. Ko wrote:

> OMs,
>
> I have MFJ-259 SWR Analyzer.
> My question is how MFJ-259 works as a dip meter?
> How can I make pick-up coils?
>
> Any answers ?
>
> N2FNO
> n2fno@qsl.net

You're much better off picking up a real dip meter like the
Measurments model 59. I have the coil set and it makes for the least
sensitive dip meter I have seen- the Measurements being the very best by
far. If still interested, you can have the coil set for 1/2 of whatevere
MFJ sells them for- like new.

Dale W4OP

2051. Re: ANTI-CW people.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: "Leonard M. Pheobus" <Sysadmin@Annapolis1.com>
Message-ID: <36CEAA8B.B1BD4C06@Annapolis1.com>
Source record: 73329
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

cincpac wrote:

> > > Another lying Democrat, George Bush.
> > >
> >
> > QUESTION?!?
> >
> > Since when is George Bush a Democrat?
> >
> > I am not even a legal adult and I STILL know a democrat from a republican. I better go back to associating with people my own age who still think before they type.
>
> > teenager - procoder - not to lazy to get up and study for PRIVILEGES I want -
> > RealHam.
> ----------
> Mr. Teenager, you're a *real ham* in more ways than you think. You need
> to spend less time with archaic modes of communication and more time
> learning to interpret satire, irony, double meanings, and other genre of
> English writing.
> Think, read, and try to discern what was writtten before YOU type.

cincpac,

I think you need to look at the context of the article . teenager is right in this case "other genre of
English writing" included! Keep the code and keep .- ... ... --- .-.. . ... .-.. .. -.-- . -.-- --- ..- - --- .- -- .. -. .. -- ..- --

Thank you for your precious time and concern
Leo

--

WINDO$Z is 32 bit patch to a 16 bit GUI
to an 8 bit OS for a 4 bit CPU by a 2 bit
company which can't stand 1 bit of competition

2052. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Ken <tylereng@pacbell.net>
Message-ID: <36CEA94E.340D6CE5@pacbell.net>
Source record: 73330
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

DaveC wrote:
>
> VCRs have disappeared repeatedly from the local volunteer center where I
> donate some of my time.
>
> Others at the center suggested securing the equipment to tables, locking
> doors, etc, but since the general public doesn't have access to this part
> of the building, some of us feel that it is someone (or someone's child)
> who attends regularly. I want to get this (ahem...) individual on video
> "en flagrante" (in the act).
>
> A camcorder (with auxiliary video input capability) will be used for the
> recorder, with a pinhole camera (NTSC output) placed either
> inconspicuously high in a corner of the room, or behind a panel in the
> TV/VCR stand/cabinet, providing the surveillance. (Placement of the camera
> will be determined by available light (we don't want to get just the
> silhouette of the thief walking away with yet another VCR) and probable
> entry/exit path into/out of the room.)
>
> An alarm wouldn't be very helpful here, because there is seldom someone
> nearby when the thefts occur and by the time someone appeared on the
> scene, the thief would probably be gone (with or without the merchandise).
>
> I need help with some of the planning:
> 1) How can I create a circuit that senses that the VCR has been picked up
> or unplugged: If I place the camera and recorder in the TV/VCR stand,
> triggering of the record mode can be via wire. If it's placed elsewhere in
> the room, triggering would be have to be done via RF or other link. Any
> sensing circuit must be unobtrusive; the thief will be unplugging the
> power cord from a standard extension cord into which the TV is also
> plugged, and so there can't be any suspicious circuitry between the VCR
> plug and the extension cord...
>
> 2) Triggering the record function on an old Sony CCD-V9, 8mm camcorder:
> how can the camcorder be put in record mode automatically?
>
> Any suggestions would be greatly appreciated.
>
> Sorry for the modified return address, but I hate getting spammed.
> My correct return address is provided below if you choose to e-mail me.
>
> Thanks,
> Dave

>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

It sounds like you have the answer for how to trigger the event covered.
The next step is using that trigger to start the camcorder for it's role
in the process. One possiblility is that if you place the camcorder in
record mode and then remove power it will retain that state when power
is restored. Only you can determine if this is possible. It may reset
itself to another state at power up or it may not. If it does remain in
record mode your questions are pretty much answered.
The device used as the trigger makes and breaks the power to the camcorder.
When the vcr is picked up power is restored to the camcorder and your
recording begins. It stays on until you run out of tape or come along and
find your vcr gone again and the system activated before the tape runs out.

If the camcorder loses it's record state when power is removed I can think
of no other possible suggestions at this time. If I had the unit here to play
with that would be another story but you have been just informative enough to
raise an interest but not enough to provide all of the solutions.

--
Ken Tyler

mailto://tylereng@pacbell.net

2053. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.99Feb20080828@colossus.stdavids.picker.com>
Source record: 73331
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

HeHeHe.. Don't worry, it really takes more effor than you think to affect a VCR or tape with a magnet. Just don't use a disk drive magnet! Reed switches are fairly sensistive.

--- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
+Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
| Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html

In article <7ala6j$aff@bgtnsc03.worldnet.att.net> "Elisabet Valls"
<valls@worldnet.att.net> writes:

Good idea on the reed switch but be careful when putting magnets near magnetic sensitive tapes as in VCR tapes find another method. Also check with an electronics supplier for level switches or contact switches such as in what is used on window alarm systems which are not magnetic. There are contact switches which will activate when they are not in contact with a surface or vice versa, usually a tiny plunger style device.

2054. Datasheet for BF255

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7ame26$t83@eldborg.rhi.hi.is>
Source record: 73332

Hi

I have a few BF255 transistors but I need the datasheet for them.
Anyone know where to find it (on the Net ofcourse :)
--
//----------------------//---
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

2055. ALINCO DR130 Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: rsdeputy@aol.com
Message-ID: <19990220085135.00960.00000507@ng-fc1.aol.com>
Source record: 73333

Does anybody know if there is, or ever was, a modification for the ALINCO DR130 that would expand the number of channels in the unit? I am researching this for a friend. I don't own one of these, myself. Any information regarding this would be helpful. If possible, please respond direct to my email address as shown.

Thanks in advance.

Robin
Robin Deputy
Amateur Radio KE9SQ
PCIA Certified Mobile Communications Technician #39520
RSDeputy@aol.com

2056. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Gary Peach <xcg34@dial.pipex.com>
Message-ID: <7amggs$n8c$2@plug.news.pipex.net>
Source record: 73334
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Andy Lake wrote
>Jim Dunnett wrote:
>> >What's that in real money? A couple of inches, I'd imagine :-)
>>
>> No idea Frank. The ruler I used only gives standard measure.
>>
>> (5.5cms is about 1.58 inches)
>
>Uhh????!!!!!!

Typical, give 'im an inch and he'll take a smile

Gary7SLL

2057. WTD: 10M Mod Info for GLA-1000B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36CEC8F4.3BA5E548@starc.org>
Source record: 73335
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Gang,

I'm trying to get info on the 10M mod for the Dentron GLA-1000B. The "B" model has a small circuit
board mounted with the band switch. There is room on it for a coil and some caps, to enable 10M, If
anybody has the docs for this mod I'd really appreciate a copy.

--Tom
KB1CGA

2058. Re: Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7amitkjte1@winter.news.rcn.net>
Source record: 73336

For specific questions or help, try rec.radio.amateur.antenna forum .

Peter

>
>
>repatch@my-dejanews.com wrote:
>>
>> I was wondering if anybody could refer me to a good web source on the
>> design of antennas? I don't want to buy one because, well, I don't want
to
>> spend that much and I feel I could learn more by doing. What is a yagi, a
>> dipole? that kind of stuff. How do you design the length, what is a
>> groundplane good for. Most of the antennas I want to build will be
receive
>> only, in the 27MHZ, 49MHZ, 160MHZ and 412MHZ areas, all seperate. Any
>> pointers? Thanks in advance for any info, including any info given here.
TTYL
>>
>> ------------== Posted via Deja News, The Discussion Network ==----------
>> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2059. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: niallcw@btinternet.com
Message-ID: <36cec93b.1100996@news.btinternet.com>
Source record: 73337
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 20 Feb 1999 03:29:23 GMT, "Elisabet Valls" <valls@worldnet.att.net>
wrote:

>Good idea on the reed switch but be careful when putting magnets near
>magnetic sensitive tapes as in VCR tapes find another method. Also check
>with an electronics supplier for level switches or contact switches such as
>in what is used on window alarm systems which are not magnetic. There are
>contact switches which will activate when they are not in contact with a
>surface or vice versa, usually a tiny plunger style device.
>
>
Stuck on the bottom of the vcr it's extremely unlikely to affect
anything. Obviously best kept as far away from the transport as
possible.
--

Niall

2060. FA: Heathkit HV Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: rbales@gte.net
Message-ID: <7amqf6$4rd$9@news-1.news.gte.net>
Source record: 73338

If you need a high voltage supply, you should check this out before spending more.

+600VDC
+300VDC
-130VDC
6.3 VAC

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69231448

Thanks for having a look

ROn

2061. Prarie Digital Board

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Czeczek <czeczmar@free.polbox.pl>
Message-ID: <6oDz2.2283$U1.400694@news.tpnet.pl>
Source record: 73339

I am searching for project of the Prarie Digital Board publicated in AMSAT Journal 12/94.
Pleaseeeeee help !

Marcin Czeczko
czeczmar@free.polbox.pl
czeczmar@infeco.pb.bialystok.pl

2062. Re: Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: zikot@gator.net
Message-ID: <36cf0a7e.21116438@news.gator.net>
Source record: 73340

Your best bet, and least expensive, would be a Dipole or Groundplane
antenna. The dipole is the least expensive and easiest to build and is
relativley directional while a groundplane is omni-directional.

What you are trying to receive at these frequencies would really
determine what type of antenna you should build. Let me know and I
will send you some information and a few URL's that you can go to.

73's

Tom
WA1VAI
On Fri, 19 Feb 1999 22:14:47 GMT, repatch@my-dejanews.com wrote:

> I was wondering if anybody could refer me to a good web source on the
>design of antennas? I don't want to buy one because, well, I don't want to
>spend that much and I feel I could learn more by doing. What is a yagi, a
>dipole? that kind of stuff. How do you design the length, what is a
>groundplane good for. Most of the antennas I want to build will be receive
>only, in the 27MHZ, 49MHZ, 160MHZ and 412MHZ areas, all seperate. Any
>pointers? Thanks in advance for any info, including any info given here. TTYL
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2063. RX-320 Free Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: mktg@ix.netcom.com
Message-ID: <36d10f8a.14829925@nntp.ix.netcom.com>
Source record: 73341

February 20, 1999

Dear RX-320 User,

Beta Version 1.0B is now available for the software I
wrote to operate the Ten-Tec RX-320 receiver.

Changes from Version 1.0A:
- Program displays a list of scan files for you
to make a selection. It is no longer necessary
to type the name of a scan file
- AGC setting now works correctly.
- The setting of the Offset is saved between
sessions.
- The program code has been fine tuned to increase
efficiency and speed.

Features of Version 1.0B:

- Squelch (adjustable)
- Scanning of lists (files) with adjustable delay
- Tuning in a variety of steps from 1 Hz to 1 Mhz
- 34 selectivity settings
- Runs under DOS or Windows - even works on a 80386
computer using DOS

I would be happy to supply free of charge this Beta version
to anyone interested who has an RX-320. The software will not
function without an RX-320.

The program is supplied along with several other files in
a single zip file. Installation and removal are simple, as
the program does not affect any system settings either in
DOS or windows.

The program is easy to use - just press various keys to engage
the different functions.

Istallation, removal, and operating instructions are included.

If there is enough interest, the Beta version may advance into
a final version.

Send your request to my e-mail at mktg@ix.netcom.com and I will
send you the zip file by return e-mail.

Regards,

David
W7HTJ

Marketing Data Research
8103 104th St., S.W.
Tacoma, WA 98498 USA
Tel. (253) 588-4149
Fax: (253) 588-4366
Internet: mktg@ix.netcom.com

2064. Mods for AH-50?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: kc8com@webtv.net
Message-ID: <24483-36CF0CCD-71@newsd-133.iap.bryant.webtv.net>
Source record: 73342

Are there any known mods for the ah-50 6m ht? I'd like to be able to
listen to the state police on 42.100 .

2065. ANZAC FM-104

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990220151455.14613.00000221@ng50.aol.com>
Source record: 73343

Can anyone identify the above component for me or even give a proper homepage address for Anzac the electronics corporation...About all I've found is an Argentinian company and a travel agency.

W4ZCB

2066. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Marty <martyk@naples.infi.net>
Message-ID: <36CF1BD8.D881E6B3@naples.infi.net>
Source record: 73344
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Some years ago we had a similar problem with office equipment
disappearing. In our case, since there was a building watchman on
duty, we triggered an alarm; but the idea we used might be applicable
in your situation as well.

I don't remember the circuit details, but it was basically a solid
state relay triggered by breaking a fine wire loop which was attached
to the bottoms of the equipment. The wire came from an old audio
transformer, probably No.40AWG, maybe smaller, and was practically
invisible. In one area we daisy-chained it under two IBM Selectrics.

You couldn't even feel the wire pull and break when you moved the
equipment, as one of the secretaries found out when she forgot the
wire and decided it was time to dust underneath :-). And yes, the guy
was caught.

DaveC wrote:
>
> VCRs have disappeared repeatedly from the local volunteer center
> I need help with some of the planning:
> 1) How can I create a circuit that senses that the VCR has been picked up
> or unplugged: If I place the camera and recorder in the TV/VCR stand,
> triggering of the record mode can be via wire. If it's placed elsewhere in
> the room, triggering would be have to be done via RF or other link. Any
> sensing circuit must be unobtrusive; the thief will be unplugging the
> power cord from a standard extension cord into which the TV is also
> plugged, and so there can't be any suspicious circuitry between the VCR

2067. Re: Re posting, Moving coil meter repair

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: dynastic@0spam.cwcom.net
Message-ID: <36cf19a4.5920753@news.cwcom.net>
Source record: 73345
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On Fri, 19 Feb 1999 22:30:31 +0000, Andy Lake <andy.lake@bt.com>
wrote:

>Jim Dunnett wrote:
>>
>> >>Incidentally, I found a '9-Pin Miniature Tall Test Socket Adapter'
>> >>Model 1449 by Pomona Electronics of Calif. It extends the valve base
>> >>of an awkwardly placed B9A valve base out by 5.5cms
>> > ~~~~~~ ?
>> >
>> >What's that in real money? A couple of inches, I'd imagine :-)
>>
>> No idea Frank. The ruler I used only gives standard measure.
>>
>> (5.5cms is about 1.58 inches)
>
>
>Uhh?????!!!!!!

All right then, try 2.18

--
- 73 de Jim, g(m)4rga | The Englishman is under no constitutional
olympus%jimdee.prestel.co.uk | obligation to believe that all men are
dynastic%cwcom.net | created equal.
marula%zdnetmail.com |
g4rga@gb7tjf.#45.gbr.eu | - John Updike 1932 -
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: pgpkeys.mit.edu:11371

2068. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: davem@redgreen.cs.ubc.ca
Message-ID: <7anav0$3s2@redgreen.cs.ubc.ca>
Source record: 73346
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

ke4zv@bellsouth.net (Gary Coffman) writes:
>The sonolert tone could be used to trigger the camcorder, hower.
>Just use a electret mic element and a 567 tone decoder at the
>camcorder to trigger it. You'll get pictures of your thief fleeing.

Provided the thief is slow. Many camcorders and VCRs take a *long*
time to go from stop to record, long enough to entirely miss a thief
who's in a hurry.

Another possibility: run the camera output to a frame grabber on a PC
hidden somewhere. Grab and store a frame every 5 or 10 seconds. Have
enough disk space for maybe 5 minutes of total images. As each new
image is grabbed, delete the oldest of the existing ones to keep the
space used the same.

Then, when the alarm goes off, you can save images from 5 minutes *before*
the alarm, as well as for some time after.

Dave

2069. Re: Where's the email gone

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <36CF2A01.64ED@wt.net>
Source record: 73347
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

Simon Cox wrote:
>
> Am I the only one who's not getting mail
> or is there a major problem somewhere.
There is always a major problem somewhere.
> --
>
> Peolpe worry about me, I ride a
> Kawasaki Z1000 LTD and listen
> to RA 17 valve radios.

Well, at least you can move fast while you are listening. MK

--
http://web.wt.net/~nm5k

2070. Re: Balun/choke help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Thomas C Sefranek <tcs@cmcorp.com>
Message-ID: <36CF20FD.C6579B2D@cmcorp.com>
Source record: 73348

Tim wrote:

> I've just recently put up a 6m Jpole, I've looked in the handbook and an
> old antenna handbook for feeding options. I don't understand the
> difference between a transforming 4:1 balun and a choke balun. Are they
> the same? Someone said you could feed the jpole by coiling up 10ft or so
> of cable at a specific diameter to create a choke balun, while I
> understand the purpose is to keep the coax from radiating how does this
> match? I was under the impression a Jpole that is shorted at the bottom
> has an impedance close to 200 ohms requiring a 4:1 transformer, others
> said connect the coax directly to the Jpole but the hot side goes to the
> shorter stub. I'm completly confused can anyone tell me the best way to
> feed this monster?
>
> Tim ka8ddz

Tim,

The J-Pole is just a half wave antenna feed at the end MATCHED with a
quarter wave line.
(The short side is half of the 1/4 wave matching section.)
At the top of the stub is almost infinite impedance, just like feeding the
end of a half wave.
At the bottom (They are almost ALL shorted) it is zero impedance.
Somewhere along the line is 50 ohms or 200 ohms or 300 ohms or whatever you
require.
This is a balanced matching section so where you attach the inner to outer
conductors of the
coax makes no difference.
So if you are using 50 ohm coax and you find the 50 ohm point on the
matching section,
you only need a 1:1 balun. I prefer the choke balun. I don't usually use
coiled coax,
but rather a few ferries of the right type for the frequency involved on the
coax at the
feed point. The balun does NOTHING to match the antenna.
Use hose clamps to attach the two conductors of you choked coax to the
matching section.
(The "J") You can then slide it up and down the matching section to find
the best match.
Mark the spot, take off the clamps, solder the coax conductors to the spots
you marked.
(I actually make copper straps wide enough to hold a coax flange connector
and an equally
wide piece to the center conductor of the connector.)

Questions?

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

2071. charge "9-volt" ni-cad battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <28767-36CF30B2-45@newsd-112.bryant.webtv.net>
Source record: 73349

i need a circuit to limit the charging current to 15 or 20 ma. i want to charge a battery in place.....without the need to remove it from the equiptment. i have seen the charger kits. but they all have too high of current for this battery. (the 9 volt battery format is lousy any way, no battery life in those little things. but the equiptment is commercialy manufactured with no room for a larger format) are there any ideas?

2072. Re: cancel <36CA2818.A9DFC71C@herald.infi.net>

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ce941c.2477453512@news.online.no>
Source record: 73350

On Fri, 19 Feb 1999 14:36:14 -0000, "Eamon Skelton"
<die.all@spammers.org> wrote:

>
>entropious wrote in message <7afksj$kf0$1@fir.prod.itd.earthlink.net>...
>
>>
>>what a dickhead.
>>
>
>
>No, it takes a real Dickhead to post a pointless message like this,
>to seven different newsgroups.
>
.......and to comment it!
LA8AK@ONLINE.no

2073. WTB: SOL Terminal Computer SOL-10 or 20

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Alan <alan.diaz@snet.net>
Message-ID: <7anc69$4l@news1.snet.net>
Source record: 73351
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

Trying to find someone that has a Processor Technology Corp. SOL-10 or SOL-20 willing to sell. You know you have one in the back of the attic, please dig it out and come back at me. You can reach me at chipsndips@snet.net.

Alan

2074. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Bill Newkirk <wnewkirk@iu.net>
Message-ID: <7andk3$aj3$1@east42.supernews.com>
Source record: 73352
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

mark the equipment. a spot of krylon on the bottom would do for a start.
(don't get too carried away - spray paint could get inside the machine and
mess it up.

check your local pawn shops.

usually the crooks don't want the VTR, the want the money the VTR represents
for drugs or whatever.

DaveC wrote in message ...
>VCRs have disappeared repeatedly from the local volunteer center where I
>donate some of my time.
>
>Others at the center suggested securing the equipment to tables, locking
>doors, etc, but since the general public doesn't have access to this part
>of the building, some of us feel that it is someone (or someone's child)
>who attends regularly. I want to get this (ahem...) individual on video
>"en flagrante" (in the act).
>
>A camcorder (with auxiliary video input capability) will be used for the
>recorder, with a pinhole camera (NTSC output) placed either
>inconspicuously high in a corner of the room, or behind a panel in the
>TV/VCR stand/cabinet, providing the surveillance. (Placement of the camera
>will be determined by available light (we don't want to get just the
>silhouette of the thief walking away with yet another VCR) and probable
>entry/exit path into/out of the room.)
>
>An alarm wouldn't be very helpful here, because there is seldom someone
>nearby when the thefts occur and by the time someone appeared on the
>scene, the thief would probably be gone (with or without the merchandise).
>
>
>I need help with some of the planning:
>1) How can I create a circuit that senses that the VCR has been picked up
>or unplugged: If I place the camera and recorder in the TV/VCR stand,
>triggering of the record mode can be via wire. If it's placed elsewhere in
>the room, triggering would be have to be done via RF or other link. Any
>sensing circuit must be unobtrusive; the thief will be unplugging the
>power cord from a standard extension cord into which the TV is also
>plugged, and so there can't be any suspicious circuitry between the VCR
>plug and the extension cord...
>
>2) Triggering the record function on an old Sony CCD-V9, 8mm camcorder:
>how can the camcorder be put in record mode automatically?

>
>Any suggestions would be greatly appreciated.
>
>Sorry for the modified return address, but I hate getting spammed.
>My correct return address is provided below if you choose to e-mail me.
>
>Thanks,
>Dave
>
>--
>Dave Carpenter
>Sound Logic
>
>Note: "From" address is invalid.
>Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2075. WTB r390/390A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36CF4065.7A08DEF4@buffnet.net>
Source record: 73353

If you have one of these please respond direct. Give description,
serial number and price.
Partial chassis and parts also considered.
--
73,

Jim N2go

2076. Re: Datasheet for BF255

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7annkr$jm2$1@news1.fast.net>
Source record: 73354

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

BF ssounds like a Siemens part ... try http://www.smi.siemens.com

The search engine seems broken for a search by part number,
returning a message about your browser needing to accept
"cookies" ... my browser is fine in that regard, but the Siemens
server can't see it that way :-(

You'll have to go through the product guide and find it the
hard way, but I'm sure it's there.

73,
- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

Hrafnkell Eiriksson <hkelle@rhi.hi.is> wrote in message
news:7ame26$t83@eldborg.rhi.hi.is...
>Hi
>
>I have a few BF255 transistors but I need the datasheet for them.
>Anyone know where to find it (on the Net ofcourse :)
>--
>//----------------------//-----------------------------------------------
-
>// Hrafnkell Eiriksson // Student of Computer- and Electrical
engineering
>// hkelle@rhi.hi.is // at the Univeristy of Iceland
>// // "Blessed are they who go around in circles,
>// Finger for PGP key // for they shall be known as Wheels"
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBNs9ha5e+N6+q84HiEQJwEwCgozZPxbkhf3rB5V0kt9D6tpTUBnEAoIfn
x6vZa05EmRj0Kdd69SY4B7f6
=lCxw
-----END PGP SIGNATURE-----
```

2077. Norcal 20 arrived !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Mike & Coreen Smith <ve9aa@nbnet.nb.ca>
Message-ID: <36CFA772.4629554F@nbnet.nb.ca>
Source record: 73355

Got my Norcal 20 about a week or so ago. Anyone else on here get one and get it on the air yet?

72/73 Mike ve9aa/p
--
Coreen & Michael Smith
271 Smith Road
Waterville Sunbury Co,
New Brunswick Canada E2V 3V6
<ve9aa@nbnet.nb.ca>

2078. ** FS: Misc. Ham Radio Satellite Books **

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: ken@seemessage.com
Message-ID: <ken-2002992258220001@user-38ld53i.dialup.mindspring.com>
Source record: 73356
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Hi...

I'm cleaning house. I'd like to sell out some of my satellite books.
I have the following books for sale. (Sorry, I don't want to separate
them....buy them all, one price.)

ARRL The Satellite Experimenter's Handbook
by Martin Davidoff K2UBC
Retail: $20

The ARRL Satellite Anthology (2nd Edition)
The Best of Recent QST articles on amateur satellite operation and hardware
Retail: $8

ARRL Weather Satellite Handbook (Fourth Edition)
by Dr. Ralph E. Taggart, WB8DQT
Retail: $20

The Amateur Radio Astronomer's Handbook
(Build your own radio telescope!)
Retail: $19.95

I'm asking $25 for the whole package (plus $5 shipping).

If interested, please send email to the address listed in
the signature below, and we can swap address particulars,
or I can answer any other questions you might have.

Thanks...

Ken, N1NEG

--
My real email address is almost "ken@wino!!!!!grad.com".
Just delete the exclamation points, and it's for real.
Sorry about this complication, just trying to avoid spam mail.

2079. Re: ANZAC FM-104

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36CF69DB.2E44@pop.valley.net>
Source record: 73357

JohnsonHE wrote:
>
> Can anyone identify the above component for me or even give a proper homepage
> address for Anzac the electronics corporation...About all I've found is an
> Argentinian company and a travel agency.
>
> W4ZCB

Hello--
I recall that Anzac is a trademark or a division of Adams-Russell Corp.
which is (or was) located in Waltham, MA. I may have an old catalog,
but I'm not sure where it's located as of now.

Drop me an e-mail message if you can't locate a website for A-R, and
I'll go digging.

73,
Brad AA1IP

2080. FS: Henry 2K plate xmfr $125.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36cf9d3e@news1.us.ibm.net>
Source record: 73358
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

OEM. Used. Fine condx. $125.00 plus shipping from San Diego 92139.

State call, name, and zip code when replying.

Lane Zeitler
Ku7i

2081. Re: ANZAC FM-104

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-20 00:00:00 UTC
From: Jim <I.hate.SPAM@nospam.com>
Message-ID: <7aod98$a6@dfw-ixnews4.ix.netcom.com>
Source record: 73359

The FM-104 is a broadband passive frequency doubler.

It's input frequency range is 75 - 1500 MHz

Output 150 - 3000 MHz

Conversion loss about 13 dB

Since it's a variation on a diode mixer, it needs an input of around +10 dBm

As far as I can tell from the catalog, the input and output pins are marked.

Jim N6BIU

My true EMAIL is jpennell at (let me think...) ix dot netcom

dot com

I hate spam with a passion.

2082. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be5df0$ac49bb40$LocalHost@default>
Source record: 73127

No kidding.

Silver is good. It looks nice especially when laid out on the rich man's table, but takes a lot of elbow grease to keep it that way. Ask the housemaid. It has some desirable mechanical properties. Its softness assists with making good electrical contacts so fine for plating roller inductors. It easily electroplates. It is expensive. Men have killed for it !

But its DC electrical conductuctivity is only 6% better than copper. At HF, because current flows on a thin skin, silver plated copper wire has a resistance only 3% lower than copper. It is not worth the cost of the plating operation plus the cost of the silver.

Important :- To be fully effective the plating has to be quite thick - at least twice the thickness of the RF skin depth in silver. At 1 MHz plating thickness should be at least 0.006 inches. At 100 MHz, 1/10 of this will suffice.

There's another effect - oxides of silver are semiconductors, ie of intermediate resistance values. When the wire is tarnished the current flows in the tarnish and RF loss can be greater than with copper. But all very uncertain.

Copper oxides have a very high resistance. So a tarnished copper wire behaves as an insulated copper wire and retains the low resistance of untarnished copper.

I think skin effect is marvellous. It makes the calculation of HF resistance of copper wire easy. It is R = Sqrt (F) / 12 / d ohms per metre, where F is in MHz and d is diameter in millimetres. Silver wire, as discussed above, is 3% less.

Tinned copper wire has an RF resistance 2.6 times greater than bare copper. Keeps looking nice and very easy to solder but terrible stuff for tuning coils. Shun it as you would 1 KW electric fire radiator elements.

Gold plated copper wire has an HF resistance 19% greater than bare copper. A balanced-to-unbalanced ATU using gold plated coils with swinging links, built inside a glass case, is something to be proudly displayed to visitors. Many amateurs would consider the prestige attached to a

gold plated ATU to be well worth the penalty of about 5% of
an S-unit in transmitted signals.

Trouble-making Housing Association neighbors might also be
suitably impressed.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

8877@my-dejanews.com wrote in article
<7anvo3pd1@nnrp1.dejanews.com>...
> In article <01be59f9$38b57f20$223963c3@default>,
> "Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:
> > Never use tinned or tin-plated copper wire for RF
coils.
> > Considerably more lossy than bare copper.
> >
> > Use silver plating if you like a pretty finish but
silver
> > does not signicantly reduce loss relative to bare
copper.
> > Silver also tarnishes rapidly.
>
> No kiding? I thought silver was good.
> What do you think about skin efect?
> CT
>
>
> > --
> > ******************************
> > Reg, G4FGQ For free software go to:-
> > http://www.btinternet.com/~g4fgq.regp
> >
> > ******************************
> >
> > Veeduber <veeduber@aol.com> wrote in article
> > <19990215222428.05874.00002279@ng126.aol.com>...
> > >
> > > >
> > > > >I am planning to build an antenna coupler that
requires
> > a coil. My attempts
> > > > >to
> > > > >wind it myself were not satisfying. In the magazines
you
> > see perfectly wound
> > > > >homebrew coils. How do they do it? Any clue would be
> > really appreciated.

> > > >Ray, KD6SXG
> > > ><
> > >
> > > Ray (and the Mailing List),
> > >
> > > One method that delivers high quality results is to
wind
> > your coils on a lathe
> > > using demountable coil forms.
> > >
> > > The forms are made of hardwood blocks about ten
inches
> > long fastened together
> > > with a recessed brass screw at each end, installed
from
> > opposite sides. The
> > > screws are installed at an angle so as to be parallel
to
> > the ends of the form.
> > > The ends of the block are then cut parallel to each
other
> > but at an angle to
> > > the parting line. The centers are then found.
Because
> > the parting line is at
> > > an angle, the ends of the block are solid. A brass
plate
> > and dog may be
> > > installed to facilitate centering and turning. The
block
> > is turned to the
> > > desired diameter. If things have been properly laid
out,
> > removing the screws
> > > will allow the block -- now a cylinder -- to come
apart
> > in the form of a pair
> > > of tapered cylindical wedges which mate along their
flat
> > face.
> > >
> > > You should end up with a cylindrical form about nine
> > inches long on which you
> > > may wind a coil eight inches or less in length. You
may
> > of course make a
> > > longer form but since it is held together only on
the
> > ends the maximum length
> > > is a function of diameter. (My 1" form is about 4"

> > long.)
> > >
> > > The cylindrical form is then grooved with a router to
> > accept styrene rod of a
> > > given diameter suitable to the coil, the grooves
falling
> > entirely within a
> > > given half of the form so as to leave the parting
line
> > unobstructed. Four
> > > grooves is the norm but with larger diameter coils
six
> > grooves are possible.
> > > Suitable styrene rod is available from plastic
suppliers.
> > Depending on the
> > > diameter of the coils you plan to make, you'll need
> > several diameters of
> > > styrene rod, that is, small (1/8") for small diameter
> > coils and heavier rod
> > > (5/16") for larger diameter coils made of heavier
gauge
> > wire.
> > >
> > > The form is then finished with varnish, and marked
> > according to diameter. If
> > > you do much building you'll eventually have half a
dozen
> > forms, from 3/4" to 3"
> > > diameter.
> > >
> > > The form is used with a wire feed and tensioner which
> > you'll also have to make.
> > > Coils are normally wound from tin-plated solid
copper
> > wire, which is fairly
> > > expensive stuff. Even so, it is best to buy an
entire
> > roll of the wire and
> > > design your wire feeder to accept the standard rolls.
> > >
> > > In use, the form of the desired diameter is chucked
into
> > the lathe, styrene
> > > rods cut to length and attached to the form with tape
or
> > wire and the lathe set
> > > to feed wire at the desired pitch and tension.
Tension
> > is kept fairly high in

> > > order to accomodate the following step.
> > >
> > > Once the coil is wound -- it takes only a few minutes
--
> > the wire may be cut
> > > and secured to the form, either to an eyelet or by
> > threading the free end of
> > > the wire into a hole drilled in the form for that
> > purpose. The completed coil
> > > is then HEATED, usually with an industrial grade
hot-air
> > gun such as you'd use
> > > for heat-shrinking. The heat softens the styrene.
The
> > highly tensioned coil
> > > then melts itself into the styrene rods.
> > >
> > > A fair degree of experience is needed in the heating,
> > especially with smaller
> > > coils. The object is to melt the wire into the rods
so
> > that the styrene covers
> > > the wire. But if you let it melt too deeply you will
> > upset the process for the
> > > remaining rods and may alter the diameter of the
finished
> > coil. The depth of
> > > the grooves you've cut to accept the styrene rod has
a
> > lot to do with your
> > > success, as does the pitch of the winding -- you may
find
> > it more convenient to
> > > make forms of identical diameters but having slightly
> > deeper grooves for coils
> > > having a finer pitch. But in most cases, the
diameter of
> > the wooden form
> > > determines the depth to which the wire can melt into
the
> > styrene.
> > >
> > > Once melted all around, the styrene is allowed to
cool.
> > The brass screws are
> > > removed and the wooden form driven apart, leaving you
> > with a air-wound coil
> > > indistinguisable from those commercially available.
> > >
> > > I'm sorry I can't provide you with a sketch. My

> > operating system does not
> > > support any of the commonly available CAD programs
and
> > what it does support, no
> > > one else seems to have :-) (ie, NT 3.51)
> > >
> > > -Bob Hoover
> > > -KA6HZF
> > >
> >
>
> ----------== Posted via Deja News, The Discussion
Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or
Start Your Own
>

2083. Re: Usage of vector voltmeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990221105600.14609.00000347@ng50.aol.com>
Source record: 73128

>
>One of the problem I realized is the narrow tuning range of
>vector-voltmeter(about 1 octave).
>If anyone know the way to overcome, please let me know.

Afraid you're stuck with it, the 8405 will go somewhat past the limits of the filter switch with a big signal, but isn't guaranteed out there.
You could auto step it with a Ledex switch or stepper motor if you need to go past those limits, better to just get out the network analyzer.

W4ZCB

2084. WTB: 60's General Radio catalogs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <ZAXz2.768$HF4.1829137@brnws01.ne.mediaone.net>
Source record: 73129
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

I'd like to buy several General Radio catalogs from the 1960's.
What do you have available?
Thanks!
Chuck...K1KW

2085. Ham 3 rotor - TA33 , used how much???.....Ed, WB3ERX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: cmc <cmconnell@pathway.net>
Message-ID: <7apicd$2vc$0@208.231.48.50>
Source record: 73130

I have a ham III rotor and a ta33 jr both are used i wanted to know what they are worth someone wants to but them. i don'y know what a fair price was..... 73's WB3ERX

2086. Wanted: Knob for HP8640A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7apko9$78i$1@news.netcologne.de>
Source record: 73131

Hi,

I'm looking for the frequency range knob of the modulation generator (option
001) of a HP8640A Signal Generator.

Another beige-coloured HP knob of the 70's (for 0.25 in axis, bottom diam.
0.6 in,
length 0.6 in, suited for a second coaxial axis) would also do.

Any idea?

Peter

2087. Re: Balun/choke help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990221114112.12202A-100000@oso.slonet.org>
Source record: 73132

Hi Tim. You are very right in asking matching questions regarding the J pole antenna. There is quite a bit of misinformation on matching, even in the ARRL antenna handbook. That is: Do NOT tap both the shield and the center conductor up the side of the quarter wave stub!
This is guaranteed to produce feedline radiation.
Do ground the coax shield at the base of the J quarter wave section halfwave between the two vertical members and extend the center coaxial conductor between the vertical portions. Experiments in the past indicate that either the short or the radiator portion can be tapped. Usually the "tap" is a short length of solid insulated house wire wrapped several times around the antenna conductor forming a capacitor. There is no need for a balun of any kind as this very procedure is an excellent balun.
For 6 meters, you might make the housewire portion about 13 inches long and wrap about 13 turns around the matching section. Do not be afraid to apply "trial and error" as all that can be lost is is a few inches of house wire! Keep an eye on the VSWR bridge and simply play!
For two meters, the dimensions are: Up five inches with house wire and about five to seven turns around the J radiator. The proper number of turns depends primarily on the antenna diameter, not the house wire size.
Two points to be gained here, 1) Ground the coax shield at the very bottom of the J----do not tap up! and 2) Play with dimensions of house wire while observing a VSWR bridge. 73 Cliff K7RR/W6HDO

2088. BNC-SMB connectors f.s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <36D06C43.5F33@northwest.com>
Source record: 73133
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

i hv six gold-plated BNC-SMB interseries connectors. ALso two pcs SMC-BNC, gold-plated. All are SEALECTRO brand.

$20 for the lot, + shipping from 97124.

2089. FS: Tubes...lots of them, sweeps and more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990221174715.01147.00001173@ng-ft1.aol.com>
Source record: 73134

I typically like to sell directly, but I have so darned many tubes, I split them up into 3 lots and posted them on eBay (sorry).

Lot 1 is 187 assorted NOS /NIB 7-pin and 9-pin miniature tubes;
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=68069950

Lot 2 is 111 assorted used tubes (mostly miniatures). All tested, all boxed, includes some 6DJ8 Bugle Boys, a Telefunken 6DJ8, and lots more;
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=68076459

Lot 3 is 50 assorted NOS/NIB sweep and rectifier tubes.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=68081160

I also have more individual tubes posted on my website at;
http://members.aol.com/reactor001

Thanks for checking,
Tom Mitchell
email - OvrReactor@aol.com

2090. Solder Iron for surface mount?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: leeleduc@pacbell.net
Message-ID: <36d07f28.1120270@news.pacbell.net>
Source record: 73135

I need to buy a new soldering station and would like to get one that will enable me to solder surface mount components as well as regular devices such as DIPS and resistors and such.

Anyone have any recommendations?

Thanks

2091. price help on a used ta33jr.....wb3erx

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: cmc <cmconnell@pathway.net>
Message-ID: <7aq5pc$d59$2@208.231.48.50>
Source record: 73136

i could used some help on the price of a used ta33jr and a ham 3 rotor
both are used.how much would they be
worth?.....tnx
Ed

2092. SOLD!!! - BNC-SMB connectors f.s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <36D0A1B3.7DF2@northwest.com>
Source record: 73137
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

already hv several buyers. thanks, all.
=====

larryc@northwest.com wrote:
>
> i hv six gold-plated BNC-SMB interseries connectors. ALso two pcs
> SMC-BNC, gold-plated. All are SEALECTRO brand.
>
> $20 for the lot, + shipping from 97124.

2093. I Need Help!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Daniel Chosy <djchosy@2waytv.com>
Message-ID: <36D0AD90.708660@2waytv.com>
Source record: 73138

I represent a Madison-based internet company specializing in high quality streaming audio and video content. Our most recent success has been a website focusing on helping the careers unsigned bands and artists from around the world. In fact, it's been such a success that our staff is being overwhelmed by the incoming content.

We're looking to gain the support of our local community businesses. In

exchange for your support, we are offering prime-time commercial spots as well as targeted banner advertising.

Our website, http://www.UnsignedRadio.com/, has between 250,000 and 500,000 page hits per month. Because a significant amount of our traffic is local, there is a great potential to gain a strong customer base from such advertising.

If you're interested in finding out more about how both of our businesses can benefit from something like this, please call me at 608.277.0635 or 888.829.2988 at your convenience. Thank you for your time.

Sincerely,
Dan Chosy

www.Unsignedradio.com
www.TheUnsigned.com
www.2WayTV.com

2094. WTB: Plate Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Glenn <wilson@accessone.com>
Message-ID: <7aq969snd1@remarQ.com>
Source record: 73139

Wanted;

1) About 3600VAC, 7.5KVA plate xfmr. Doesn't have to be pretty.

2) 3 ea., turns counters for vacuum variables, etc.

3) Ceramic shaft couplers, one each; 1/4 X 1/4, 1/4 X 3/8 and 1/4 X 1/2.

Cash or trade,

Thanks and 73,

Glenn, KZ7R

2095. Re: Capacitor questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Allan Henry Kaplan <w1ael@tmindscape.com>
Message-ID: <36D01594.7689CFB0@tmindscape.com>
Source record: 73140
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Adam, As an old and gray experienced ham, I must point out that Nicholas Caruso's advice is right on the money! Do NOT go replacing parts just 'cause you've heard that "the capacitors go bad". Follow Mr Caruso's good advice, and come back with more questions. 73 de W1AEL

2096. **NEED ADVICE ON HOW TO BUILD ANT. SW.**

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Bill <bill@hovac.com>
Message-ID: <36d0cbd7.0@news1.mid-ga.com>
Source record: 73141

THANKS FOR READING.

I WANT TO BUILD A REMOTE COAX RELAY FOR MY CAR. SO FAR I'VE GOT A 12V RELAY WITH SILVER CONTACTS AND A METAL BOX. CAN I JUST SEND THE RF THROUGH THE RELAY LIKE A TYPICAL ELECTRICAL CIRCUIT? WHAT WILL THIS DO TO MY IMPEDIENCE?

MY GOAL IS TO SPLIT THE 6M/HF OUTPUT OF MY ICOM 706 TO SEND THE 6M TO A DIFFERENT ANTENNA.

DUPLEXERS COMBINE TWO OUTPUTS INTO ONE ANTENNA. CAN IT BE USED TO SPLIT ONE OUTPUT TO TWO ANTENNAS?

PLEASE E-MAIL COMMENTS TO bill@hovac.com AND THANKS ALL IN ADVANCE!

73 BILL

2097. He Needs To SPAM!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36D0CB22.1626@megsinet.net>
Source record: 73142

Daniel Chosy wrote:
> [spam]

Don't bother.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

2098. Beer Church T-shirts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: God <God@BeerChurch.com>
Message-ID: <36d0d61c@news.nwlink.com>
Source record: 73143
Cross-posted to: rec.food.drink.beer,rec.music.gdead,rec.music.phish,rec.radio.amateur.homebrew,seattle.eats

http://www.beerchurch.com

Now there is an online home for beer lovers!

Because beer is good, and you are worthy.

As God@BeerChurch.com, I welcome you to visit Beer Church.

Per the requests of our followers, we now have Beer Church T-shirts
available so you can show the world that you are worthy!

Now go in peace to serve and drink beer,

God

2099. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: null.rNOS@PAM.flashnet.it
Message-ID: <36d02d39.17201408@news.flashnet.it>
Source record: 73144
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 19 Feb 1999 10:55:49 -0800, bogus@supernews.com (DaveC) wrote:

>As I said in the original post, I don't want to go the alarm route. We can
>scare off the individual, but, as I said, we want to catch him/her on
>video.
>[...]

My .002 Euro here :*)

Use an old pc (486 or so) to grab images with a
b/w Quickcam that connects to the parallel port;
IIRC, on the net there are free programs/sources/drivers
to do that job under Linux (free itself too).
Then there are two solutions:

1- Write a dumb program that grabs images at a reasonable
rate (eg: one each 5 seconds), saves them on the hard
disk, keeping the last 24 hour ones.
Simple, but you'll need a big hard disk.

2- Write a smart program that grabs images faster, compares
them (eg: if image221.xyz != image220.xyz, then the camera
is seeing something) then saves only the ones that
differ, and delete the others.
By image "different" from another I mean dark/light
differences, you won't need image recognition for
that purpose.
Just make sure there are no cats/dogs in the room!:)

In that way you could also make the computer dial at
your (or police's) phone number with a prerecorded
voice that warns about the theft in act.
No alarm would scream, so the thief could be catched.

PS. By removing the IR filter, those cameras become
sensitive to the infrared too. Some IR "lamps" could
make the whole thing work also in a dark environment.

HTH

--
sr - null.rNOS@PAMflashnet.it <strip NOS & PAM to email>

2100. Balun/choke help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36D07804.C86156DC@eaglequest.com>
Source record: 73360

I've just recently put up a 6m Jpole, I've looked in the handbook and an old antenna handbook for feeding options. I don't understand the difference between a transforming 4:1 balun and a choke balun. Are they the same? Someone said you could feed the jpole by coiling up 10ft or so of cable at a specific diameter to create a choke balun, while I understand the purpose is to keep the coax from radiating how does this match? I was under the impression a Jpole that is shorted at the bottom has an impedance close to 200 ohms requiring a 4:1 transformer, others said connect the coax directly to the Jpole but the hot side goes to the shorter stub. I'm completly confused can anyone tell me the best way to feed this monster?

Tim ka8ddz

2101. Re: charge "9-volt" ni-cad battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be5d70$eb4f0fa0$30ecabc3@default>
Source record: 73361

Insert a limiting resistor.

2102. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: emw@teleport.com
Message-ID: <36d14e46.99495085@news.teleport.com>
Source record: 73362

On Sat, 20 Feb 1999 01:12:35 GMT, "Kelly Bersch"
<not_kbersch@ncmg.com> wrote:

>Check out www.prescientsys.com . They have a piece of software called
>GOTCHA! that I've been looking at. It uses a computer with a video capture

Thank you very much.
I have been just reading.
This will solve (i hope) a problem I have.
Ed

2103. Re: charge "9-volt" ni-cad battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <dEk0UkAp60z2Ew6M@corn2.freeserve.co.uk>
Source record: 73363

In article <28767-36CF30B2-45@newsd-112.bryant.webtv.net>, Jim
<inagaddadavida@webtv.net> writes
>i need a circuit to limit the charging current to 15 or 20 ma. i want to
>charge a battery in place.....without the need to remove it from the
>equiptment. i have seen the charger kits. but they all have too high of
>current for this battery. (the 9 volt battery format is lousy any way,
>no battery life in those little things. but the equiptment is
>commercialy manufactured with no room for a larger format) are there any
>ideas?
>
view in fixed font...

```
in |-----------| out
+ IN v dc >--------------------| 7805 vreg |-------o
| | |
----------- Rx
---------- | |
0V >-0 - | 9v bat | + o------o-------------0
----------
```

IN v is >= 1.5v * (number of cells in battery pack) + 5v
Rx = 5v / charge current eg. 100mA charge 5v / 0.10mA = 50 ohm
watt rating of Rx = 5v * charge current 5v * 0.10mA = 0.5W so use 1W
The voltage reg should run cool at the pp3 charge rate, so no need for
heatsinking it.
I use this cct to charge 4Ah 'C' cells at their 14h rate with a small
heatsink on the Vreg. if

cheers..

Mike W mike@corn2.freeserve.co.uk

Never underestimate the power of Human stupidity {;o)>

2104. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <7anvo3pd1@nnrp1.dejanews.com>
Source record: 73364

In article <01be59f9$38b57f20$223963c3@default>,
"Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:
> Never use tinned or tin-plated copper wire for RF coils.
> Considerably more lossy than bare copper.
>
> Use silver plating if you like a pretty finish but silver
> does not signicantly reduce loss relative to bare copper.
> Silver also tarnishes rapidly.

No kiding? I thought silver was good.
What do you think about skin efect?
CT

> --
> ******************************
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp
>
> ******************************
>
> Veeduber <veeduber@aol.com> wrote in article
> <19990215222428.05874.00002279@ng126.aol.com>...
> >
> > >
> > >I am planning to build an antenna coupler that requires
> a coil. My attempts
> > >to
> > >wind it myself were not satisfying. In the magazines you
> see perfectly wound
> > >homebrew coils. How do they do it? Any clue would be
> really appreciated.
> > >Ray, KD6SXG
> > ><
> >
> > Ray (and the Mailing List),
> >
> > One method that delivers high quality results is to wind
> your coils on a lathe
> > using demountable coil forms.
> >
> > The forms are made of hardwood blocks about ten inches
> long fastened together
> > with a recessed brass screw at each end, installed from
> opposite sides. The
> > screws are installed at an angle so as to be parallel to

> the ends of the form.
> > The ends of the block are then cut parallel to each other
> but at an angle to
> > the parting line. The centers are then found. Because
> the parting line is at
> > an angle, the ends of the block are solid. A brass plate
> and dog may be
> > installed to facilitate centering and turning. The block
> is turned to the
> > desired diameter. If things have been properly laid out,
> removing the screws
> > will allow the block -- now a cylinder -- to come apart
> in the form of a pair
> > of tapered cylindical wedges which mate along their flat
> face.
> >
> > You should end up with a cylindrical form about nine
> inches long on which you
> > may wind a coil eight inches or less in length. You may
> of course make a
> > longer form but since it is held together only on the
> ends the maximum length
> > is a function of diameter. (My 1" form is about 4"
> long.)
> >
> > The cylindrical form is then grooved with a router to
> accept styrene rod of a
> > given diameter suitable to the coil, the grooves falling
> entirely within a
> > given half of the form so as to leave the parting line
> unobstructed. Four
> > grooves is the norm but with larger diameter coils six
> grooves are possible.
> > Suitable styrene rod is available from plastic suppliers.
> Depending on the
> > diameter of the coils you plan to make, you'll need
> several diameters of
> > styrene rod, that is, small (1/8") for small diameter
> coils and heavier rod
> > (5/16") for larger diameter coils made of heavier gauge
> wire.
> >
> > The form is then finished with varnish, and marked
> according to diameter. If
> > you do much building you'll eventually have half a dozen
> forms, from 3/4" to 3"
> > diameter.
> >
> > The form is used with a wire feed and tensioner which
> you'll also have to make.

> > Coils are normally wound from tin-plated solid copper
> wire, which is fairly
> > expensive stuff. Even so, it is best to buy an entire
> roll of the wire and
> > design your wire feeder to accept the standard rolls.
> >
> > In use, the form of the desired diameter is chucked into
> the lathe, styrene
> > rods cut to length and attached to the form with tape or
> wire and the lathe set
> > to feed wire at the desired pitch and tension. Tension
> is kept fairly high in
> > order to accomodate the following step.
> >
> > Once the coil is wound -- it takes only a few minutes --
> the wire may be cut
> > and secured to the form, either to an eyelet or by
> threading the free end of
> > the wire into a hole drilled in the form for that
> purpose. The completed coil
> > is then HEATED, usually with an industrial grade hot-air
> gun such as you'd use
> > for heat-shrinking. The heat softens the styrene. The
> highly tensioned coil
> > then melts itself into the styrene rods.
> >
> > A fair degree of experience is needed in the heating,
> especially with smaller
> > coils. The object is to melt the wire into the rods so
> that the styrene covers
> > the wire. But if you let it melt too deeply you will
> upset the process for the
> > remaining rods and may alter the diameter of the finished
> coil. The depth of
> > the grooves you've cut to accept the styrene rod has a
> lot to do with your
> > success, as does the pitch of the winding -- you may find
> it more convenient to
> > make forms of identical diameters but having slightly
> deeper grooves for coils
> > having a finer pitch. But in most cases, the diameter of
> the wooden form
> > determines the depth to which the wire can melt into the
> styrene.
> >
> > Once melted all around, the styrene is allowed to cool.
> The brass screws are
> > removed and the wooden form driven apart, leaving you
> with a air-wound coil
> > indistinguisable from those commercially available.

> >
> > I'm sorry I can't provide you with a sketch. My
> operating system does not
> > support any of the commonly available CAD programs and
> what it does support, no
> > one else seems to have :-) (ie, NT 3.51)
> >
> > -Bob Hoover
> > -KA6HZF
> >
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2105. Still looking for an HBR-16 RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: tubepwr813@aol.com
Message-ID: <19990220234257.01140.00000771@ng-cc1.aol.com>
Source record: 73365

I am still looking for one of these homebuilt receivers. I used to have on eyears ago, but dealt it away for something else. If you have one of these sets, working or not and are interested in seeing it go to a good home, please let me know.

Thanks,

Chris "KX0Y"

2106. Tape Head Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: kc8com@webtv.net
Message-ID: <7766-36CFBEAD-36@newsd-131.iap.bryant.webtv.net>
Source record: 73366

I want to build a couple 4 channel cassette player/recorders using
autoreverse tape heads, now here are the questions:
1.What is the impedance of the typical head?
2.What level of audio voltage will be required to record?
3.How much gain will I need for playback (to drive line-level inputs)?
4.Where can I find inexpensive autoreverse tapeheads?
5.What is the frequency reponse of a typical head at normal speed?
6.What hampers the low frequency response?
7.Would it be possible to gang 2 of these beasts without a noticable
delay?
tnx,
matt

2107. Re: DIY Wireless data communication (RS-232)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Paul Young <paul@zx.net>
Message-ID: <GWPz2.1$yb2.431@vic.nntp.telstra.net>
Source record: 73367
Cross-posted to:
alt.comp.hardware.homebuilt,alt.comp.hardware.homedesigned,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

what about the Infowave, see
http://www.innomedia.com/products/infowave1.html
approx $450 a pair here in Australia, I have a few new sets spare if you
can't get them,

Mogwai <mogwai@smitsarnhem.com> wrote in message
news:7af587kod1@dinkel.civ.utwente.nl...
>Hi all,
>
>I'd like to build a wireless RS-232 communication channel, so my robot can
>communicate with a PC. I searched the net for transmitter/receiver units,
>but only found commercial ones (which are far too expensive for a hobby
>project).
>
>So can anyone point me to an online design/schematic that I can use for my
>project.....
>
>Thanks,
>
>mogwai
>
>

2108. Re: ALINCO DR130 Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <36cfdc3a.1641949@news.nemaine.com>
Source record: 73368

See:

http://qrz.com/files/modfiles/dr130.txt

Ken

On 20 Feb 1999 13:51:35 GMT, rsdeputy@aol.com (RSDEPUTY) wrote:

>Does anybody know if there is, or ever was, a modification for the ALINCO DR130
>that would expand the number of channels in the unit? I am researching this for
>a friend. I don't own one of these, myself. Any information regarding this
>would be helpful. If possible, please respond direct to my email address as
>shown.
>
>Thanks in advance.
>
>Robin
>Robin Deputy
>Amateur Radio KE9SQ
>PCIA Certified Mobile Communications Technician #39520
>RSDeputy@aol.com

2109. WTB: RACAL TA4034 A MPLIFIER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: kuwaiti@my-dejanews.com
Message-ID: <7aoq85ljk1@nnrp1.dejanews.com>
Source record: 73369

Looking for RACAL TA4034,TA4044 amplifier .

Thank you

Faisal

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2110. Want to put RS CB HT on 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36d03ad7.771366@news.erols.com>
Source record: 73370

I picked up an old RADIO SHACK TRC-201 Hand held CB 2 watt 3 channel radio.

It uses three crystals in the receiver and three in the transmitter. The crystals are very small (like the size of your smallest fingernail) and correspond to the three channels.

Any ideas on how to convert this thing to ten meter AM?

What kinds of crystals were they using in these rigs? Third Overtone?

Thanks, 73 Bill N2CQR

2111. Mail Delivery Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: MAILER-DAEMON@aol.COM
Message-ID: <199902211300.IAA26755@aolmbd03.mx.aol.com>
Source record: 73371

Sorry Ham-Homebrew@ucsd.edu. Your mail to kc2we could not be delivered because kc2we is not accepting mail with attachments

2112. Re: Datasheet for BF255

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36cf3f30.2521255911@news.online.no>
Source record: 73372

On 20 Feb 1999 13:41:26 GMT, hkelle@rhi.hi.is (Hrafnkell Eiriksson)
wrote:

>Hi
>
>I have a few BF255 transistors but I need the datasheet for them.
>Anyone know where to find it (on the Net ofcourse :)
>--
>//----------------------//---
>// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
>// hkelle@rhi.hi.is // at the Univeristy of Iceland
>// // "Blessed are they who go around in circles,
>// Finger for PGP key // for they shall be known as Wheels"
I don't have it, but this is a 30 year old type, not particular
interesting for any design, you may compare it to MPF102 or MPF106. If
you need it for a specific application you may need pinch off voltage,
but normally one don't

LA8AK@ONLINE.no

2113. Re: ANZAC FM-104

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990221081832.14617.00000276@ng50.aol.com>
Source record: 73373

>
> The FM-104 is a broadband passive frequency doubler.
>
> It's input frequency range is 75 - 1500 MHz

Mnay thanks Jim. I have a dozen of them I received from another ham several years ago. Gold plated, I didn't want to throw them away, but with those conversion losses, and what I can get from an MCL, think I may!

Yea, I don't know anyone who likes Spam, it must sell tho, so many SOB's are doing it. Unfortunately, AOL doesn't let me use an acronym for an address and I get plenty. Looking for a good ISP is something like looking for an ANZAC homepage.

Thanks again

W4ZCB

2114. Usage of vector voltmeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-21 00:00:00 UTC
From: Hidenori Suzuki <mail-hs@mxa.mesh.ne.jp>
Message-ID: <36D00E46.73F8CFC9@mxa.mesh.ne.jp>
Source record: 73374

I've obtained HP vector-voltmeter(model HP8405A) recently, and I'm planning to display the
amplitude-phase response of filters automatically combined with sweep generator.

One of the problem I realized is the narrow tuning range of vector-voltmeter(about 1 octave).
If anyone know the way to overcome, please let me know.
I don't like to use the network analyzer, because it's difficult to borrow and too expensive to buy.

H.Suzuki

2115. Re: Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <36D0BABF.468F1B94@bellsouth.net>
Source record: 73145

http://www.geocities.com/Athens/Parthenon/4205/xe1bef.htm
http://www.ac6v.com/pageas.html
check out the antenna sections of these sites
ni4l

repatch@my-dejanews.com wrote:

> I was wondering if anybody could refer me to a good web source on the
> design of antennas? I don't want to buy one because, well, I don't want to
> spend that much and I feel I could learn more by doing. What is a yagi, a
> dipole? that kind of stuff. How do you design the length, what is a
> groundplane good for. Most of the antennas I want to build will be receive
> only, in the 27MHZ, 49MHZ, 160MHZ and 412MHZ areas, all seperate. Any
> pointers? Thanks in advance for any info, including any info given here. TTYL
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2116. Re: Solder Iron for surface mount?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990221212403.10260.00001450@ng29.aol.com>
Source record: 73146

leeleduc@pacbell.net wrote:

>I need to buy a new soldering station and would like to get one that
>will enable me to solder surface mount components as well as regular
>devices such as DIPS and resistors and such.
>
>Anyone have any recommendations?
>

How deep are your pockets? Metcal makes some good ones, and actually has one in the $200 region, I think. I'm still using a Weller WTCP station I bought surplus for $10 or so over 20 years ago, and I've snagged a couple more newer ones for $5 or so each. With the right tip (I can't remember the number...long and very fine point), it works fine for 0.05" lead spacing SOIC packs and R's and C's and L's in standard SMT packages, at least down to 0603. I can do fine pitch with it if I'm careful. And there are those who will recommend a little butane torch (e.g., Weller Pyropen I think it is). You put down some solder paste, place the part, and heat. The surface tension of the solder tends to pull the SMT part into place, provided the pads on the board are the right sizes and you've used the right amount of solder paste. I personally perfer the iron, but that's the thing: some of soldering is personal technique and preference.

Regards,
Jay

2117. Stancor A-31 interstage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990221230954.24582.00001475@ng07.aol.com>
Source record: 73147

I am in need of a Stancor A-31 audio interstage transformer. If not available can someone please advise the specifications of this unit?

Thanks
Bob, W4RLC

2118. 4-1000 SOCKET TO TRADE FOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990221232948.01144.00001221@ng-cf1.aol.com>
Source record: 73148

```
NEED A 4-1000 CHIMNEY WOULD TRADE A 4-1000 SOCKET FOR ONE
SOCKET PART NUMBER IS SK 500
CHIMNEY MUST FIT SAME TYPE SOCKET
73 JOE
```

2119. Re: Datasheet for BF255

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7ar2jd$dtl@eldborg.rhi.hi.is>
Source record: 73149

On Sun, 21 Feb 1999 13:11:18 GMT, J M Noeding <la8ak@online.no> wrote:
>On 20 Feb 1999 13:41:26 GMT, hkelle@rhi.hi.is (Hrafnkell Eiriksson)
>wrote:
>>I have a few BF255 transistors but I need the datasheet for them.
>>Anyone know where to find it (on the Net ofcourse :)
>>
>I don't have it, but this is a 30 year old type, not particular
>interesting for any design, you may compare it to MPF102 or MPF106. If
>you need it for a specific application you may need pinch off voltage,
>but normally one don't

Unless I am very wrong: the BF255 is an NPN BJT transistor with f_T=200MHz.
Pinchoff voltage is only defined for FETs.

I tried searching at the Siemens website as Carl R. Stevenson
suggested, but no luck. The lowest number I found there was
BF4andsomething :)

But you are probably right that it is an old type.

--
//----------------------//--
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

2120. Point Contact Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36d1878e.7416303@news.erols.com>
Source record: 73150

We were talking a while bak about homebrew transistors. I came across an interesting description of them in an old Navy publication (NAVPERS 10087-B) on Basic electronics. "During the manufacturing process of the point contact diode, a relatively large current is passed from the catwhisker (beryllium copper, phosphor bronze or tungsten wire) to the (n-type) germanium crystal. The result of this large current is the formation of a small P type region in the vicinity of the point contact."

Does anybody know HOW the current causes the N- type material to "go P"? Also, how is the junction formed in ordinary galena, catwhisker detectors (where no large current was employed)?

Thanks, 73 Bill N2CQR

2121. WTB: Powerstat 240v 25/28a Variac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: Leon Snider <leons@worldnet.att.net>
Message-ID: <7arghg$1is@bgtnsc02.worldnet.att.net>
Source record: 73151

New or used? Your zip code? Price? I'm going to the Dalton Swapfest.
Thanks, Leon

2122. Re: Point Contact Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990222090940.26345.00001448@ng108.aol.com>
Source record: 73152

>Does anybody know HOW the current causes the N- type material to "go
>P"?

Dunno. Running water does it to me.

(Sorry, couldn't resist.)

2123. Re: Want to put RS CB HT on 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: k5dh@rtis.ray.com
Message-ID: <7aro95$mao@news.rsc.raytheon.com>
Source record: 73153

In article <36d03ad7.771366@news.erols.com>, wmeara@erols.com says...
>
>I picked up an old RADIO SHACK TRC-201 Hand held CB 2 watt
>3 channel radio. It uses three crystals in the receiver and
>three in the transmitter. The crystals are very small (like
>the size of your smallest fingernail) and correspond to the
>three channels. Any ideas on how to convert this thing to
>ten meter AM? What kinds of crystals were they using in these
>rigs? Third Overtone?

10m conversion on your handheld CB would be simple:
- Order crystals for the desired operating frequencies from JAN or International (just tell them what kind of CB it is; they should have the tech info on it in their files);
- plug the crystals in;
- tweak up the transmitter coils for maximum output, starting with the oscillator and working toward the PA;
- tweak up the receiver front end coils for maximum received signal strength (the i-f coils shouldn't need much tweaking).
That's it.

73,
Dean / K5DH

2124. Re: Tower Electrical Length or Dipping a Tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: Phil Clements <philk5pc@tyler.net>
Message-ID: <36D1A324.77E91D44@tyler.net>
Source record: 73154

More than likely, if your tower is 60 feet or higher, with a yagi on top,
your resonant frequency will be somewhere in the broadcast band.
You will need a Millen GDO with the low freq. coil to dip it with.

GL!
Phil, K5PC

Joe Shuey NE3H wrote:

> I've tried the determining the resonant height of my tower. I've climed
> it, attaching a wire at the top, and puttting a couple loops at the
> bottom. Then using a grid dip meter. But the was no distinct dip
> anywhere in the expected frequency range. I've talked to a couple others
> who have also tried (and failed) to get a reading by this method.
>
> Anyone out there that has had success with this method?
>
> Thanks

2125. How to test an RF choke? (RF amp, plate-supply)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: Joel Govostes <jgovost1@twcny.rr.com>
Message-ID: <36D180AA.1DC40C8A@twcny.rr.com>
Source record: 73155
Cross-posted to: sci.electronics.basics,rec.radio.amateur.homebrew

The RF choke in an RF-amp's plate supply acts to prevent
short-circuiting the pwr supply with RF --
(according to texts).

But -- if such a choke were to overheat, short in the windings, or
otherwise go bad, what symptoms would arise? How might it affect
tuning-up of the amp, and is there a good simple way to check for
quality, & to make sure a choke (from an older piece of gear) is
useable / has not been damaged?

The choke in question is 500uh, in the 300v plate supply of a small VHF
(rf) tube amplifier.

Any info would be greatly appreciated...

thanks,
JWG

2126. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: chris@pooh.cc.ucf.edu
Message-ID: <7as4vb$qu0$1@news.cc.ucf.edu>
Source record: 73156

In article <01be5df0$ac49bb40$LocalHost@default>,
"Reg Edwards" <G4fgq.Regp@btinternet.com> writes:
> No kidding.
>
> Silver is good. It looks nice especially when laid out on
> the rich man's table, but takes a lot of elbow grease to
> keep it that way. Ask the housemaid. It has some desirable
> mechanical properties. Its softness assists with making
> good electrical contacts so fine for plating roller
> inductors. It easily electroplates. It is expensive. Men
> have killed for it !
>
>
Really ? I got some silver plated B&W Aridux coils, small ones
I think 3/4 to 1 inch in diameter. I cannnot remember where I got
them from. I would guess whover originally had them plated them
himself as I do no remember B&W selling silver plated Airdux coil
stock.

Chris

--
==
Chris Maukonen "Change is not merely necessary
Sr. Systems Programmer to life - IT IS LIFE"
Univeristy of Central Florida Alvin Toffler
chris@.ucf.edu (407) 823 5460

2127. FS: Hogh Voltage Disc Ceramic Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: chris@pooh.cc.ucf.edu
Message-ID: <7as5m6$r0n$1@news.cc.ucf.edu>
Source record: 73157

Hi,

I have the following high voltage disc ceramic caps.
for sale.

6 of 180pf at 6kv
16 of 470pf at 3kv
24 of 180pf at 3kv
16 1000pf at 2kv

Make offer. These are pcb mount compoments with 3/4 to 1 inch
leads.

Chris w4oab

--
==========
Chris Maukonen "Change is not merely necessary
Sr. Systems Programmer to life - IT IS LIFE"
Univeristy of Central Florida Alvin Toffler
chris@.ucf.edu (407) 823 5460

2128. Re: Point Contact Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36d1a087.0@news.netwalk.com>
Source record: 73158

Bill Meara wrote in message <36d1878e.7416303@news.erols.com>...
>Does anybody know HOW the current causes the N- type material to "go
>P"?

Don't know about this, but....

>Also, how is the junction formed in ordinary galena, catwhisker
>detectors (where no large current was employed)?

This is because in natural semiconductors there are natural impurities.
These impurities are similar to the doping in manufactured semiconductors,
and cause regions of N and P, as well as 'intrinsic' (pure material).

When you move around the catwhisker your are looking for one of these N or P
areas on the surface. As posted previously (a week or 2 ago) it is
theoretically possible to form a transistor in this manner using 2
catwhiskers (besides the normal mounting).

Has anyone out there actually tried this? I would like to hear how it
worked.

Jim
N8EE

2129. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: KD5GEH <kd5geh@arrl.net>
Message-ID: <7as9i1$j4i$1@newnews.startext.net>
Source record: 73159
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ya, when there are SEVERAL progs to do exactly that in Windows...?
There's even one (atleast) like you mentioned (what genius.....) that only
records the images when something changes.. It can even tell the difference
between an object moving and the sun changing positions (to alter shadows).
You can find the progs at www.windows95.com (it'll redirect you to the
proper address, since they stopped using that one for obvious reasons)...

Silvio Romagnoli <null.rNOS@PAM.flashnet.it> wrote in message
news:36d02d39.17201408@news.flashnet.it...
>On Fri, 19 Feb 1999 10:55:49 -0800, bogus@supernews.com (DaveC) wrote:
>
>>As I said in the original post, I don't want to go the alarm route. We can
>>scare off the individual, but, as I said, we want to catch him/her on
>>video.
>>[...]
>
>My .002 Euro here :*)
>
>Use an old pc (486 or so) to grab images with a
>b/w Quickcam that connects to the parallel port;
>IIRC, on the net there are free programs/sources/drivers
>to do that job under Linux (free itself too).
>Then there are two solutions:
>
>1- Write a dumb program that grabs images at a reasonable
>rate (eg: one each 5 seconds), saves them on the hard
>disk, keeping the last 24 hour ones.
>Simple, but you'll need a big hard disk.
>
>2- Write a smart program that grabs images faster, compares
>them (eg: if image221.xyz != image220.xyz, then the camera
>is seeing something) then saves only the ones that
>differ, and delete the others.
>By image "different" from another I mean dark/light
>differences, you won't need image recognition for
>that purpose.
>Just make sure there are no cats/dogs in the room!:)
>
>In that way you could also make the computer dial at
>your (or police's) phone number with a prerecorded
>voice that warns about the theft in act.
>No alarm would scream, so the thief could be catched.
>

>PS. By removing the IR filter, those cameras become
>sensitive to the infrared too. Some IR "lamps" could
>make the whole thing work also in a dark environment.

2130. Bird 43 Thruline DC matching.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: "g0mjw.freeserve.co.uk" <Mike@g0mjw.freeserve.co.uk>
Message-ID: <7ase9g$2e1$1@news7.svr.pol.co.uk>
Source record: 73160

I am hoping to use a spare thruline (no meter) as a PEP type instrument.
Has anyone measured the scale law for the 30uA meter (even better - produced
a
scale for a standard meter so I don't need to bother with making a new
design).

The analogue meter scale is rather compact at one end and it might not be a
bad idea to try and erctify this while I am at it. I am thinking of
something along
the lines of a 16C71 driving the meter via a lookup table.

Mike

2131. Need Panel meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: Len Schaier <lschaier@avotec.com>
Message-ID: <36D1C4E6.6020@avotec.com>
Source record: 73161

I'm looking for two meters that can be used on old Heathkit SB220
amplifiers. Meters with the follows characteristics are suitable:

Meter no. 1
sensitivity of 200 uamp or better ie 50 uamp
panel hole 2 3/16 max
dial markings of 0 to 1; or 0-10, or 0-100

Meter no. 2 same as number 1 except that the markings are either:
0-3.5; or 0-35; or 0- 350
or 0-5 ;or 0-50; or 0- 500

Thanks in advance,

Len

2132. Parts needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990222165318.13119.00001766@ng33.aol.com>
Source record: 73162

JW Miller 2102 or 1461-BS 3 gang capacitor
Stancor A-31X 3:1 interstage transformer
4 hy 100-110 filter chokes (2 needed)
5x7x2 steel chassis
10x14x3 aluminum chassis
1 1/4 5 pin plug in coil forms (need 25 of them)
5 pin ceramic socket

Will trade or purchase.

73's
Bob, W4RLC

2133. Re: Datasheet for BF255

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36d1cd83.2688788299@news.online.no>
Source record: 73163

On 22 Feb 1999 07:56:29 GMT, hkelle@rhi.hi.is (Hrafnkell Eiriksson)
wrote:

>On Sun, 21 Feb 1999 13:11:18 GMT, J M Noeding <la8ak@online.no> wrote:
>>On 20 Feb 1999 13:41:26 GMT, hkelle@rhi.hi.is (Hrafnkell Eiriksson)
>>wrote:
>>>I have a few BF255 transistors but I need the datasheet for them.
>>>Anyone know where to find it (on the Net ofcourse :)
>>>
>>I don't have it, but this is a 30 year old type, not particular
>>interesting for any design, you may compare it to MPF102 or MPF106. If
>>you need it for a specific application you may need pinch off voltage,
>>but normally one don't
>
>Unless I am very wrong: the BF255 is an NPN BJT transistor with f_T=200MHz.
>Pinchoff voltage is only defined for FETs.

I am not familiar with BJT, what does it mean, only know UJT.....
my transistor-vergleich-handbuch says JFET, and I believe the series
were used in 2nd version of PYE westminster VHF transceiver and R17FM
RF converter boards used with models dated late 67 or early 68

LA8AK@ONLINE.no

2134. Wanted: Home Brew DCI Filter (how-to)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: jpoulin@honk.org
Message-ID: <7aslujtga1@nnrp1.dejanews.com>
Source record: 73164

Hello,

I have an abnormaly high amount of Intermod from a local
Police Transmitter. It is bad.

I am looking at a 2m DCI filter to clean this up, and was
wondering if anyone here has any homebrew ideas to build
such a device.

If you have any ideas, please pass them along. Any info is
greatly appreciated.

73'

James Poulin
VA3JPX

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2135. Double balanced mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: ik@mclink.it
Message-ID: <36cf4611.11400956@news.mclink.it>
Source record: 73165

How to compute the input and output toroidal windings
of a diode-ring double balanced mixer?
Thanks.

I built one, but it loose too much at the operating
frequency. My purpose is to obtain the difference
from two oscillators.

Another question: what kind of transistor would you suggest
to get a lot of power at LF frequencies, at 12.5 Volt?

2136. HELP: IC-706<->PK-232MBX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: "Christopher Zeman, KB9RHA" <zman.SCREW.YOU.SPAMMERS@iwc.net>
Message-ID: <g4oA2.946$LO6.2190@news7.ispnews.com>
Source record: 73166
Cross-posted to: alt.ham-radio,alt.ham-radio.hf,alt.ham-radio.mods,alt.ham-radio.morse,alt.ham-radio.nocode,alt.ham-radio.packet,alt.ham-radio.rtty,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

I just purchased a PK-232MBX and would like to connect it to my Icom IC-706.
I am new to this multimode TNC and it appears there are a few different ways
to setup the digital portion of my station. If there is anyone who would be
able to offer thier assistance, please send e-mail to: zman@iwc.net

Thank you,
Christopher Zeman, KB9RHA
zman@iwc.net

2137. Re: Point Contact Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: NOSPAMpfriedr@azstarnet.com
Message-ID: <NOSPAMpfriedr.105.0033E4C8@azstarnet.com>
Source record: 73167

This is an idea that has intrigued me for some time. I, too, would be interested in any further information on this type of experimentation. Web searches haven't yielded much.

Pete
pfriedr@azstarnet.com

In article <36d1a087.0@news.netwalk.com> "Jim" <jbolinger@lintek.com> writes:
>From: "Jim" <jbolinger@lintek.com>
>Subject: Re: Point Contact Transistors
>Date: Mon, 22 Feb 1999 13:23:04 -0500

>Bill Meara wrote in message <36d1878e.7416303@news.erols.com>...
>>Does anybody know HOW the current causes the N- type material to "go
>>P"?

>Don't know about this, but....

>>Also, how is the junction formed in ordinary galena, catwhisker
>>detectors (where no large current was employed)?

>This is because in natural semiconductors there are natural impurities.
>These impurities are similar to the doping in manufactured semiconductors,
>and cause regions of N and P, as well as 'intrinsic' (pure material).

>When you move around the catwhisker your are looking for one of these N or P
>areas on the surface. As posted previously (a week or 2 ago) it is
>theoretically possible to form a transistor in this manner using 2
>catwhiskers (besides the normal mounting).

>Has anyone out there actually tried this? I would like to hear how it
>worked.

>Jim
>N8EE

****
To email me, remove NOSPAM from my return address.
Anyone sending unwanted advertising e-mail to this address will be charged $25 for network traffic and computing time. By extracting my address from this message or its header, you agree to these terms.

2138. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: davem@idle.cs.ubc.ca
Message-ID: <7at69g$9ss@idle.cs.ubc.ca>
Source record: 73168

wdmilner.ns@auracom.com writes:
>Another option is a motion detector wired to autostart the camcorder
>or vcr. If they are left in "pause" so the trip takes them off pause
>the startup time is fairly fast, and in the case of a vcr, much
>quieter.

A VCR left in "pause" generally has the tape threaded, the video head spinning, and is all ready to start recording when the capstan starts rotating. Going from pause to record takes a fraction of a second.

Unfortunately, if you leave a VCR like this for more than a few minutes, the head will wear the oxide right off the tape. It's spinning at 1800 RPM, and rubbing the same narrow track on the tape twice per revolution, so the tape gets 3600 "passes" of wear per minute of waiting time.

To protect the tape, most VCRs will not remain in pause for very long. Maybe they'll spin down the head, or unload the tape - but whatever they do it will drastically increase the amount of time required to get into "record" once the signal is given.

Dave

2139. FS: 803 pentodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: Ross Lipman <rl1856@ix.netcom.com>
Message-ID: <36D2235F.6155@ix.netcom.com>
Source record: 73169

2/22

Hello,

I have a pair of 803 Pentodes that I would like to sell.

$40.00 + shipping.

Please reply to: rl1856@ix.netcom.com

Thank you,

Ross Lipman

rl1856@ix.netcom.com

2140. Re: WTB: Plate Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36D16959.B8@pop.valley.net>
Source record: 73170

Glenn wrote:
>
> Wanted;
> 2) 3 ea., turns counters for vacuum variables, etc.
>

Hello, Glenn--

I found three odometer-style mechanical "counters" in my collection. These are unused, NOS but not in original wrappings. All read 000-999, with no decimal points.

All are manufactured by Durant (Watertown, WI).

All measure 1.4 inches long by 1.1 inches deep by 0.8 inches wide (across viewing face). All mount via the rear surface via two 4-40 tapped holes on 0.625-inch centers. Each has a 0.156-inch dia. shaft that's 0.5 inches long. All have 0.2-inch high digits.

One carries p/n 3-Y-41181-406-R-CL; this one has an aluminum frame, and when you're looking at the digits its shaft exits to the right.

Two carry p/n 3-Y-41700-421-L-CL; these have a black plastic frame, and when you're looking at their digits their shafts exit to the left.

I can e-mail you a bitmapped image (from an HP scanner) showing you all three; there are a few scan artifacts in the image, but it'll give you a general idea of their shape.

If you're interested, you can purchase all three for $9.00 plus $4.00 priority-mail postage. You can, of course return these for a refund if they're not satisfactory.

73,
Brad AA1IP

>Brad Thompson
>P.O. Box 307
>202 Whitaker Rd.
>Meriden, NH 03770-0307
>voice: (603) 469-3351
>fax: (603) 469-3917
>e-mail: brad.thompson@valley.net

2141. Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <#tRgzhuX#GA.312@upnetnews05>
Source record: 73171

Dear Newsgroup,

I am designing a HF Transceiver. It possibly will use a
Motorola 68000 or a Intel 80x86 processor (have not decided which one), and
possiblty the Texas instruments DSP Processor. It will have most of the HF
bands; i.e. 20m, 40m, 80m,etc. It will have an LCD Display and a beautiful
custom chassis by:

Spire Audio Http://www.spireaudio.com
Http://www.spireaudio.com/products.html

Chassis will be 6" high x 17" (from left side to right side) x 10" (from
front panel to rear panel)

* will have 4 pin mic connector and 8 pin mic connector

Please make suggestions to gbowne@email.msn.com

Gregory Bowne
Seattle,WA

P.S. Soon after I finish the transceiver I will get my liscence! I am
still studying for it... Been on 2m with a friend using a Kenwood TR-7400A.

2142. Re: How to digitize microfiche?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-22 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <36D23426.8BD03217@mail.rsccd.org>
Source record: 73172
Cross-posted to: sci.electronics.repair,sci.electronics.equipment,sci.electronics.misc,rec.radio.amateur.homebrew

DaveC wrote:

> How can one get microfiche images (each 6mm x 9mm, 180 per film) into
> digital form? Printing the pages (via microfiche printer) and then
> scanning the printouts was suggested. Any possibility of direct scanning?

> May be interested in equipment to do this, if you have a solution.

> Suggestions are welcome.

The scanner that I used for my doigital photo class was made by Kodak, but there are similar ones made by Nikon and others. This is a scanner that has a plastic holder for either slides or negatives, and each slide or negative has to be positioned by hand in the holder. If you are serious about doing this, I would think that this type of machine would be too slow and labor intensive. The machine itself costs maybe 10 thousand dollars. And that was the low priced model; there are drum scanners that are up to 25 thousand.

You can use some other method, but I don't think that the resolution would be adequate. The Kodak can scan at 2000 PPI (pixels per inch). Since the slide is about an inch, blowing it up to 11 inches would bring the resolution down to about 200 to 300 PPI, which is about what you need for decent resolution.

The reason I mention this is because the stuff you're doing will need to be at least this good. With a flat bed scanner and transparency adapter, I don't think you're going to get good enough resolution to get a decent image. But you could try it. Go to a photo service bureau and pay them to scan your microfiche in with a flat bed, and see if it's good enough for your purposes. That way, if you're going to try it, you don't have to shell out for the whole scanner. You may also be able to get them to scan the microfiche in with the Kodak or other machines, too.

You might be able to get them to put the fiches on CD-ROM for you, too. Good luck.

> Sorry about the modified return address, but I hate getting spammed.
> The correct address is listed below, if you chose to e-mail me.

> Thanks.
> Enjoy,
> Dave

> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2143. Re: Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be5f07$29011860$563cac3e@default>
Source record: 73173

Download free software on analysis of performance of simple
antennas, from :-
http://www.btinternet.com/~g4fgq.regp

2144. Re: How to wind a coil?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be5f0a$4d93dc00$563cac3e@default>
Source record: 73174

Proof of the pudding is in the eating.

Why not ask B&W how much higher Q are bare copper tuning
coils after being silver plated or dipped ? Does B&W give
any data in the sales literature ?

Or measure the Q of your own inductors before and after
etching off the silver.
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

2145. Midland cb to 10 or 6 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: milo17@aol.com
Message-ID: <19990222212518.07265.00001846@ng21.aol.com>
Source record: 73175

I would like to convert a Midland 13-892 ssb radio to 50 mhz (I will settle for 28 mhz if I have to). I have seen the cb to six anrticle by ZR1EV, But this radio is somewhat different. The mixing is done by 2 banks of crystals. Does anyone have any experience/ideas on converting this radio to 6 or 10 meters ? Any source for schematic ? Thanks to the group in advance.
73,
Mike

2146. 2 Mtr VFO or Even Fixed Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: arcadio@island.net
Message-ID: <7at6vfndv1@frasier.island.net>
Source record: 73176

I'm looking for schematics of a VFO for 2m. I've got some 2m crystal rigs I want to see if I can add a board or module that could replace one of the crystal pairs. I'm contemplating Motorola 145156 or 145152 - any recommendations? I expect that drift could end up being a major problem, but I think this could be a workable project. The oscillator wouldn't even need to be variable.

2147. Re: Wanted: Home Brew DCI Filter (how-to)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7atsck$8u4@groucho.cs.ubc.ca>
Source record: 73177

jpoulin@honk.org writes:
>I am looking at a 2m DCI filter to clean this up, and was
>wondering if anyone here has any homebrew ideas to build
>such a device.

The DCI filter is made up of 4 helical resonators. They are large
in order to get low loss and low SWR so you can transmit through it
(I think it's rated at 200 W). If you only want filtration on receive,
you could use something much smaller - but then you'd have to figure
out how to bypass it on transmit. There are commercial filters
that do exactly this.

I haven't seen anything in ARRL publications about building helical
filters, but the RSGB publications are somewhat better. The RSGB
"Radio Communication Handbook" talks about helical filters in general
terms in section 8.6. The "VHF/UHF Manual" has a short section on
designing and building a helical filter starting on page 3.7.

These references might be a good place to start if you want the
experience of building and aligning a filter yourself. On the other
hand, if you just want to get rid of the interference, the DCI filter
is not that expensive, it's well built, and it's already tuned - buying
it will save you a lot of time.

Dave

2148. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01be5f2c$391304a0$8c60b6cd@cbx-nt>
Source record: 73178

Not a flame, but these are fairly poor choices for CPU's if you want to keep your part count down. There are some 80486 style of computers on a single chip which would probably be better suited.

Personally, I would use PIC's for control purposes.

Regards

Christopher Cox

2149. Re: Where's the email gone

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36D2AD98.AC47FCD8@citrus.infi.net>
Source record: 73179
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

No problem here in Florida with EMail.
73 de Jim W4ONO .-.-.
= = = = = = = = = = = = = = = = = = =

Simon Cox wrote:
>
> Am I the only one who's not getting mail
> or is there a major problem somewhere.
> --
>
> Peolpe worry about me, I ride a
> Kawasaki Z1000 LTD and listen
> to RA 17 valve radios.
> simon.cox@breathe.co.uk

2150. Re: Double balanced mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7aubah$26d$1@news1.exit109.com>
Source record: 73180

10 turns no 32 on ft37 wound trifiliar should be fine

K7HFD low noise high output(+17dbm) 2- 2n3904 long tailed pair transistor
oscilator should work fine, It worked fine for me.
Design and shield that LC tuned circuit properly.
Drawback : needs mechanical tuning cap due to high power levels

Otherwise, if U need VCO, the most commonly used circuit is the
FET dueal Varactor colpitts VCO, followed by a 2 transistor buffer
to raise the power level.

Look at the ARRL HB for 1995 page 14.18 and 14.36 for further info.

73

ik wrote in message <36cf4611.11400956@news.mclink.it>...
>How to compute the input and output toroidal windings
>of a diode-ring double balanced mixer?
>Thanks.
>
>I built one, but it loose too much at the operating
>frequency. My purpose is to obtain the difference
>from two oscillators.
>
>Another question: what kind of transistor would you suggest
>to get a lot of power at LF frequencies, at 12.5 Volt?
>
>

2151. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: BV <bv@mail.com_RemoveThis>
Message-ID: <3ByA2.104$iu1.529@news.get2net.dk>
Source record: 73181

I would not use such a microprocessor in this case.

Right now I am homebrewing a 80 meter transciever, and planning to use a
16F84 PIC controller for display readout.

Other good rasons to use a PIC controller is that a "burner" is very easy to
make, and that the design by using a PCI controller is very simple.
If you want to use a 80x86 CPU you will need a lot of extra components, such
as external RAM & ROM, chip select, wait state generator ect.

Vy 73 de OX3IO, Brian

gbowne wrote in message <#tRgzhuX#GA.312@upnetnews05>...
>Dear Newsgroup,
>
> I am designing a HF Transceiver. It possibly will use a
>Motorola 68000 or a Intel 80x86 processor (have not decided which one), and
>possiblty the Texas instruments DSP Processor. It will have most of the HF
>bands; i.e. 20m, 40m, 80m,etc. It will have an LCD Display and a
beautiful
>custom chassis by:
>
>Spire Audio Http://www.spireaudio.com
> Http://www.spireaudio.com/products.html
>
>Chassis will be 6" high x 17" (from left side to right side) x 10" (from
>front panel to rear panel)
>
> * will have 4 pin mic connector and 8 pin mic connector
>
>Please make suggestions to gbowne@email.msn.com
>
>Gregory Bowne
>Seattle,WA
>
>P.S. Soon after I finish the transceiver I will get my liscence! I am
>still studying for it... Been on 2m with a friend using a Kenwood
TR-7400A.
>
>
>

2152. Re: homebrew electronic keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: ypwhich@hotmail.com
Message-ID: <7auktv$ic2$1@nnrp1.dejanews.com>
Source record: 73182

Thanks, that is exactly what i've been looking for!

> Try the following site, K1EL has designed a PIC chip that is great and
> inexpensive!
>
> http://members.aol.com/k1el/k8info.html
>
> DJ, KE3ZB
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2153. WTB: Neophyte 40m Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Jack Hardin <jhardin@hal-pc.org>
Message-ID: <01be5f47$b00fe120$4481b4ce@jhardin>
Source record: 73183

Looking for a Neophyte 40m receiver that you've built and no longer want, or a kit for one you haven't built. I know that Dan's small parts has a kit for a little over $18, but it occurs to me that there are some used ones out there that no one is using. Want one to mess with and modify...cheap. Let me know whether yours works, and how much shipped to me in Texas...
Jack
jhardin@hal-pc.org

2154. Want Micronta meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Len Schaier <lschaier@avotec.com>
Message-ID: <36D2F6B5.6052@avotec.com>
Source record: 73184

I need a few 50 ua panel meters for panel openings of 2.2 inches or greater. Micronta 50 ua meters would be great.

Len

2155. Hamfest near Buffalo,Ny

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Bill Gittere <wgittere@buffnet.net>
Message-ID: <36d2fac7.0@news3.buffnet.net>
Source record: 73185

The Greater Buffalo Hamfest and Computer Show will be held next Sunday,
February 28. Click on
http://hamgate1.sunyerie.edu/~larc/greaterbuffalowinterhamfest.htm

Location: Leonare VFW Post
2450 Walden Ave. Near exit 52 of interstate 90 (NYS Thruway)

Time:
6:00AM for Vendors
8:00AM for General admission

Talk In - 147.255 +600

2156. FS - Socket for 4-1000/3-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990223135808.00787.00001276@ng-fu1.aol.com>
Source record: 73186

```
FS -SK 510 socket $25.00
```

2157. Re: 2 Mtr VFO or Even Fixed Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7autsn$g3j$1@news1.exit109.com>
Source record: 73187

DC Electronics has a kit using MC145170 and MC1648 and PIC16c54 for a
PLL/VCO . This can be programmed/tuned using a keypad.
http://www.dckits.com/kits.htm

good luck

********** cut from their page**********

ALL NEW PLL EXPERIMENTER PACKAGE $34.95
Includes experimenter board with keypad and prototyping areas, MC145170 PLL
chip,
programmed PIC and support components - just add oscillator, audio & rf amp
to
build an FM transmitter at your choice of frequency band. Can also be used
to build
RF signal generators, recievers or AM transmitter/receiver. go to PLL APP
Note
****
*****

arcadio wrote in message <7at6vfndv1@frasier.island.net>...
>I'm looking for schematics of a VFO for 2m. I've got some 2m crystal
>rigs I want to see if I can add a board or module that could replace one
>of the crystal pairs. I'm contemplating Motorola 145156 or 145152 - any
>recommendations? I expect that drift could end up being a major
>problem, but I think this could be a workable project. The oscillator
>wouldn't even need to be variable.
>

2158. Re: Source for high-Q homebrew IF filter crystals.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: henryp@cartier.raleigh.ibm.com
Message-ID: <7av02l$6dq$1@rtpnews.raleigh.ibm.com>
Source record: 73188

Sorry it took so long to respond.

xxx@yyy.com wrote:
: Why 5.2075 IF ?

Actually, it's 5.20175 -- sorry for the typo. The reason is that I received some boss-keen 10-pole monolithic filters at this frequency from a wealthy benefactor. These have been tested to have extremely high 3OIP and low IL. The plan under development, which I am greedily copying, is to use them as hybrid roofing filters.

: What are the design specs of the filter (extraordinary CW filter) ???

At the time I posted my original note, I was thinking of building an extraordinary CW filter. Subsequently I have quit dreaming and have decided on an SSB filter which won't, of course, require such high-Q crystals to realize decent insertion loss.

: What design are u using for the filter ??

I'm using W7ZOI's 'X' software to compute coupling cap values for Chebychev ladder filters. This is my first whack at this sort of thing; I'm getting a lot of guidance from my benefactors.

: What about the assymmetrical bandpass characteristics of a cascaded
: ladder filter with so many poles.

It's a nuisance, isn't it?

: QQQ : Why shouldnt we just convert to a IF of 15 KHZ from 455Khz ,
: and just use one of the powerful DSP processors EVM to implement
: whatever filter you desire. DSP filters have better passband/stopband
: characteristics, and ring much less. Plus, they can are very flexible .

There are many viable approaches to radio design. I'm just keen on the traditional method for the moment.

Anyway, the nice folks at International Crystal are helping me out and I'm just going to buy a set of rocks from them.

Thanks for the comments.

-Henry

2159. Re: Antenna Deisgn

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <919798763.566835@cs1.sdd.hp.com>
Source record: 73189

Hello (OM?),

Your questions are best answered by your own study of literature, of which there
is a large amount available. Try any of the ARRL antenna books. I agree with
you that building an antenna is by far the most cost-effective, not to mention
educational, way to obtain an antenna.

73,
Don, W6JL

> I was wondering if anybody could refer me to a good web source on the
>design of antennas? I don't want to buy one because, well, I don't want to
>spend that much and I feel I could learn more by doing. What is a yagi, a
>dipole? that kind of stuff. How do you design the length, what is a
>groundplane good for. Most of the antennas I want to build will be receive
>only, in the 27MHZ, 49MHZ, 160MHZ and 412MHZ areas, all seperate. Any
>pointers? Thanks in advance for any info, including any info given here.
TTYL
>
>------------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2160. Re: Source for high-Q homebrew IF filter crystals.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: henryp@cartier.raleigh.ibm.com
Message-ID: <7av0ej$6dq$2@rtpnews.raleigh.ibm.com>
Source record: 73190

Richard Karlquist (rick@area.com) wrote:
: I would shop around and see what you can get from other vendors
: at 10 MHz. You might get higher Q for less $$$.

You'd be surprised. CCC is the only vendor I've been able to dig up that can do better than about Q=150,000. I get the feeling that applications for super-duper crystal filters, and hence the supply of raw parts, are drying up. DSP is cheaper.

I have a DSP56002EVM. One of these days I might play with it, but for the moment I'm interested in getting more experience with old-fashioned RF circuits.

I don't have a radio at the moment. In fact, I just got my license. I figured if I was going to build a rig, I ought to take my time and build a really good one...

-Henry, KU4XC

2161. F.S. HP 428A Clamp-On Milliammeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: n6ax@pacbell.net
Message-ID: <usDA2.775$Ff.128901@WReNphoon4>
Source record: 73191

For Sale: HP model 428A clamp on ammeter...unit in exc condx, includes probe and is in perfect working
order, measures from 3 mA full-scale up to 1000mA full-scale in a 3, 10 sequence.
Best offer over $100.00 plus shipping.

Thanks

**** Posted from RemarQ - http://www.remarq.com - Discussions Start Here (tm) ****

2162. SMT resistor assortments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: baggybob@execpc.com
Message-ID: <7av1mh$otu@newsops.execpc.com>
Source record: 73192

For sale :
Surface mount 1/8 watt resistor assortments 1206 size. Tape strips of 20 each of 50 different values = 1000 resistors. All parts marked $10.00 each assortment +$1 shipping/ea

Stealth chip resistor assortment. Mil spec JAN-M55342 resistors surplus to Northrup packaged in anti-static trays and bags. Over 230 different values all 1% tolerance. About 22,000 pieces total with no single value more than 300 pcs. Only one lot available. $25 plus $8 shipping (big box).

.24 ohm 1/2 watt resistor size 2010 30/$1

Payment
Personal or bank check, money order payable to Baggybob. I am not set up for credit cards.
International orders require international money order or funds drawn upon a US bank.
If you have tech questions please e-mail. My wife, Kim, has no electronics background and will not understand what you are talking about on the phone.
If you need to know the status of your order or it is not what you expected please let me know.

Address:
Baggybob
Box 331
Lake Geneva, WI 53147

2163. I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Adam Huber <ahuber@csulb.edu>
Message-ID: <36D30E13.5A34E26E@csulb.edu>
Source record: 73193
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I need ADMS-1D or ADMS-1E to program my VX-1R. I have an older version of the software that I purchased a while ago. It was the first version and will not work with the VX-1R. I spoke with the company who makes it (not Yaesu) and they are willing to sell the upgrade to me.....for the same price I can purchase it new. That sucks. I already have the cable, I just need the version ADMS-1D or ADMS-1E.

Thanks,
Adam

2164. Re: Wanted: Home Brew DCI Filter (how-to)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <F7MJHF.vK@world.std.com>
Source record: 73194

> The DCI filter is made up of 4 helical resonators. They are large
> in order to get low loss and low SWR so you can transmit through it
> (I think it's rated at 200 W). If you only want filtration on receive,
> you could use something much smaller - but then you'd have to figure
> out how to bypass it on transmit. There are commercial filters
> that do exactly this.

There is a line of helical filter modules, I think it was from Toko, in
the big catalogs, Mouser or Digikey, that could be inserted into your
receive-side or TR-switched to suit. But it's not a bad idea to get
one big enough to transmit through, as it provides an extra guarantee
on the purity of YOUR emmissions. I so very much like the helicals
built into my 1970s 2m mobile that I'll probably go this route
myself eventually.

> I haven't seen anything in ARRL publications about building helical
> filters,

I forget which book, but it's in one of the ARRL books too.

> but the RSGB publications are somewhat better.

So I've heard, have to get some ... not having any yet is how I can
be reasonably certain the one I'm remembering was in ARRL.
Probably one of the two ARRL UHF/microwave books.

73,
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

2165. Needed: High Current Power Supply Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Bradley Risk <Brad_R@ofm.com>
Message-ID: <36D32795.E4C8C0A2@ofm.com>
Source record: 73195

I'm trying to build a 20+Amp 13.8V power supply, but am having a hard time finding a good schematic for one. Anyone have any good plans, or URLs?

TNX

Brad

2166. digital QSYer (was re ICOM did it)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <F7Mr81.n0F@world.std.com>
Source record: 73196
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7afimi$4o7$1@paxfeed.eni.net>,
Bill Clarke <W2BLC599@bigfoot.com> wrote:
(regarding the late lamented outboard QSYer product and the new YIQ
digitally controlled HF rigs)

> Yes, that's one way - but the preferred method is a small stand-alone box
> that goes where the rig goes. Car, boat, airplane, etc.

So a PIC-chip and a calculator case and you've got a remote control.
The PIC's probably even prefer to operate at TTL on their supposed
serial lines same as the radios. Someone should do a PIC-QSYer as a
project article. (See Hagman's articles in Feb and March 99 QST
for use of PICs in radio projects if this is gibberish.)

Oh wait, this is the .equipment group, I should be saying this in
homebrew ... well, consider it a product idea :-)

73 de Bill N1VUX
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

2167. FS Alnico Earphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <36D34808.5F0B@sympatico.ca>
Source record: 73197
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.shortwave,

I have a number of Alnico earphones - suitable for use with a crystal set etc. These come as a single earphone, with a metal headband. Checked and working. (tried each on a crystal set myself). Decal on the eaphone says "Alnico Magnetic" . Made by C.F. Cannon. $10.00US each, shipping included.

2168. WTB: Homebrew receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: bill <wfh@fidnet.com>
Message-ID: <01be5f8d$8ff3ce60$4ac9d8cd@whudson.nextel.com>
Source record: 73198

-- Looking for any homebrew receivers, general coverage 3~30 mhz
ham band only, single band. What ever.
Lets talk.

William F. Hudson, IV, WA0KBZ
Cuba, Mo. 65454

2169. Thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: gfbike <gfbike@iaxs.net>
Message-ID: <36D35F6E.9242AD00@iaxs.net>
Source record: 73199

I wanted to get the word out to all the sites about a thief by the name of Glen Verasso of
Newark, Ohio. He entered into a trade agreement with me when he saw my listing of
my Henry 2KD5 in one of the various ham sites, amngh whch this was one. He offered
to trade me an FT1000 (presumably an early one) for my Henry. This seemed like an
odd, but certaily reasonable trade so I went for it. I carefully packed up the Henry in 3
boxes ans sent it to him UPS, the same time he sent a package to me, again UPS. What I received today was a nicely wrapped box with three concrete blocks inside, total value
about $1.50.

2170. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: kilroy <kilroy@fuse.net>
Message-ID: <7avmlnjtp1@remarQ.com>
Source record: 73200

Since you asked, you might also want to consider using a BASIC stamp rather
than the more extensive microprocessors. Easier to program...

gbowne wrote in message <#tRgzhuX#GA.312@upnetnews05>...
>Dear Newsgroup,
>
> I am designing a HF Transceiver. It possibly will use a
>Motorola 68000 or a Intel 80x86 processor (have not decided which one), and
>possiblty the Texas instruments DSP Processor. It will have most of the HF
>bands; i.e. 20m, 40m, 80m,etc. It will have an LCD Display and a
beautiful
>custom chassis by:
>
>Spire Audio Http://www.spireaudio.com
> Http://www.spireaudio.com/products.html
>
>Chassis will be 6" high x 17" (from left side to right side) x 10" (from
>front panel to rear panel)
>
> * will have 4 pin mic connector and 8 pin mic connector
>
>Please make suggestions to gbowne@email.msn.com
>
>Gregory Bowne
>Seattle,WA
>
>P.S. Soon after I finish the transceiver I will get my liscence! I am
>still studying for it... Been on 2m with a friend using a Kenwood
TR-7400A.
>
>
>

2171. Thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: gfbike <gfbike@iaxs.net>
Message-ID: <36D388DB.147E39AE@iaxs.net>
Source record: 73201

I have been informed (in a less than polite way) that I was too broad in my statement that I had listed my Henry 2KD5 in this or any other newsgroup and that I had been defrauded by somenon who was using the newsgroups. That was not my intention. My only intention was to warn all of you about this individual in case you might have the occasion to have dealings with him. I never expect to see a dime of my loss again so I had not hoped to gain in any way by my posting to the newsgroups.

So let me be perfectly clear -I DID NOT POST MY HENRY 2KD5 IN THIS OR ANY OTHER NEWSGROUP. I WAS NOT DEFRAUDED BY ANYONE THROUGH THESE NEWSGROUPS.

My ads were all at Internet trading sites and all of them have been informed of the situation, as well as this person's ISP and all law enforcement officials in the respective jurisdictions.

I have slit my wrist and let a small sampling of blood fall on my keyboard in pennance.

Regards,

Gary

2172. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <#Y2nDY7X#GA.265@upnetnews03>
Source record: 73202

Making it Y2K compliant is one of my top items on the list.

Gregory

2173. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <udfRD07X#GA.316@upnetnews03>
Source record: 73203

Christopher Cox wrote in message <01be5f2c$391304a0$8c60b6cd@cbx-nt>...
>Not a flame, but these are fairly poor choices for CPU's if you want to
>keep your part count down. There are some 80486 style of computers on a
>single chip which would probably be better suited.
>
>Personally, I would use PIC's for control purposes.
>
>Regards
>
>Christopher Cox

I don't really need to worry about the part count. Personally I like the idea of using a full microprocessor. I have an STL from an FM radio station that uses a 486dx25 chip. I was really thinking about using what I had on hand, which was a Motorola 680000 10MHz, or a 386DX 25MHz. Dunno how much RAM I would need, but I would like about 1 to 4MB.
BASIC Stamps, Microcontrollers, Microprocessors, PIC's, etc.

2174. Re: Balun/choke help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36D3996B.80FD8856@teleport.com>
Source record: 73204

Tim wrote:
>
> I've just recently put up a 6m Jpole, I've looked in the handbook and an
> old antenna handbook for feeding options. I don't understand the
> difference between a transforming 4:1 balun and a choke balun. Are they
> the same?

They refer to different properties. There are two fundamentally different types of baluns. One, called a "choke" or "current" balun, forces the currents in the two conductors to be equal and opposite. The other, a "voltage" balun, forces equal and opposite voltages on the two conductors. Either type can be made to perform impedance transformation such as 4:1. See the _ARRL Handbook_ for a brief explanation, and "Baluns: What They Do and How They Do It" in the _ARRL Antenna Compendium_, Vol. 1, for more detail.

> Someone said you could feed the jpole by coiling up 10ft or so
> of cable at a specific diameter to create a choke balun, while I
> understand the purpose is to keep the coax from radiating how does this
> match?

The function of a balun is to keep the feedline from radiating by reducing the common-mode, or "antenna" current on it. In the case of coax, this flows on the outside of the coax. Winding the coax into a coil makes a broadly resonant circuit which performs this choking action. Dimensions which provide the greatest impedance on various bands can be found in the _ARRL Handbook_.

I was under the impression a Jpole that is shorted at the bottom
> has an impedance close to 200 ohms requiring a 4:1 transformer, others
> said connect the coax directly to the Jpole but the hot side goes to the
> shorter stub. I'm completly confused can anyone tell me the best way to
> feed this monster?
>
> Tim ka8ddz

Actually, you can feed a J-pole by just connecting the coax directly to the bottoms of the wires, then adjusting the wire lengths for the best match. Or you can short the bottom wires together and tap up with the coax. No matter how you do it, there will be considerable current on the outside of the coax due to coupling with the radiator. The amount of current depends on the orientation of the coax and its length. Modeling I've done shows that it takes a couple of baluns, one at the feedpoint and another about 1/4 wavelength down, to reduce the current to a low level if it's initially large.

Roy Lewallen, W7EL

2175. Motorola FM Modulation Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <e0Zen37X#GA.127@upnetnews03>
Source record: 73205

Dear Newsgroup,
A while back I saw somewhere a Motorola AM or FM (cant
remember which) Modulation Monitor for a radio station. It possibly was
made later than 1960. Does anyone know about this unit? It was quite a
lovely looking (asthetically) peice of ecquipment.
The one I saw was at a antique radio society flea market in
the area. If I saw a pictures of one, I could tell you if it matched what I
saw. I would like to build a replica. Motorola is still conducting a
search of its records for me.

Thanx,
Gregory Bowne

2176. WTB: 1400 volt 1 amp plate xmfr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36d3ae4e@news1.us.ibm.net>
Source record: 73206
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Must have 240 volt primary with 1400 volts at 1 amp (min) secondary. State the facts when replying including shipped price to San Diego 92139

Lane
Ku7i

2177. negative acting board??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-23 00:00:00 UTC
From: Possum <fnjlh1@aurora.alaska.edu>
Message-ID: <Pine.OSF.3.96.990223083952.13729G-100000@aurora.alaska.edu>
Source record: 73207

Anyone know of a source for small quantities of negative acting
photosensitive single sided board? Thanks...

j harris

2178. FA: 7/8" hard line connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36D4AC8D.598F3026@uswest.net>
Source record: 73077
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

7/8 hard line connectors

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69961678

2179. FA: 400pf @ 1500pf Vacuum Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36D4AD30.B657625F@uswest.net>
Source record: 73078
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69967183

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69971529

2180. FA: Roller inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36D4ADA8.53EC5C83@uswest.net>
Source record: 73079
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

roller inductor

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69976461

2181. FA: RBA, 1,2,3, & 7 manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36D4AE50.FC0DF06D@uswest.net>
Source record: 73080
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69981334
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69984109

2182. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <OcJLxMGY#GA.111@upnetnews03>
Source record: 73081

Dean Craft wrote in message <7b05qa$i30$1@samsara0.mindspring.com>...
>Have you checked to see if you might have the HAPPY virus? You are
>sending double posts with one of them the approximate size of the
>virus.
compliant is one of my top items

Yes, I am aware that I have the Happy 99.exe virus, and I think I did elliminate it per Symantec's website. not sure if its fixed yet, till I make a few posts and see if it shows up again..

-Gregory

2183. FA: Dow-Key

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36D4AEB3.B830654E@uswest.net>
Source record: 73082
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=69955220

2184. Poor man's spectrum analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Chuck k <chuckk@kerrlake.com>
Message-ID: <36D4B904.5F445450@kerrlake.com>
Source record: 73083

I have all the boards built have all tuners tracking and marker
generator also display comes with book cost $469 in kit
Will sell for $300 OBO
chuck

2185. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF7pzCA.H1z@netcom.com>
Source record: 73084

In article <36d374b3.261537051@news.sccoast.net>,
<mchenry1@sccoast.net> wrote:
>On Mon, 22 Feb 1999 20:53:36 -0800, "gbowne" <gbowne@email.msn.com>
>wrote:
>> I am designing a HF Transceiver. It possibly will use a
>>Motorola 68000 or a Intel 80x86 processor (have not decided which one), and
>>possiblty the Texas instruments DSP Processor. It will have most of the HF
>>bands; i.e. 20m, 40m, 80m,etc. It will have an LCD Display and a beautiful
>>custom chassis by:
>
>Make sure your specs and components are all Y2K compliant or it will
>not work after Y2K

How is a IC/resistor/capacitor that's been sitting unpowered in packaging
in a distributor or in my parts box know what date it is? Why would
EVERYONE design a circuit board and ALL accidently program them so
that they would break at a specific date? Get Real.

Anybody else noticed that there are a lot less Elvis sightings now that
Y2K is all the rage, looks like those people found something else to do.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

2186. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: mchenry1@sccoast.net
Message-ID: <36d374b3.261537051@news.sccoast.net>
Source record: 73208

Make sure your specs and components are all Y2K compliant or it will
not work after Y2K

On Mon, 22 Feb 1999 20:53:36 -0800, "gbowne" <gbowne@email.msn.com>
wrote:

>Dear Newsgroup,
>
> I am designing a HF Transceiver. It possibly will use a
>Motorola 68000 or a Intel 80x86 processor (have not decided which one), and
>possiblty the Texas instruments DSP Processor. It will have most of the HF
>bands; i.e. 20m, 40m, 80m,etc. It will have an LCD Display and a beautiful
>custom chassis by:
>
>Spire Audio Http://www.spireaudio.com
> Http://www.spireaudio.com/products.html
>
>Chassis will be 6" high x 17" (from left side to right side) x 10" (from
>front panel to rear panel)
>
> * will have 4 pin mic connector and 8 pin mic connector
>
>Please make suggestions to gbowne@email.msn.com
>
>Gregory Bowne
>Seattle,WA
>
>P.S. Soon after I finish the transceiver I will get my liscence! I am
>still studying for it... Been on 2m with a friend using a Kenwood TR-7400A.
>
>

2187. Re: Thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: veeduber@aol.com
Message-ID: <19990223225313.17518.00001963@ng139.aol.com>
Source record: 73209

>
>I wanted to get the word out to all the sites about a thief by the name
>of Glen Verasso of
>Newark, Ohio.

What's his call sign?

-Bob Hoover
-KA6HZF

2188. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <7b05qa$i30$1@samsara0.mindspring.com>
Source record: 73210

Have you checked to see if you might have the HAPPY virus? You are sending double posts with one of them the approximate size of the virus.

gbowne wrote in message <#Y2nDY7X#GA.265@upnetnews03>...
>Making it Y2K compliant is one of my top items on the list.
>
>Gregory
>
>

2189. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <VvPA2.110$Ox6.989@news20.ispnews.com>
Source record: 73211

gbowne wrote in message <#tRgzhuX#GA.312@upnetnews05>...
> I am designing a HF Transceiver. It possibly will use a
>Motorola 68000 or a Intel 80x86 processor (have not decided which one),
and
>possiblty the Texas instruments DSP Processor. It will have most of the
HF
>bands; i.e. 20m, 40m, 80m,etc. It will have an LCD Display and a
beautiful
>custom chassis by:

This is all well and good but completely trivial compared to the engineering that must go into the RF section of the radio. High speed microprocessors are notorious for generating wideband noise in receivers. But even if it is shielded perfectly, the radio will be a far more complex project. Fancy cases with lots of bells and whistles mean nothing if the radio works poorly.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

2190. Mail Delivery Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: MAILER-DAEMON@aol.COM
Message-ID: <199902241307.FAA05564@mailbox1.ucsd.edu>
Source record: 73212

Sorry Ham-Homebrew@ucsd.edu. Your mail to kc2we could not be delivered because kc2we is not accepting mail with attachments

2191. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: clintbrad4d@earthlink.net
Message-ID: <7b14p6$nh4$1@nnrp1.dejanews.com>
Source record: 73213
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <36D30E13.5A34E26E@csulb.edu>,
Adam Huber <ahuber@csulb.edu> wrote:
> I need ADMS-1D or ADMS-1E to program my VX-1R. I have an older version
> of the software that I purchased a while ago. It was the first version
> and will not work with the VX-1R. I spoke with the company who makes it
> (not Yaesu) and they are willing to sell the upgrade to me.....for the
> same price I can purchase it new. That sucks. I already have the
> cable, I just need the version ADMS-1D or ADMS-1E.

This does not sound right. RT Systems will upgrade you to their newest version
for twenty bucks - plus minimal charges for shipping. Are you really a
legitimate purchaser of their software?

Heck - I am two Updates behind - and RT Systems is upgrading me to the newest,
VX-5R-compatible ADMS-1E v2.0x version for only twenty bucks.

- Clint Bradford, KE6LCS

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2192. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Paul Gili <paul.e.gili@lmco.com>
Message-ID: <36D43A0B.E49@lmco.com>
Source record: 73214

gbowne wrote:
>
> Christopher Cox wrote in message <01be5f2c$391304a0$8c60b6cd@cbx-nt>...
> >Not a flame, but these are fairly poor choices for CPU's if you want to
> >keep your part count down. There are some 80486 style of computers on a
> >single chip which would probably be better suited.
> >
> >Personally, I would use PIC's for control purposes.
> >
> >Regards
> >
> >Christopher Cox
>
> I don't really need to worry about the part count. Personally I like the
> idea of using a full microprocessor. I have an STL from an FM radio
> station that uses a 486dx25 chip. I was really thinking about using what I
> had on hand, which was a Motorola 680000 10MHz, or a 386DX 25MHz. Dunno how
> much RAM I would need, but I would like about 1 to 4MB.
> BASIC Stamps, Microcontrollers, Microprocessors, PIC's, etc.

Does either of you worry about how to make a radio?

73, Paul, AA1LL

2193. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: null.rNOS@PAM.flashnet.it
Message-ID: <36d4485f.1647755@news.flashnet.it>
Source record: 73215
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 22 Feb 1999 13:10:53 -0600, "KD5GEH" <kd5geh@arrl.net> wrote:

>Ya, when there are SEVERAL progs to do exactly that in Windows...?

Hmm, I supposed he wanted to make the whole thing himself,
and also I didn't check if there are such progs under
Linux (BSD, etc.) too.

Anyway, besides reliability and overall quality reasons
(don't want to start a stupid OS war), I would choose
Linux *for that purpose* because Linux is free and
well documented.
Windows is not free, wants more resources (cpu, ram, etc.),
you cannot operate it remotely without buying expensive
software, so you'll need a video card and a monitor too.
And, if you plan to write the software yourself you'll
also need documentation and a development system.
Windows lack both natively, Linux have both free.
For example, in every Linux distribution there are also
docs on how to interface external electronic appliances to
I/O ports and how to connect unsupported UPSs.
The kernel is also customizable: one can cut away unneeded
things to fit it into small machines (8088/86-like embedded
processors too, search for "ELKS"). IMO it's worth a look.

And even realizing that Linux is the worst OS in the
world, you haven'wasted any money (ok, a couple of $
for the CD :*).

Not related to the original topic but, since you are an
Old Man, I bet you'll be interested to know that Linux
supports natively the AX-25 packet radio protocol.

73's

PS. I follow only s.e.misc, and occasionally s.e.repair
(among the originally crossposted groups).
Feel free to remove the ones we don't read both, to
limit the noise.

--
sr - null.rNOS@PAMflashnet.it <strip NOS & PAM to email>

2194. WTB: HP 410 VTVM; would consider others (EICO, Heath)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36D454E9.661B5FB1@certco.com>
Source record: 73216
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.forsale,sci.electronics.equipment

Anyone got a working HP 410 they're looking to get rid of? I'm looking
for a VTVM to use aligning old BA receivers etc.

thanks & 73
nick kb1dej

2195. Re: Needed: High Current Power Supply Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <919887811.446420@cs1.sdd.hp.com>
Source record: 73217

Bradley OM,

There was a design for a switching power supply, 50 amps, in a recent issue
of QST.
Have you checked recent issues?

73,
Don, W6JL

Bradley Risk wrote in message <36D32795.E4C8C0A2@ofm.com>...
>I'm trying to build a 20+Amp 13.8V power supply, but am having a hard
>time finding a good schematic for one. Anyone have any good plans, or
>URLs?
>
>TNX
>
>Brad
>

2196. CB --> 10m or 6m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Walter Wickersham <wwickersham@oc.ctc.edu>
Message-ID: <36D45FAF.A1DA4162@oc.ctc.edu>
Source record: 73218

I have a GE ssb cb that i would like to convert to either 10 or 6
meters,
i dont have the model number off hand, but I know it uses a 02a pll..

any help would be appreciated..

-Walter Wickersham
KD7AUR

2197. SWR vs impeadance mismatch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36D46613.845BCEB0@eaglequest.com>
Source record: 73219
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Tuning a 6m jpole,&#65533; I move the clamps up and down on the jpole for minimum SWR but I can't get it to drop to 1:1. I am moving the hose clamps up and down to match 50ohms which is my feedline, and I have been told to dip for minumum SWR.

Fine, but now that I have it to a minumum, it wont dip to 1:1 should I now start looking at trimming the antenna? I'm not sure I understand the relationship of matching the feedline by tuning for minumum SWR VS the resonance of the antenna. If the antenna were say an inch too long would changing the feedpoint compensate for this? or do I move the clamps for min SWR THEN trim the antenna for an even better match?

HELP!

Tim ka8ddz

2198. Re: SWR vs impeadance mismatch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be607e76323420LocalHost@default>
Source record: 73220
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Impedance matching always involves two variables - R
and jX. At least two control knobs are required on any
ATU.

On the antenna itself, after adjusting the clamps for
minimum SWR the next move is to adjust the antenna length,
ie, bring it into exact resonance. Then return to the
clamps for an exact 1-to-1 SWR in a sequence similar to
that used on an ATU. Its hard luck if it's necessary to
increase the length of antenna elements. This may arise if
the feeder impedance is not exactly the design value. But
a small residual mismatch will not be noticed by anyone or
anything except your SWR meter. Just don't look at it !
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Tim <ka8ddz@eaglequest.com> wrote in article
<36D46613.845BCEB0@eaglequest.com>...
> Tuning a 6m jpole,&#65533; I move the clamps up and down on the
jpole for
> minimum SWR but I can't get it to drop to 1:1. I am
moving the hose
> clamps up and down to match 50ohms which is my feedline,
and I have been
> told to dip for minumum SWR.
>
> Fine, but now that I have it to a minumum, it wont dip to
1:1 should I
> now start looking at trimming the antenna? I'm not sure I
understand the
> relationship of matching the feedline by tuning for
minumum SWR VS the
> resonance of the antenna. If the antenna were say an inch
too long would
> changing the feedpoint compensate for this? or do I move
the clamps for
> min SWR THEN trim the antenna for an even better match?
>
> HELP!
>

> Tim ka8ddz
>
>

2199. Re: Needed: High Current Power Supply Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Bradley Risk <Brad_R@ofm.com>
Message-ID: <36D47E40.C5C1A185@ofm.com>
Source record: 73221

I'll check that out. I hadn't seen it.

Thanks!

Brad
N7IVV

Don W6JL wrote:

> Bradley OM,
>
> There was a design for a switching power supply, 50 amps, in a recent issue
> of QST.
> Have you checked recent issues?
>
> 73,
> Don, W6JL
>
> Bradley Risk wrote in message <36D32795.E4C8C0A2@ofm.com>...
> >I'm trying to build a 20+Amp 13.8V power supply, but am having a hard
> >time finding a good schematic for one. Anyone have any good plans, or
> >URLs?
> >
> >TNX
> >
> >Brad
> >

2200. Re: CB --> 10m or 6m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36D47ED6.E59A69B8@eaglequest.com>
Source record: 73222

See if you can find or borrow a copy of the 10FM book that Bob Heil wrote. It will give you the complete skinny on converting to 10m AM/CW or FM using that board.

Tim

Walter Wickersham wrote:

> I have a GE ssb cb that i would like to convert to either 10 or 6
> meters,
> i dont have the model number off hand, but I know it uses a 02a pll..
>
> any help would be appreciated..
>
> -Walter Wickersham
> KD7AUR

2201. Dentron GLA-1000B 10M Mod!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36D4A363.28148CC3@starc.org>
Source record: 73223
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Doesn't anybody out there have a Dentron GLA-1000"B" with the 10M mod?
I'd really like to get the info on the mod, it has to be the "B" model.

--Tom
KB1CGA

2202. Re: Wanted: Home Brew DCI Filter (how-to)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36D4A73E.ECD@megsinet.net>
Source record: 73224

jpoulin@honk.org wrote:
> I have an abnormaly high amount of Intermod from a local
> Police Transmitter. It is bad.

How far away is it? Some years ago we had a police transmitter getting into the input of a local repeater. A friend and I drove around and located the signal, and it turned out to be a spur from a transmitter at a PSAP about 8 miles from the repeater. We notified the Chief of Police and he had it fixed... twice (the repairman didn't get it the first time).

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

2203. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-24 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36D4A5EB.4529@pop.removethistomailme.net>
Source record: 73225

Paul Gili wrote:
>
> gbowne wrote:
> >
> > Christopher Cox wrote in message <01be5f2c$391304a0$8c60b6cd@cbx-nt>...
> > >Not a flame, but these are fairly poor choices for CPU's if you want to
> > >keep your part count down. There are some 80486 style of computers on a
> > >single chip which would probably be better suited.
> > >
> > >Personally, I would use PIC's for control purposes.
> > >
> > >Regards
> > >
> > >Christopher Cox
> >
> > I don't really need to worry about the part count. Personally I like the
> > idea of using a full microprocessor. I have an STL from an FM radio
> > station that uses a 486dx25 chip. I was really thinking about using what I
> > had on hand, which was a Motorola 680000 10MHz, or a 386DX 25MHz. Dunno how
> > much RAM I would need, but I would like about 1 to 4MB.
> > BASIC Stamps, Microcontrollers, Microprocessors, PIC's, etc.
>
> Does either of you worry about how to make a radio?
>
> 73, Paul, AA1LL

Let's not get hung up on details here, Paul... perhaps they plan to
emulate all the RF stuff in software. :-)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2204. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Ken Bickel <ac4vvremove@mearrl.net>
Message-ID: <%N0B2.269$Bh5.373191@news.megsinet.net>
Source record: 73085
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Early versions of the VX1R could not be programmed due to a problem with the radio. If you own an earlier version of the software, why not find out the serial number of the radio and give RT Systems a call? If your radio is programmable, RT sells the upgrade for $20.00 as stated in the other message.

73

clintbrad4d@earthlink.net wrote in message
<7b14p6$nh4$1@nnrp1.dejanews.com>...
>In article <36D30E13.5A34E26E@csulb.edu>,
> Adam Huber <ahuber@csulb.edu> wrote:
>> I need ADMS-1D or ADMS-1E to program my VX-1R. I have an older version
>> of the software that I purchased a while ago. It was the first version
>> and will not work with the VX-1R. I spoke with the company who makes it
>> (not Yaesu) and they are willing to sell the upgrade to me.....for the
>> same price I can purchase it new. That sucks. I already have the
>> cable, I just need the version ADMS-1D or ADMS-1E.
>
>This does not sound right. RT Systems will upgrade you to their newest
version
>for twenty bucks - plus minimal charges for shipping. Are you really a
>legitimate purchaser of their software?
>
>Heck - I am two Updates behind - and RT Systems is upgrading me to the
newest,
>VX-5R-compatible ADMS-1E v2.0x version for only twenty bucks.
>
> - Clint Bradford, KE6LCS
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2205. PIN DIODES.. Where do you find them???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <36d4c1eb.129701329@news.revealed.net>
Source record: 73086

Have had this problem in the past, not able to locate diodes such as MI-301 and UM9401. Any ideas where one could order a few at reasonable prices????

Terry WB0VQP

2206. 25 Mfd, 450 volt CRAP-acitor needed.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990225001515.06453.00003193@ng126.aol.com>
Source record: 73087

Hello, a fellow I know is looking for a 25 MFD., 450 volt or better cap for his antique radio...Here is his description of the item:

The P 1937..25-450....97 Alum. Capacitor stand on top of the chassis, mounted in an upright position with a metal band at the base held around the cylinder with a screw and nut. The connection is through a hole in the chassis and soldered to the wiring underneath. It stands upright and is 5" high and 1 1/4 " accross.

IF you have one, please EMAIL HIM DIRECTLY, although if you really want to, you can say hello to me too...his Email addy is:

JBURNS333@webtv.net (Jim Burnsides)

Thanks everyone! Joe Pratt, Tubecntral@aol.com

2207. New domain.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: "G8AS)" <g8aso@warwick.warwks.sch.uk>
Message-ID: <36d54a6b.0@206.100.206.63>
Source record: 73088
Cross-posted to: aus.radio.amateur.misc,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Greetings

The Laughing Policeman Wireless Society's new web domain is

http://laughingpoliceman.com

Please ensure that your bookmarks/favourites are updated accordingly.

g8aso@laughingpoliceman.com

73s Brian G8ASO

2208. New domain.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: "G8AS)" <g8aso@warwick.warwks.sch.uk>
Message-ID: <36d56206.0@206.100.206.63>
Source record: 73089
Cross-posted to: aus.radio.amateur.misc,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Greetings

The Laughing Policeman Wireless Society's new web domain is

http://laughingpoliceman.com

Please ensure that your bookmarks/favourites are updated accordingly.

g8aso@laughingpoliceman.com

73s Brian G8ASO

2209. New domain.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: "G8AS)" <g8aso@warwick.warwks.sch.uk>
Message-ID: <36d562a2.0@206.100.206.63>
Source record: 73090
Cross-posted to: aus.radio.amateur.misc,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Greetings

The Laughing Policeman Wireless Society's new web domain is

http://laughingpoliceman.com

Please ensure that your bookmarks/favourites are updated accordingly.

g8aso@laughingpoliceman.com

73s Brian G8ASO

2210. Re: 4-1000 SOCKET TO TRADE FOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: John Stodart <gencomm@iinet.net.au>
Message-ID: <36D50E1A.12CF@iinet.net.au>
Source record: 73091

TS950SDX wrote:
>
> NEED A 4-1000 CHIMNEY WOULD TRADE A 4-1000 SOCKET FOR ONE
> SOCKET PART NUMBER IS SK 500
> CHIMNEY MUST FIT SAME TYPE SOCKET
> 73 JOE
I found that a suitable pyrex gas lamp glass can be found at the local
hardware store for B/all.

John Stodart

2211. Re: New domain.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <KCbB2.49$wp.3139@news.goodnet.com>
Source record: 73092
Cross-posted to: aus.radio.amateur.misc,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Yea, we saw your last 12 messages. What do you think we are? Stupid
or something?

I notified your ISP about the SPAM.

G8AS) wrote
>Greetings
>
>The Laughing Policeman Wireless Society's new web domain is
>
>http://laughingpoliceman.com
>
>Please ensure that your bookmarks/favourites are updated accordingly.
>
>g8aso@laughingpoliceman.com
>
>73s Brian G8ASO
>
>
>
>

2212. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01be60be$0bf65ba0$8260b6cd@cbx-nt>
Source record: 73093

> >
> > Does either of you worry about how to make a radio?
> >
> > 73, Paul, AA1LL
>
> Let's not get hung up on details here, Paul... perhaps they plan to
> emulate all the RF stuff in software. :-)
>
> -- jm KE5FX
>

I hope you all feel bigger now. I do not chime in unless I have some knowledge to impart. Digital hardware and software is my strong suite. I am impressed with good RF design and usually just monitor groups like this in an attempt to glean knowledge. Nothing like the introduction of a couple hundred thousand transistors in a package the size of your thumb to make a RF Engineer to sit up and cry foul.

Christopher Cox
KC8FRJ

2213. Socket for 4-1000/3-1000 Sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990225083349.00132.00000023@ng30.aol.com>
Source record: 73094

Socket/Sold
Thanks JR

2214. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <7b3nfl$eau@dfw-ixnews6.ix.netcom.com>
Source record: 73095
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In <7b14p6$nh4$1@nnrp1.dejanews.com> clintbrad4d@earthlink.net writes:
>
>In article <36D30E13.5A34E26E@csulb.edu>,
> Adam Huber <ahuber@csulb.edu> wrote:
>> I need ADMS-1D or ADMS-1E to program my VX-1R. I have an older
version
>> of the software that I purchased a while ago. It was the first
version
>> and will not work with the VX-1R. I spoke with the company who makes
it
>> (not Yaesu) and they are willing to sell the upgrade to me.....for
the
>> same price I can purchase it new. That sucks. I already have the
>> cable, I just need the version ADMS-1D or ADMS-1E.
>
>This does not sound right. RT Systems will upgrade you to their newest
version
>for twenty bucks - plus minimal charges for shipping. Are you really a
>legitimate purchaser of their software?

Clint you truly are a jerk. Is this last comment necessary? As a matter
of fact RT doesn't care if you register or not what they sell is The
whole business for $39 with the level converter or the latest software
as an upgrade with the 2 to 3 adapter for $20. What really was uncalled
for was the comment about this questioner "really a legitimate
purchaser" what a pompus ass you are Clint.

>
>Heck - I am two Updates behind - and RT Systems is upgrading me to the
newest,
>VX-5R-compatible ADMS-1E v2.0x version for only twenty bucks.
>

That how they do it Clint and they will do it for anyone who calls and
orders it.

> - Clint Bradford, KE6LCS
>
>-----------== Posted via Deja News, The Discussion Network
==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your
Own

2215. Re: PIN DIODES.. Where do you find them???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: xxx@yyy.com
Message-ID: <36D56281.A638A3C7@yyy.com>
Source record: 73096

http://www.rfparts.com

and

dans small parts(!) http://www.concentric.net/~parker4/dans.html

TLNixon@revealed.net wrote:

> Have had this problem in the past, not able to locate diodes such as
> MI-301 and UM9401. Any ideas where one could order a few at
> reasonable prices????
>
> Terry WB0VQP

2216. Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: azkb7ryu@aztec.asu.edu
Message-ID: <7b3okoqpo1@news.asu.edu>
Source record: 73097

Hello All,

I am teaching someone basic electronics and am
wondering if anyone knows of any acronyms for
learning the resistor color code.

Thanks,

Joel KB7RYU
--

2217. Re: PIN DIODES.. Where do you find them???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <36D5723C.E9B1E1A6@iag.net>
Source record: 73098

DOWNEAST MICROWAVE HAS THEM. HARRY

xxx@yyy.com wrote:

> http://www.rfparts.com
>
> and
>
> dans small parts(!) http://www.concentric.net/~parker4/dans.html
>
> TLNixon@revealed.net wrote:
>
> > Have had this problem in the past, not able to locate diodes such as
> > MI-301 and UM9401. Any ideas where one could order a few at
> > reasonable prices????
> >
> > Terry WB0VQP

2218. Indiana General

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990225113214.29133.00000024@ng51.aol.com>
Source record: 73099

Can anyone give me a homepage address or telephone number for the above company please? Looking for info on one of their cores, part number 18006-1, dimensions and material.
TIA

W4ZCB

2219. I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Bob Sikes <rwsikes@mediaone.net>
Message-ID: <36D59005.4D929E02@mediaone.net>
Source record: 73100

When I transmit and have my microphone near my keyboard (< 1 ft) the lights on the keyboard flash and letters appear on the computer screen. If it would type what I said, I'd be thrilled, but alas, no such luck.

I've worked on my grounding (I'm on the second floor and ran a larger diameter copper wire down to the ground rod) and tried several chokes on the mike wire, but nothing seems to help.

Anyone know what I might try?

Bob
W1MMM

2220. Re: Datasheet for BF255

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Paul Gili <paul.e.gili@lmco.com>
Message-ID: <36D58E16.76C0@lmco.com>
Source record: 73101

J M Noeding wrote:
>

>
> I am not familiar with BJT, what does it mean, only know UJT.....

BJT refers to a Bipolar Junction Transistor, i.e., having both N and P type semiconductor material, and having PN-junctions as opposed to a FET which would only have one type of material and no PN junctions.

73, Paul, AA1LL
Greenville, NH
http://www.qsl.net/aa1ll

2221. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Bob Sikes <rwsikes@mediaone.net>
Message-ID: <36D5918D.8C7A2E06@mediaone.net>
Source record: 73102

And, for Tech America at least, a $4 "Economy" shipping charge for a 555 chip.
Okay, so no one would order just a single chip, but when I need just one, I get a
Shack Attack, and I'm glad they are there.

Bob Sikes

Bob Lewis wrote:

> A phone call away and 3 days shipping.
>

2222. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: hanavin@ren.eecis.udel.edu
Message-ID: <7b452tnfk1@dewey.udel.edu>
Source record: 73103

Bad Boys Rape Our Young Girls But Violet Gives Willingly

Thats how I learned it!

Chuck (W3FJJ)

In article <7b3okoqpo1@news.asu.edu>,
JOEL N. STEENIS <azkb7ryu@aztec.asu.edu> wrote:
>
>
>Hello All,
>
>I am teaching someone basic electronics and am
>wondering if anyone knows of any acronyms for
>learning the resistor color code.
>
>Thanks,
>
>
>Joel KB7RYU
>--
>
>
>
>

2223. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <919972062.30249@cs1.sdd.hp.com>
Source record: 73104

Bob OM,

You have to isolate the source.
Transmit into a dummy load. Still have the problem?
If so, it is coming directly from the rig. Suggests ferrite loading of AC line on
computer and/or rig.
No problem using dummy load? Radiation from the feedline
or close proximity to the antenna. How far away is your antenna? In/near the house?
Good luck! Reduced power will usually show you the power level at which the problem
occurs. Operate below that level and work on problem, see if you can get an improvement
based on tolerable power level. If using coax feedline, insert a choke balun on the line to
minimize common mode current on outside of line. Run line at low SWR (flat).

73 and GL,

Don, W6JL

>When I transmit and have my microphone near my keyboard (< 1 ft) the
>lights on the keyboard flash and letters appear on the computer screen.
>If it would type what I said, I'd be thrilled, but alas, no such luck.
>
>I've worked on my grounding (I'm on the second floor and ran a larger
>diameter copper wire down to the ground rod) and tried several chokes on
>the mike wire, but nothing seems to help.
>
>Anyone know what I might try?
>
>Bob
>W1MMM
>
>

2224. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: clintbrad4d@earthlink.net
Message-ID: <7b4d42$hq3$1@nnrp1.dejanews.com>
Source record: 73105
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7b3nfl$eau@dfw-ixnews6.ix.netcom.com>,
kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

>>> [A writer complains that he was treated weirdly by RT Systems. The same >>
>>> writer mis-states RT Systems' very public stance on legitimate Upgrades of
>>> their ADMS software. RT Systems has responded that no one in their company
>>> ever told that writer what he now claims in public...

>> So Clint asks: Are you really a legitimate purchaser of their software? [As
>> opposed to someone who has "borrowed" a copy of the software from someone
>> else.]

>And here comes Gerald "Don't believe ANYTHING Clint has to say" Schmitt:
> Clint you truly are a jerk...what a pompus ass you are Clint.

You obviously aren't a small business owner, Gerald. I doubt you have ever
successfully marketed anything in your career. No matter.

Why you perceive a problem with someone who just hung up with RT Systems and
discussed this very matter and found out the truth is beyond rational thought.

Work on your inner anger somewhere else, would you please? Your
anti-Clint rantings are in no way in the true spirit of what Amateur Radio is
supposed to be all about. In the mean time, I will continue to support those
firms that treat their public well. And RT Systems treats their valid customer
base with respect and excellent products.

- Clint Bradford, KE6LCS
909-681-6210 - Office

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2225. Re: Point Contact Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36D5B6CB.3852AD33@certco.com>
Source record: 73106

Bill Meara wrote:

> Does anybody know HOW the current causes the N- type material to "go
> P"? Also, how is the junction formed in ordinary galena, catwhisker
> detectors (where no large current was employed)?
>
> Thanks, 73 Bill N2CQR

A wild-assed guess: large current causes migration of impurities (e.g.
atoms from catwhisker)
to diffuse into the germanium, forming (note my hands, waving furiously
here) a P-type region.

--ncc kb1dej

2226. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Bob Sikes <rwsikes@mediaone.net>
Message-ID: <36D5BE2E.6335FF19@mediaone.net>
Source record: 73107

Don

Thanks for the quick help

I hadn't tried the dummy load test, the newbie that I am, and I only get the problem when connected to the antenna. It takes about 50 watts to get the effect. I would add that I also have a lot of problem with speaker in my shack. The antenna, a dipole is outside, but only about 10 feet above the shack (25 feet off the ground). And one end is attached to the outer wall of the shack. I've noticed with a field strength meter that wires in the shack seem to radiate the transmitted signal. Is this possible?

My guess now is that the keyboard cable (long) is the problem instead of the mike cable (short) and after putting a pair of chokes on each end, I seemed to have fixed the problem, even at 100 watts. Yeah! I can talk and type again. Good for contests.

I guess I'll have to move the antenna before getting a kilowatt DX amp :-)

Bob W1MMM

Don W6JL wrote:

> Bob OM,
>
> You have to isolate the source.
> Transmit into a dummy load. Still have the problem?
> If so, it is coming directly from the rig. Suggests ferrite loading of AC
> line on
> computer and/or rig.
> No problem using dummy load? Radiation from the feedline
> or close proximity to the antenna. How far away is your antenna? In/near
> the house?
> Good luck! Reduced power will usually show you the power level at which the
> problem
> occurs. Operate below that level and work on problem, see if you can get
> an improvement
> based on tolerable power level. If using coax feedline, insert a choke
> balun on the line to
> minimize common mode current on outside of line. Run line at low SWR
> (flat).
>
> 73 and GL,
>
> Don, W6JL
>

> >When I transmit and have my microphone near my keyboard (< 1 ft) the
> >lights on the keyboard flash and letters appear on the computer screen.
> >If it would type what I said, I'd be thrilled, but alas, no such luck.
> >
> >I've worked on my grounding (I'm on the second floor and ran a larger
> >diameter copper wire down to the ground rod) and tried several chokes on
> >the mike wire, but nothing seems to help.
> >
> >Anyone know what I might try?
> >
> >Bob
> >W1MMM
> >
> >

2227. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Bob Sikes <rwsikes@mediaone.net>
Message-ID: <36D5BEBF.3282C8F5@mediaone.net>
Source record: 73108

Hi Dean,

That seemed to do the trick. I thought it was the mike cable, but after trying Don's test with the dummy load, the problem seems to be direct form the antenna which is nearby.

So far, I talk and I get to do the typing. Much better.

Bob W1MMM

W. Dean Milner wrote:

> x-no-archive: yes
>
> Bob Sikes <rwsikes@mediaone.net> wrote:
>
> >I've worked on my grounding (I'm on the second floor and ran a larger
> >diameter copper wire down to the ground rod) and tried several chokes on
> >the mike wire, but nothing seems to help.
> >
> >Anyone know what I might try?
>
> Try putting chokes on teh keyboard cable.
>
> Dean
>
> Note: remove the (.ns) from the user id before emailing.

2228. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <az7ZZDAHza12EwJp@ifwtech.demon.co.uk>
Source record: 73109

Bob Sikes wrote:
>When I transmit and have my microphone near my keyboard (< 1 ft) the
>lights on the keyboard flash and letters appear on the computer screen.
>If it would type what I said, I'd be thrilled, but alas, no such luck.
>
You had everybody all excited there...

>I've worked on my grounding (I'm on the second floor and ran a larger
>diameter copper wire down to the ground rod) and tried several chokes on
>the mike wire, but nothing seems to help.
>
>Anyone know what I might try?

It's fairly obviously RF from the antenna, flowing down the feedline as common-mode currents, and causing trouble when they pass through the shack on their way down to ground. You should try to eliminate/reduce the RF currents, more than to RFI-proof the mic lead.

If the antenna is coax-fed, try winding the coax to make a choke, or use ferrite beads/rings.

On the other hand, you may have more success by *not* attempting to make the ground lead too effective. A friend had very similar RFI problems with a quad (gamma matched and coax fed) and an upstairs shack. He tried all kinds of chokes in the coax with only partial success. What completely cured the problem was to disconnect the extra RF ground, and to wind the mains lead to the shack around a stack of about 6 large ferrite rings(*). By blocking any RF path from the shack to ground, he removed the 'incentive' for common-mode currents to flow down the coax and into the shack. It cured the RFI in the shack, and also cured breakthrough into both his own and the neigbors' hi-fi.

Note that all three wires of the mains lead (line, neutral and also earth/ground) were wound through the ferrite rings, so he still had an effective ground for mains safety.

(*) Another good source of a ferrite core for a large mains choke is the deflection yoke from a scrapped TV set - about 10 turns shows a fairly high impedance all across the HF spectrum.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2229. WTB 455 Khz Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Dave Thomas <dethomas@hiwaay.net>
Message-ID: <36D5C9FE.7EA7CB71@hiwaay.net>
Source record: 73110

need a 455.0 Khz Crystal.

Thanks,

Dave Thomas N4CLR

2230. 6 Meter RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990225172252.27311.00000239@ng17.aol.com>
Source record: 73111

I read about the stripline filter for 6 Meters in the ARRL RFI book.
I need a unit for full legal limit. Will it make the grade?
Any suggestions?
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

2231. Complex impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Troels Pedersen <oz3tro@altavista.net>
Message-ID: <01be610e$14a16330$12da52c3@p133>
Source record: 73112

I am thinking of making computer controlled impedance meter - but how do I measure the COMPLEX IMPEDANCE.
Does anyone have any hint about were to find i diagram or how to construct some apperatus wich can do that?

xcuse me 4 my rotten English !

Vy 73 De OZ3TRO/Troels

Let ur fingers do the talking - try a CW QSO (or write an email ;-)

2232. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <1D76D05944F3D0CC.F86AF6ABFF1AB034.755376555665BCAE@library-proxy.airnews.net>
Source record: 73113

i've heard of people putting tin-foil over the coiled cord from the
keyboard...stops some interferance
Bob Sikes wrote in message <36D5BEBF.3282C8F5@mediaone.net>...
>Hi Dean,
>
>
>That seemed to do the trick. I thought it was the mike cable, but after
>trying Don's test with the dummy load, the problem seems to be direct form
>the antenna which is nearby.
>
>So far, I talk and I get to do the typing. Much better.
>
>Bob W1MMM
>
>W. Dean Milner wrote:
>
>> x-no-archive: yes
>>
>> Bob Sikes <rwsikes@mediaone.net> wrote:
>>
>> >I've worked on my grounding (I'm on the second floor and ran a larger
>> >diameter copper wire down to the ground rod) and tried several chokes on
>> >the mike wire, but nothing seems to help.
>> >
>> >Anyone know what I might try?
>>
>> Try putting chokes on teh keyboard cable.
>>
>> Dean
>>
>> Note: remove the (.ns) from the user id before emailing.
>
>
>

2233. Good PC-based Scope and Specrum Analyzer???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: jrybak@mesa7.MesaState.EDU
Message-ID: <7b4jna$4jk$1@mesa7.mesa.colorado.edu>
Source record: 73114

I'm looking for a GOOD PC-based scope and spectrum analyzer. It must cover at least the entire audio frequency range but the higher the frequency response the better. However,I don't want high frequency response at the expense of accuracy and display features.

What hardware/software packages are good? Is the Velleman PCS64i digital oscilloscope for PC a good choice?

Thanks.

Jim Rybak

2234. Wanted: Surveillance camera, free, cheap, or as a tax deduction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: bogus@supernews.com
Message-ID: <bogus-2502991732390001@dnai-207-181-238-113.dialup.dnai.com>
Source record: 73115
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In a thread in this n.g. I asked for suggestions on catching a thief on video who is pilfering office equipment. Thanks to all who have offered such creative ideas.

Now I need a video camera, the smaller the better. This volunteer center where I've been asked to help catch the pilferer is -- how do you say -- not cash-heavy. So, I'm asking for the loan of a survelliance camera, or as a tax write-off (the center is an IRS non-profit organization). Or, if you must have cash, will consider this last.

Camera must have NTSC video output, and require only a single power source. Color prefered, but b/w is acceptable.

Sorry about my modified return address, but I hate getting spammed.
My correct address is provided below if you choose to e-mail me.

Thanks,
Dave

--
Dave Carpenter
Sound Logic

Note: "From" address is invalid.
Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.

2235. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-25 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF7ryD3.Kxx@netcom.com>
Source record: 73116

In article <7b3okoqpo1@news.asu.edu>,
JOEL N. STEENIS <azkb7ryu@aztec.asu.edu> wrote:
>I am teaching someone basic electronics and am
>wondering if anyone knows of any acronyms for
>learning the resistor color code.

Don't bother. Using a rhyme puts too many mental steps in the process.
You end up mumbling to yourself and counting on your fingers when all
you need is a direct visual - number mapping.

Try ftp://ftp.eskimo.com/u/m/mzenier/colorcd.gif
(A chart of the digits, 0 to 9, with each digit rendered in the matching
color, at least on my monitor).

Make up a chart like this and have them sort a pile of resistors.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

2236. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: mas@ucla.edu
Message-ID: <36d6361f.5861448@nntp.we.mediaone.net>
Source record: 73027

> You're going to have to contend with the processor clock
>and all the harmonics of divided-down sub-harmnics.
...snip...
> Also, you'll want to carefully bypass the power
>supply to the controller, and every signal line that enters or leaves it.
...snip...
>Remember, your controller generates high speed waveforms with several volts
>Pk-Pk, and you're trying to receive signals with just a microvolt Pk-Pk. We're
>talking about over 1 million to one ratio, or 120 dB of isolation required.

How about more isolation?

I remember -174dBm as the noise in a 1 Hz bandwidth in a resistor.

Also HC logic can be pretty powerful -- I've seen designs using it for
high level LO drivers. I'd guess high end processors would
have I/O (off chip) drivers which could push some power if
loaded.

Where do you want your "noise" floor -- microprocessor switching
leakage or input noise limited?

Also beware that "filtering" isn't all that easy (or at least not
obvious). I'm looking at the 3rd edition of "Freqency
Synthensizers: Theory and Design" by Vadim Manassewitsch.
See chapter 3 on shielding.

I like the section on p 185 about the shielding requirements to
obtain 130 dB isolation between modules at 1 KHz. These
are closed modules -- assume no entries, this analysis is just
concerned with the electric and magnetic fields which travel
through the module walls.

Apparently two aluminum walls 125 mils thick separated by one
inch of air can't isolate the magnetic field at 1 KHz more than about
76 dB. Higher frequencies have more attenuation, this is
worst case, but your microprocessor will have sub-harmonics
at all kinds of frequencies (probably depending on what
it's doing).

[steel at 125 mils he shows as 110 dB at 1 KHz, still not
the 130 dB he's looking for].

Perhaps you can try to keep the frequencies higher
and avoid the low frequency magnetic field problems.

But I've heard a radio with a rotary encoder which had audible noise when the encoder was rotated...

You probably want to build the radio in multiple boxes (die cast?) and connect all signals with shielded cables (and/or balanced?). You'll also need good bypassing on all power...

2237. Re: 25 Mfd, 450 volt CRAP-acitor needed.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7b5uj8mus1@news1.exit109.com>
Source record: 73028

try AES at www.tubesandmore.com

TUBECNTRAL wrote in message <19990225001515.06453.00003193@ng126.aol.com>...
>Hello, a fellow I know is looking for a 25 MFD., 450 volt or better cap for
his
>antique radio...Here is his description of the item:
>
>
>The P 1937..25-450....97 Alum. Capacitor stand on top of the chassis,
>mounted in an upright position with a metal band at the base held around
>the cylinder with a screw and nut. The connection is through a hole in
>the chassis and soldered to the wiring underneath. It stands upright and
>is 5" high and 1 1/4 " accross.
>
> IF you have one, please EMAIL HIM DIRECTLY, although if you really want
to,
>you can say hello to me too...his Email addy is:
>
> JBURNS333@webtv.net (Jim Burnsides)
>
> Thanks everyone! Joe Pratt, Tubecntral@aol.com

2238. Re: WTB 455 Khz Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7b5umvmuu1@news1.exit109.com>
Source record: 73029

buy the 455 Khz CW filter for Collins R390 R390a, that has 455 Khz crystal
inside

Try Fair Radio Sales of Lima Ohio for that.

Dave Thomas wrote in message <36D5C9FE.7EA7CB71@hiwaay.net>...
>need a 455.0 Khz Crystal.
>
>Thanks,
>
>Dave Thomas N4CLR
>
>

2239. New Web Page with HB stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36d6ca94.6066246@news.erols.com>
Source record: 73030

They have finally developed Web Page software that so user friendly that even I can carve out a place on the Web! (Netscape Navigator Gold)

My site has some Homebrew articles that I hope will be of interest to this group. Please take a look and let me know what you think:

http://www.erols.com/wmeara

73 Bill N2CQR

2240. Re: 6 Meter RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <kvaWODABNm12EwOX@ifwtech.demon.co.uk>
Source record: 73031

Goldreged wrote:
>I read about the stripline filter for 6 Meters in the ARRL RFI book.
>I need a unit for full legal limit.

You almost certainly DON'T need a stripline bandpass filter. Its single high-Q circuit has just about the worst possible combination of characteristics: a very sharp peak and rather poor skirt rejection.

You don't say what the RFI problem is. Maybe it isn't a transmitter problem at all. But if your transmitted signal does need cleaning up, you need to think more carefully about the kind of filter you need.

Your transmitted signal should contain only harmonics. A lowpass filter (or a multiple notch filter) will have much better harmonic rejection than a bandpass.

If your transmission genuinely does have close-in non-harmonic spurious products, it's either a parasitic oscillation in the PA or driver stage, or else the signal from the exciter is impure. Obviously a filter is no cure for an oscillating amplifier. Also, bandpass filtering to clean up the exciter signal should have happened way before the PA, at a very low power level.

If you're suffering from receiver intermodulation, you probably do need a bandpass filter but it doesn't need to be capable of handling 1.5kW.

> Will it make the grade?

You haven't said what you really want it to do... but probably not. In a high-Q circuit at 1.5kW, you can expect over 10kV across the tuning capacitor, and circulating currents of a few hundred amps. In other words, expect fireworks!

>Any suggestions?

Be sure about what you really need, and then check the ICE catalog or web page for appropriate filters.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2241. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: clintbrad4d@earthlink.net
Message-ID: <7b664k$2cu$1@nnrp1.dejanews.com>
Source record: 73032
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7b50rm$9kj@dfw-ixnews6.ix.netcom.com>,
kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

> Tell me Clint what is a "valid customer" I have 3 different versions of
> their product am I valid or not.

I do not know...did you purchase any of the versions, and send in the
Registration Cards? Do you show up on RT Systems' computer as a registered
user of their software? Don't you already know?

- Clint Bradford, KE6LCS
909-681-6210 - Office

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2242. Re: WTB 455 Khz Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Juergen Putzger <juergen.putzger@physik.uni-regensburg.de>
Message-ID: <36D6954A.12B9@physik.uni-regensburg.de>
Source record: 73033

Dave Thomas wrote:
>
> need a 455.0 Khz Crystal.
>

I have one here. What is it useful for, what can I build with it ? Why
does one want such a crystal ? Build a BFO ?

Juergen Putzger

2243. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <7b69jl$8sa@dfw-ixnews11.ix.netcom.com>
Source record: 73034
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In <7b664k$2cu$1@nnrp1.dejanews.com> clintbrad4d@earthlink.net writes:
>
>In article <7b50rm$9kj@dfw-ixnews6.ix.netcom.com>,
> kc5egg@ix.netcom.com(Gerald Schmitt) wrote:
>
>> Tell me Clint what is a "valid customer" I have 3 different versions
of
>> their product am I valid or not.
>
>I do not know...did you purchase any of the versions,

Am I now dishonest? Yes you twit I did purchase all of them.

> and send in the
>Registration Cards?

Nope never did that but they happily sold me an upgrade.

>Do you show up on RT Systems' computer as a registered
>user of their software? Don't you already know?

I have no idea whose data base I show up on but I do know
they happily sold me an upgrade without any idea who I was.

>
> - Clint Bradford, KE6LCS
> 909-681-6210 - Office
>
>-----------== Posted via Deja News, The Discussion Network
==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your
Own

2244. Identify these IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7b6e5ulom1@news6.svr.pol.co.uk>
Source record: 73035

I have a Lab frequency counter made in the 70's or 80 's

Some of the counter / divider / latch IC's are marked

59-926-29
69-958-79
59-914-29

Anyone know if these DTL or RTL etc ??

Can they be replaced with TTL functional equivalents or are the levels
different ?

John

2245. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: clintbrad4d@earthlink.net
Message-ID: <7b6kdofqh1@nnrp1.dejanews.com>
Source record: 73036
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7b69jl$8sa@dfw-ixnews11.ix.netcom.com>,
kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

> Yes you twit I did purchase all of them.
> ...[RT Systems] happily sold me an upgrade without any idea who I was.

Wow...yet another case of RT Systems caring for their customers.You didn't
even follow the basic rules (sending in the Registration Card) yet they
treated you like you did.

Thank you for your input.

- Clint Bradford

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2246. WTB:VA200 Innovation First

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: VINCENT COPPOLA <vcoppola@snet.net>
Message-ID: <36D6EAD7.64C5@snet.net>
Source record: 73037

This is the computer interface for the HP-141T spectrum analyzer.
Does anybody know what happened to the company?

Vince N1VC

2247. Re: 6 Meter RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990226122729.11193.00000313@ng-cc1.aol.com>
Source record: 73038

<<You don't say what the RFI problem is. Maybe it isn't a transmitter
problem at all. But if your transmitted signal does need cleaning up,
you need to think more carefully about the kind of filter you need.
>>
Well, I have a new IC 706 MK II radiio. Just running stock high power gets into
my TV (fixing w/ filters & chokes) & 2 different cordless phones(have to work
on today)
I do want to run full legal limit. I have an amp that I'm converting. I just
want to ensure the cleanest output I can get.

<<You haven't said what you really want it to do... but probably not. In a
high-Q circuit at 1.5kW, you can expect over 10kV across the tuning
capacitor, and circulating currents of a few hundred amps. In other
words, expect fireworks!>>
I have some Large var caps & a couple vacuum caps & a large junkpile. If
there's a way, I can build.

<<Be sure about what you really need, and then check the ICE catalog or
web page for appropriate filters.>>
I havent heard of ICE, but I'll check your website for a link, so if it's not
there, just post it.

Thanks alot for your help.
I have the ARRL RFI handbook, but need more 6 Meter info.
If you have any suggestions....
Ed
KB1DQX

Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

2248. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7b6m5l$87h$1@news1.exit109.com>
Source record: 73039

There is this single chip UP
called 89c55 .

It is 8051 with 256 bytes RAM and 20 Kb of ROM
+ 32 + I/O pins.

Why would anyone need anything better than that
to program a stupid PLL chip, read Keyboard,
write to display and flips a few IO bits ???

What exactly would be the purpose of
68K chip and4 MB RAM be ????
Would he need a 1 GB hard-drive also ????

Why dont people learn proper Embedded Design ???

Should people look at SOME DSP modules like the

Motorola 16 Bit DSP + Microcontroller DSP56L811
Or the ADS21061 chips .

These are more or less single chip and powerful chips

That thing might even help people implement
do the digital processing process which has become
integral to modern

DIGITAL COMMUNICATION RECEIEVERS.

Micros are going to be there , as they implement the
things like Channel coding, decoding, channel synchronization
Forward Error Correction Radio control functions and DSP
filtering etc.

Look inside your favorite Cell Phone to find out how the RF
analog sections and DSP processing plus complex computer
and User-Interface stuff has been successfully integrated ,
and how they have used DSP to actually overcome
Rayleigh fading (channel combining in Time domain and Rake
4 channel receievers)

So, DSP/Microcontrollers Definitely belongs in the HF or VHF receivers, but
need succesful and intelligent design.

mas wrote in message <36d6361f.5861448@nntp.we.mediaone.net>...
>> You're going to have to contend with the processor clock
>>and all the harmonics of divided-down sub-harmnics.
>...snip...

>> Also, you'll want to carefully bypass the power
>>supply to the controller, and every signal line that enters or leaves it.
>...snip...
>>Remember, your controller generates high speed waveforms with several
volts
>>Pk-Pk, and you're trying to receive signals with just a microvolt Pk-Pk.
We're
>>talking about over 1 million to one ratio, or 120 dB of isolation
required.
>
>How about more isolation?
>
>I remember -174dBm as the noise in a 1 Hz bandwidth in a resistor.
>
>Also HC logic can be pretty powerful -- I've seen designs using it for
>high level LO drivers. I'd guess high end processors would
>have I/O (off chip) drivers which could push some power if
>loaded.
>
>Where do you want your "noise" floor -- microprocessor switching
>leakage or input noise limited?
>
>Also beware that "filtering" isn't all that easy (or at least not
>obvious). I'm looking at the 3rd edition of "Freqency
>Synthensizers: Theory and Design" by Vadim Manassewitsch.
>See chapter 3 on shielding.
>
>I like the section on p 185 about the shielding requirements to
>obtain 130 dB isolation between modules at 1 KHz. These
>are closed modules -- assume no entries, this analysis is just
>concerned with the electric and magnetic fields which travel
>through the module walls.
>
>Apparently two aluminum walls 125 mils thick separated by one
>inch of air can't isolate the magnetic field at 1 KHz more than about
>76 dB. Higher frequencies have more attenuation, this is
>worst case, but your microprocessor will have sub-harmonics
>at all kinds of frequencies (probably depending on what
>it's doing).
>
>[steel at 125 mils he shows as 110 dB at 1 KHz, still not
>the 130 dB he's looking for].
>
>Perhaps you can try to keep the frequencies higher
>and avoid the low frequency magnetic field problems.
>
>But I've heard a radio with a rotary encoder which
>had audible noise when the encoder was rotated...
>
>You probably want to build the radio in multiple

>boxes (die cast?) and connect all signals with
>shielded cables (and/or balanced?). You'll also need
>good bypassing on all power...
>
>
>
>
>
>
>

2249. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: "Kurt A. Freiberger" <kurt@cs.tamu.edu>
Message-ID: <36D6E68F.FFE1783D@cs.tamu.edu>
Source record: 73040
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

clintbrad4d@earthlink.net wrote:

> Wow...yet another case of RT Systems caring for their customers.You didn't
> even follow the basic rules (sending in the Registration Card) yet they
> treated you like you did.

It has been held that the sending in of a registration card is not necessary in warranty or support cases. IMNSHO, all it does is get you on mailing lists that propagate like wildfire. Most of the time, I need nothing further from the manufacturer. In the small cases in which I DO need more from the manufacturer, I provide them with the necessary proof of ownership, if asked.

I have no gripe with RT Systems per se, except that I think they are WAY too paranoid in their copy protection scheme. Every time I defrag my hard drive, I have to reinstall the software. That torques me to no end. As soon as the Linux software is available, I'm switching.

--
Kurt A. Freiberger, WB5BBW Network Environmentalist Austin, TX
Published 12/12/98, Saint Paul Pioneer Press Bulletin Board:
Redmond, WA (AP) -- Microsoft announced today that the official release date for the new operating system "Windows 2000" will be delayed until the second quarter of 1901.

2250. Re: 6 Meter RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36D73410.C79EFAEF@bellsouth.net>
Source record: 73041

Goldreged wrote:
> Well, I have a new IC 706 MK II radiio. Just running stock high power gets into
> my TV (fixing w/ filters & chokes) & 2 different cordless phones(have to work
> on today)

What channel on the TV?

(channel 2 is directly above the 6m band, a *very* sharp low-pass filter
can sometimes help channel 2 TVI. The 4th harmonic of 6m falls into
channel 11, so a decent low-pass filter might help with this channel
too. If you have interference in other TV channels, it's probably the
TV responding to your 6m signal itself - no filter you can install on
your rig will fix this. (without breaking your rig!))

Likewise on the cordless phones. No harmonic of the 6m band falls into
any cordless-phone band. Unfortunately, "pre-900MHz" cordless phones
usually used 49MHz to go one way, and 46MHz to go the other way. A
sharp *high-pass* filter *might* help with these, though these receivers
are made very cheaply & I rather doubt they'll work properly near a
high-powered 6m transmitter no matter how clean the 6m rig is.

I think a liberal application of choke cores to the leads entering the
TV and the cordless base units is likely to be much more effective than
anything you can do to your ham gear.

73 Doug
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

2251. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <374be77b.1036691790@news.atl.bellsouth.net>
Source record: 73042

On Thu, 25 Feb 1999 20:04:23 +0000, "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>On the other hand, you may have more success by *not* attempting to make
>the ground lead too effective. A friend had very similar RFI problems
>with a quad (gamma matched and coax fed) and an upstairs shack. He tried
>all kinds of chokes in the coax with only partial success. What
>completely cured the problem was to disconnect the extra RF ground, and
>to wind the mains lead to the shack around a stack of about 6 large
>ferrite rings(*). By blocking any RF path from the shack to ground, he
>removed the 'incentive' for common-mode currents to flow down the coax
>and into the shack. It cured the RFI in the shack, and also cured
>breakthrough into both his own and the neigbors' hi-fi.

There's a very important lesson here. Most hams seem to think that grounds
solve RFI problems, but it is very often the case that grounds make RFI problems
worse. Ground has no magical properties, it isn't a noise sink. Think about
desirable and undesirable RF current paths before willy nilly adding grounds.
A ground can be exactly the wrong thing to have.

Remember that balanced antennas don't need grounds to function, and shouldn't
have any RF current paths to ground (lightning suppression is a different topic).
A choke balun at the antenna feedpoint can often choke off common mode currents
on the feedline, so RF can't come back into the shack by that path. (Or leave the
shack by that path, find the antenna, and sneak back down the inside of the coax
to the radio to cause computer hash in its receiver. The problem can go either
way.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2252. Where to buy traps and motorized L/C?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: ignacy@num.ads.uga.edu
Message-ID: <36d6f996$1$vtanpl$mr2ice@news.uga.edu>
Source record: 73043

Does any vendor sell traps? Are they expensive?

Does any vendor sell motorized inductor or capacitor?

Ignacy, NO9E

2253. ATTENTION to all Kansas City Tracker USERS.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <7b6qemdbe1@news3.Belgium.EU.net>
Source record: 73044
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hello Kansas City Tracker Users.

I'm collect the names of all the available programs that being written, or suppot the kansas city tracker.

All these information wil be placed in a Database and wil be available to all of you.

On my homepage http://www.ping.be/~p4u11324/ you wil find a list of all available software.
If you know a program that not being in the list, PLEASE fill in the Question form:

If you click here, you go wright to the question form
http://www.ping.be/~p4u11324/KCT_Ques.html

Thanks to all of you !

Geert Pirens
Vissit my home page: http://www.ping.be/~p4u11324/

2254. Re: Identify these IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7b72o9$8uq$1@news8.svr.pol.co.uk>
Source record: 73045

John Mortlock wrote in message <7b6e5ulom1@news6.svr.pol.co.uk>...
>I have a Lab frequency counter made in the 70's or 80 's
>
>Some of the counter / divider / latch IC's are marked
>
>59-926-29
>69-958-79
>59-914-29
>
>Anyone know if these DTL or RTL etc ??
>
>Can they be replaced with TTL functional equivalents or are the levels
>different ?

I've discovered that these are DTL chips 926, 958 and 914.
Anyone know if DTL and TTL levels are compatible ??

John

2255. Re: PIN DIODES.. Where do you find them???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36d6cc8d.3016271718@news.online.no>
Source record: 73046

I have heard that BY100 and several other rectifier diodes will work
73
Jan-Martin LA8AK

On Fri, 26 Feb 1999 04:20:47 GMT, mmoss@mindspring.com (marvin moss)
wrote:

>I have heard that the 1N4007 will work as a PIN diode. It is the only
>one of the series fabricated so it will work.
>
>Marv
>
>On Thu, 25 Feb 1999 03:23:48 GMT, TLNixon@revealed.net wrote:
>
>>Have had this problem in the past, not able to locate diodes such as
>>MI-301 and UM9401. Any ideas where one could order a few at
>>reasonable prices????
>>
>>Terry WB0VQP
>

LA8AK@ONLINE.no

2256. HAMFEST March 7, 1999 - Lindenhurst, LI

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: W2GSB <info@gsbarc.org>
Message-ID: <GEEB2.5789$ur5.17118731@news.optonline.net>
Source record: 73047
Cross-posted to: rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

GREAT SOUTH BAY AMATEUR RADIO CLUB & SUFFOLK COUNTY RADIO CLUB
ARRL APPROVED LONG ISLAND HAMFEST - MARCH 7, 1999

On March 7, 1999 the Great South Bay Amateur Radio Club & Suffolk County Radio Club will again sponsor an indoor Hamfest. The location will be at the:

Knights of Columbus
400 South Broadway
Lindenhurst, Long Island, NY

There will be radio equipment, electronic componets, computers and access-ories, softeware, books, technical manulas, ARRL information, Amateur Radio License Exams, Door Prizes. General admission is $6.00.
Free Admission for spouses and children under 12.

VE - ARRL - 12:00 NOON
For exam candidates please remember to bring your original FCC Amateur Radio license (if licensed), any C.S.C.E. forms that are pending, plus a photocopy of each, pens, calculator, formal form of ID (preferably photo ID), and the examination fee, to the exam session. 1999 ARRL/VEC fee is $ 6.45, exact change is appreciated. Novice exams are free.
The VE team is from ISLIP ARES Group and GSBARC. Thanks guys.

For vendor and additional information pleas contact, Peter Portanova WB2OQQ at(516)541-4886. Email info@gsbarc.org

Talk-in will be via W2GSB Repeater on 146.685 4Z(136.5) PL.

Food Service during the Hamfest will be provided by members of the Knights of Columbus Council.

Information is also available during the GSBARC 2 meter info net every Monday evening at 7:00 pm on the W2GSB repeater, 146.685 -600 4Z(136.5) PL required. You may also write to:

HAMFEST 0399
P.O. Box 1356
West Babylon, NY 11704

Email: info@gsbarc.org

Visit GSBARC online at http://www.gsbarc.org/hamfest.htm or SCRC at http://www.members.tripod.com/~parasca/index/scrc.html

NEXT HAMFEST - Ocotber 24, 1999
Y2K HAMFEST - March 5, 2000 and October 29, 2000

73,
GSBARC & SCRC

2257. WTB R390A receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36D7193F.24F96BCE@buffnet.net>
Source record: 73048

I am looking to buy one of these receivers. Please respond direct with a
description, serial number and price.
Partial units considered.
--
73,

Jim n2go

2258. RLS135 pindiode TS850 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: "Humblet J." <Johan.Humblet@village.uunet.be>
Message-ID: <36D723C6.DCEB6502@village.uunet.be>
Source record: 73049

Hi,

Apparently one of the pindiodes on the RF unit (X44-3120-00) of my TS850 is QRT. The service manual says type is RLS135 (RF switch , BPF switch), used for band pass filter switching i guess... My question is , will any other pindiode do to replace this one ?

Please reply direct to : ï¿½johan.humblet@village.uunet.beï¿½

Thanks very much !!

Johan., ON7DU

2259. Q - Astro Van Radio Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: billx@bigfoot.com
Message-ID: <36d72eae.2597435@netnews.worldnet.att.net>
Source record: 73050

I own a 1990 Chevy Astro Van. I get a pulsing noise over my 10 meter radio when ever the van moves. The faster I go the more rapid the pulse becomes until it becomes a steady noise level. I believe it is from the speedometer sensor circuit. Does anyone know how to stop this radio noise.

Thank You

Bill Hayhurst KE4IDU

2260. need add-on BFO circuit !

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Mike & Coreen Smith <ve9aa@nbnet.nb.ca>
Message-ID: <36D76D3B.57C85759@nbnet.nb.ca>
Source record: 73051

--
Coreen & Michael Smith
271 Smith Road
Waterville Sunbury Co,
New Brunswick Canada E2V 3V6
<ve9aa@nbnet.nb.ca>

Hi ALL!

Does anyone have a small, SIMPLE circuit for a 455kHz BFO oscillator
using easy to find (ie: Radio-Shack type) parts?
I do have a small junkbox as well.

I've built a SW converter for my AM car radio and want to add SSB/CW.

Many thanks! ve9aa - Mike
--
Coreen & Michael Smith
271 Smith Road
Waterville Sunbury Co,
New Brunswick Canada E2V 3V6
<ve9aa@nbnet.nb.ca>

2261. 455kHz IF xfrmr color codes??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Mike & Coreen Smith <ve9aa@nbnet.nb.ca>
Message-ID: <36D78C40.3AA2D2D1@nbnet.nb.ca>
Source record: 73052
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

A silly question-but I have to ask-
Are the IF xfrmrs in radios color coded?

IE: I think I read somewhere years ago that the ones with a black
top were for 455kHz......yes?

Many thanks to Mark <mcaldera@ix.netcom.com> for furnishing me with
a nice simple cct for a 455kHz BFO. Lets see if it works, hi!

Other ccts welcome !

-- de ve9aa, Mike

Coreen & Michael Smith
271 Smith Road
Waterville Sunbury Co,
New Brunswick Canada E2V 3V6
<ve9aa@nbnet.nb.ca>

2262. Re: SWR vs impeadance mismatch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36D765DC.B04075AD@eaglequest.com>
Source record: 73053
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Ohhh yea.... now this I can sink my teeth into. Thanks!

Tim ka8ddz

dw wrote:

> On Fri, 26 Feb 1999 00:33:34 GMT, klocko@toad.net wrote:
>
> >In article <36D46613.845BCEB0@eaglequest.com>,
> >&#65533; Tim <ka8ddz@eaglequest.com> wrote:
> >> Tuning a 6m jpole,&#65533; I move the clamps up and down on the jpole for
> >> minimum SWR but I can't get it to drop to 1:1.
> >
> Check out this web page.....
> http://qrp.cc.nd.edu/qrp-l/hints/jpole/JPOLE.HTML
>
> Have fun,
> Duane

2263. atv stuff ceep

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Mike <suzn99@email.msn.com>
Message-ID: <eelhgagY#GA.300@upnetnews02.moswest.msn.net>
Source record: 73054

Diamond B3 U341 very rare,,I got it from a guy that just didn't know any better,,darn yhing is worht 350 but he taut it was busted so I got it for 22 bucks..what a stupid old bastard,,any way it is ready to go..it hav a little ware and torn from the 14 years that it was up but it was hardly used so you can take it for 178.45 blus you ship..leme no
dimdajjee
jaffejim@wa2vos.com
and visit this place to see how smart I ma
http://users.nais.com/~jaffejim/pushhere.htm

2264. magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: art <ignatz@datasync.com>
Message-ID: <7b7rac$vg5$1@news.ametro.net>
Source record: 73055
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

i am having a time trying to find #16 gauge magnet wire need about 75 foot
or so on a spool and im also looking for the largest spools of #35 or so
magnet wire.around 3lbs or so dose any one know where i can find?
now i guess you want to know what im doing with this wire? hint winding a
coil :-) tesla
thanks in advance
art
ps
please email any reply

2265. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Mike <suzn99@email.msn.com>
Message-ID: <#0DpligY#GA.289@upnetnews02.moswest.msn.net>
Source record: 73056
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Diamond B3 U341 very rare,,I got it from a guy that just didn't know any
better,,darn yhing is worht 350 but he taut it was busted so I got it for 22
bucks..what a stupid old bastard,,any way it is ready to go..it hav a little
ware and torn from the 14 years that it was up but it was hardly used so you
can take it for 178.45 blus you ship..leme no
dimdajjee
jaffejim@wa2vos.com
and visit this place to see how smart I ma
http://users.nais.com/~jaffejim/pushhere.htm
Silvio Romagnoli wrote in message <36d02d39.17201408@news.flashnet.it>...
>On Fri, 19 Feb 1999 10:55:49 -0800, bogus@supernews.com (DaveC) wrote:
>
>>As I said in the original post, I don't want to go the alarm route. We can
>>scare off the individual, but, as I said, we want to catch him/her on
>>video.
>>[...]
>
>My .002 Euro here :*)
>
>Use an old pc (486 or so) to grab images with a
>b/w Quickcam that connects to the parallel port;
>IIRC, on the net there are free programs/sources/drivers
>to do that job under Linux (free itself too).
>Then there are two solutions:
>
>1- Write a dumb program that grabs images at a reasonable
>rate (eg: one each 5 seconds), saves them on the hard
>disk, keeping the last 24 hour ones.
>Simple, but you'll need a big hard disk.
>
>2- Write a smart program that grabs images faster, compares
>them (eg: if image221.xyz != image220.xyz, then the camera
>is seeing something) then saves only the ones that
>differ, and delete the others.
>By image "different" from another I mean dark/light
>differences, you won't need image recognition for
>that purpose.
>Just make sure there are no cats/dogs in the room!:)
>
>In that way you could also make the computer dial at
>your (or police's) phone number with a prerecorded
>voice that warns about the theft in act.
>No alarm would scream, so the thief could be catched.

>
>PS. By removing the IR filter, those cameras become
>sensitive to the infrared too. Some IR "lamps" could
>make the whole thing work also in a dark environment.
>
>HTH
>
>--
>sr - null.rNOS@PAMflashnet.it <strip NOS & PAM to email>

2266. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Phil Kane <philkane>
Message-ID: <cuvyxnarpbzzynjpragrepbz.f7shdq0.pminews@nntp1.ba.best.com>
Source record: 73057
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sat, 27 Feb 1999 03:36:26 GMT, Colin Caulkins wrote:

>I would like to bypass cellular providers by having a
>transceiver in my car and another at home which is connected to
>the phone line. I'm not sure how to go about this, however. I
>know hams have been doing this sort of thing for years with
>repeaters and two-meter handhelds.

Repeaters, yes. Base stations, not unless there is a
properly licensed control operator at the base station. This
was ruled upon a LONG time ago.

>The trouble with this is that the FCC restricts what kind of
>conversation can take place on the two-meter band.

And every other ham band as well. So does international
communications law. Ham radio is not a common carrier where
"anything goes".

>If you use a repeater to, say, order a pizza, that is considered
>"commercial use" and the FCC can come down on you like a load of
>bricks.

Or a load of cheese. You are "beginning to see the light".

>Also, I'm not sure how security works on such repeater
>systems. How would I prevent someone else from using it to make
>a long-distance call?

That's the easy part. Digital or analog codes are permitted to
establish communication, and in fact the licensee/control
operator is required to ensure that unauthorized persons do not
access his/her station.

>One alternative might be to use the FRS band, since that is less
>regulated and offers some kind of rudimentary security. The
>trouble with that is, I don't know of any FRS radios with DTMF
>keypads. Are there any?

The FRS is not permitted to be interconnected with the public
telephone network so you won't find any such devices on the
market (legally).

>Better still, are there any amateur transceivers that can
>transmit a full-duplex, encrypted, digital signal? If the answer
>is no, then why is the amateur market so technologically far
>behind cellular?

The answer is no, and the reason is that amateur communications are not allowed to be encrypted for security. Say it in the clear or go to a common carrier (mobile radiotelephone, cellular, PCS) service. Nothing stops full duplex as long as it is in the clear. We have a number of 440 MHz folks who use it in the San Francisco area.

73 de Phil Kane - K2ASP

2267. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Rick Kaumeier <rkaumeier@earthlink.net>
Message-ID: <36D770AF.6296@earthlink.net>
Source record: 73058

Chuck Hanavin wrote:
>
> Bad Boys Rape Our Young Girls But Violet Gives Willingly
>
> Thats how I learned it!
>
> Chuck (W3FJJ)

Same here. Appended to that is "Get Some Now!" for the tolerance band.
Gold, Silver, None.

73, Rick Kï¿½VJ

2268. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: NOSPAMpfriedr@azstarnet.com
Message-ID: <NOSPAMpfriedr.110.00B7FBCC@azstarnet.com>
Source record: 73059

Bachelor
Boys
Rush
Our
Young
Girls
But
Veronica
Goes
Wild (for)
Silver (and)
Gold

In article <19990226013554.21773.00000174@ngol01.aol.com> n2ey@aol.com (N2EY)
writes:>From: n2ey@aol.com (N2EY)
>Subject: Re: Resistor Color Code Acronym
>Date: 26 Feb 1999 06:35:54 GMT

>Hello all,

>The "G rated" version I learned (from an old QST) is:

>"Better be right or your great big venture goes west"

>(Black brown red orange yellow green blue violet gray white)

>73 de Jim, N2EY

****
To email me, remove NOSPAM from my return address.
Anyone sending unwanted advertising e-mail to this address will be charged
$25 for network traffic and computing time. By extracting my address from
this message or its header, you agree to these terms.

2269. Crazy big Western Electric tube 5795: picture URLs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Rick Francis <research@uoft02.utoledo.edu>
Message-ID: <36D724B6.A694CC32@uoft02.utoledo.edu>
Source record: 73060
Cross-posted to: alt.ham-radio.marketplace,misc.industry.electronics.marketplace,rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

I have this cool weird old W.E. tube -- jus the thing to impress your
friends, squish your enemies. It is quite DENSE, as is the current owner
for dragging it home. Perhaps this can be rebuilt and used by someone
somewhere? Or maybe YOU want it as the ultimate item for your tube
collection! Check out the pictures in the URLs below: it has its own custom
wooden shipping/storage crate, so it COULD be shipped. Contact me if
interested, or if you know of any place that buys up stuff like this.

Thanks,
Rick Francis, rfrancis@glasscity.net
---
http://www.glasscity.net/users/rfrancis/WE5795-1.jpg
http://www.glasscity.net/users/rfrancis/WE5795Case.jpg
http://www.glasscity.net/users/rfrancis/WE5795Case2.jpg
http://www.glasscity.net/users/rfrancis/WE5795Case3.jpg
http://www.glasscity.net/users/rfrancis/WE5795cu.jpg
http://www.glasscity.net/users/rfrancis/WE5795cu1.jpg
http://www.glasscity.net/users/rfrancis/WE5795cu2.jpg

2270. PicturePacket featured in March CQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Stan Huntting <stan@sni.net>
Message-ID: <7b68nr$3v1$1@news-2.csn.net>
Source record: 73061
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.swap

PicturePacket is featured in a six-page review, starting on page 60 of the
March issue of CQ Magazine. Check it out! 73,

Stan

Stan Huntting, KW7KW (ex-KF0IA)
Email: stan@sni.net Fax: 303 444 2314
Post: 4655 Pleasant Ridge Rd., Boulder, CO 80301-1731, USA
SA Watch/KaWin/PicturePacket home page: http://www.sni.net/kawin/

2271. Re: SWR vs impeadance mismatch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: klocko@toad.net
Message-ID: <7b4q4utqs1@nnrp1.dejanews.com>
Source record: 73117
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <36D46613.845BCEB0@eaglequest.com>,
Tim <ka8ddz@eaglequest.com> wrote:
> Tuning a 6m jpole,&#65533; I move the clamps up and down on the jpole for
> minimum SWR but I can't get it to drop to 1:1.

Tim,
If it doesn't drop to 1:1, how close does it get? Depending on your radio, the antenna may work just fine even if the SWR is not exactly 1:1.

> I am moving the hose
> clamps up and down to match 50ohms which is my feedline, and I have been
> told to dip for minumum SWR.
>
> Fine, but now that I have it to a minumum, it wont dip to 1:1 should I
> now start looking at trimming the antenna? I'm not sure I understand the
> relationship of matching the feedline by tuning for minumum SWR VS the
> resonance of the antenna. If the antenna were say an inch too long would
> changing the feedpoint compensate for this? or do I move the clamps for
> min SWR THEN trim the antenna for an even better match?
>

Look at it this way. At the end of the half-wave section (where it meets the quarter wave matching section), the impedance is very high. At the bottom of the matching section, the impedance is very low. There should be a "sweet spot" somewhere in between where the impedance is exactly the impedance of the transmission line. This assumes that the impedance is real (no reactance). If you can't get a the SWR to drop down below 2:1 somewhere along the length of the matching section, then the impedance is probably reactive due to some combination of the conductor lengths and separations. In that case, you will probably have to adjust the length of the half-wave section. See a message I posted on the 24th. 73, Bill N3WK

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2272. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36D5F075.9E120D84@worldnet.att.net>
Source record: 73118

Gregory,
I'd suggest that you try to implement the whole controller in a single chip CMOS microcontroller. If you build it with a bus and external memory and I/O, you're almost sure to be frustrated by hundreds of 'birdie' responses causes by radiation from the bus. You're going to have to contend with the processor clock and all the harmonics of divided-down sub-harmnics. In general, smaller and more compact is better, and you can't get smaller or more compact then having everything on the same chip. Also, you'll want to carefully bypass the power supply to the controller, and every signal line that enters or leaves it. This is almost impossible to do on a high speed bus, so consider having a small number (1 would be good) of low speed serial busses to drive peripherals like PLL's, display, etc. This way, you can bypass them well enough to eliminate RF, but still pass the serial data. Also, consider putting the whole controller in a shielded enclosure.
Remember, your controller generates high speed waveforms with several volts Pk-Pk, and you're trying to receive signals with just a microvolt Pk-Pk. We're talking about over 1 million to one ratio, or 120 dB of isolation required. Be forewarned.

Joe

gbowne wrote:

> Dear Newsgroup,
>
> I am designing a HF Transceiver. It possibly will use a
> Motorola 68000 or a Intel 80x86 processor (have not decided which one), and
> possiblty the Texas instruments DSP Processor. It will have most of the HF
> bands; i.e. 20m, 40m, 80m,etc. It will have an LCD Display and a beautiful
> custom chassis by:
>
> Spire Audio Http://www.spireaudio.com
> Http://www.spireaudio.com/products.html
>
> Chassis will be 6" high x 17" (from left side to right side) x 10" (from
> front panel to rear panel)
>
> * will have 4 pin mic connector and 8 pin mic connector
>
> Please make suggestions to gbowne@email.msn.com
>
> Gregory Bowne
> Seattle,WA
>
> P.S. Soon after I finish the transceiver I will get my liscence! I am

> still studying for it... Been on 2m with a friend using a Kenwood TR-7400A.

2273. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be6122$a0a801e0$e6b14d0c@default>
Source record: 73119

Bad Boy Rapes Our Young Girls But Violet Gives Willingly
l l
Clinton Monica

2274. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <7b50rm$9kj@dfw-ixnews6.ix.netcom.com>
Source record: 73120
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In <7b4d42$hq3$1@nnrp1.dejanews.com> clintbrad4d@earthlink.net writes:
>
>In article <7b3nfl$eau@dfw-ixnews6.ix.netcom.com>,
> kc5egg@ix.netcom.com(Gerald Schmitt) wrote:
>
>>>> [A writer complains that he was treated weirdly by RT Systems. The
same >>
>>>> writer mis-states RT Systems' very public stance on legitimate
Upgrades of
>>>> their ADMS software. RT Systems has responded that no one in their
company
>>>> ever told that writer what he now claims in public...
>
>>> So Clint asks: Are you really a legitimate purchaser of their
software? [As
>>> opposed to someone who has "borrowed" a copy of the software from
someone
>>> else.]

The guy said in his original post that he had the level converter and
earlier software. Whereupon you question his honestly and integrity.

>
>>And here comes Gerald "Don't believe ANYTHING Clint has to say"
Schmitt:
>> Clint you truly are a jerk...what a pompus ass you are Clint.
>
>You obviously aren't a small business owner, Gerald. I doubt you have
ever
>successfully marketed anything in your career. No matter.

Actually Clint I have, I have currently own a small business in the
computer field. I make it a policy to not accuse my customers of
dishonesty. I assume that RT Systems also refrains from accusing
their customers of dishonesty. But old Clint will do it.

>
>Why you perceive a problem with someone who just hung up with RT
Systems and
>discussed this very matter and found out the truth is beyond rational
thought.
>

>Work on your inner anger somewhere else, would you please? Your
>anti-Clint rantings are in no way in the true spirit of what Amateur
Radio is
>supposed to be all about.

Oh and I suppose that accusing other amateurs of dishonesty is in the
"true spriit" of Amateur radio.

> In the mean time, I will continue to support those
>firms that treat their public well. And RT Systems treats their valid
customer
>base with respect and excellent products.

Tell me Clint what is a "valid customer" I have 3 different versions of
their product am I valid or not. I have no issue with RT Systems just
you and you stupid chamber of commerce raving. If I were RT Systems I
would tell you to shut up since you try so hard to sound like you
represent them and then insult and accuse their other customers. I must
respectfully disagree with your contention that they treat their
customers well. If you tell the truth about your "free upgrades" and
"free customer service phone numbers" and stop treating people who ask
a legitimate question like criminals then I will lay off of you but
until then ....

>
> - Clint Bradford, KE6LCS
> 909-681-6210 - Office
>
>-----------== Posted via Deja News, The Discussion Network
==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your
Own

2275. Noise Blanker Circuit for MFJ Travel Radios?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: kt4ht@aol.com
Message-ID: <19990225220028.08056.00000341@ng12.aol.com>
Source record: 73121

Anyone know of or designed a circuit for a noise blanker for the MFJ Travel Radio series (9420, 40, etc.)?

Thanks,

Mike, KT4HT

2276. Re: Solder Iron for surface mount?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: kjhales@aol.com
Message-ID: <19990225220303.05066.00000317@ng-da1.aol.com>
Source record: 73122

>I need to buy a new soldering station and would like to get one that
>will enable me to solder surface mount components as well as regular
>devices such as DIPS and resistors and such.
>
>Anyone have any recommendations?
>
>

I use a temp controlled iron that Jameco sells for a little under $100, any iron of moderate wattage and *very* fine tip will get you there. I occaisionally mount 208 pin QFPs with 0.5mm pitch. Trashed several before I developed the technique, though. Any pitch coarser than 0.5mm is a breeze.

I also have a hot-air pen from OK. It is very useful for some things, but you can easily get by without it.

It is essential that your board have a very good solder mask.

The other tools I find indespensable are cheap (strong) reading glasses from WalMart, a flux pen from Digi-Key (looks like a magic marker), and ChipQuick (magic stuff for de-soldering fine-pitch parts without destroying the PCB).

kh

2277. Re: SWR vs impeadance mismatch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: dw@sover.net
Message-ID: <36d642f8.2209356@news.sover.net>
Source record: 73123
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Fri, 26 Feb 1999 00:33:34 GMT, klocko@toad.net wrote:

>In article <36D46613.845BCEB0@eaglequest.com>,
> Tim <ka8ddz@eaglequest.com> wrote:
>> Tuning a 6m jpole, I move the clamps up and down on the jpole for
>> minimum SWR but I can't get it to drop to 1:1.
>
Check out this web page.....
http://qrp.cc.nd.edu/qrp-l/hints/jpole/JPOLE.HTML

Have fun,
Duane

2278. Re: PIN DIODES.. Where do you find them???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: mmoss@mindspring.com
Message-ID: <36d620f5.3107050@news.mindspring.com>
Source record: 73124

I have heard that the 1N4007 will work as a PIN diode. It is the only one of the series fabricated so it will work.

Marv

On Thu, 25 Feb 1999 03:23:48 GMT, TLNixon@revealed.net wrote:

>Have had this problem in the past, not able to locate diodes such as
>MI-301 and UM9401. Any ideas where one could order a few at
>reasonable prices????
>
>Terry WB0VQP

2279. Re: Complex impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <XmJiBCAV9h12Ew4G@corn2.freeserve.co.uk>
Source record: 73125

In article <01be610e$14a16330$12da52c3@p133>, Troels Pedersen
<oz3tro@altavista.net> writes
>I am thinking of making computer controlled impedance meter - but how do I
>measure the COMPLEX IMPEDANCE.
>Does anyone have any hint about were to find i diagram or how to construct
>some apperatus wich can do that?
>
>xcuse me 4 my rotten English !
>
>Vy 73 De OZ3TRO/Troels
>
>Let ur fingers do the talking - try a CW QSO (or write an email ;-)
>
try this url.
http://www.waterw.com/~njqrp/mbrproj/analyzer/analyzer.html
if you can find the coil winding details would you please pass a copy of
them to me. I have e-mailed the editor of page and , so far, had no
reply. I'm working on a similar project but by the time I've built it
the gear will be 'old hat'.. such is life.. Mike W
ps. rotten English?. you should see my Danish !! ;o)
Mike W mike@corn2.freeserve.co.uk

Never underestimate the power of Human stupidity {;o)>

2280. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-26 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990226013554.21773.00000174@ngol01.aol.com>
Source record: 73126

Hello all,

The "G rated" version I learned (from an old QST) is:

"Better be right or your great big venture goes west"

(Black brown red orange yellow green blue violet gray white)

73 de Jim, N2EY

2281. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <QUarAPAD6912EwbY@ifwtech.demon.co.uk>
Source record: 72977

Monty Northrup wrote:
>
>>There's a very important lesson here. Most hams seem to think that grounds
>>solve RFI problems, but it is very often the case that grounds make RFI
>problems
>>*worse*. Ground has no magical properties, it isn't a noise sink. Think about
>>desirable and undesirable RF current paths before willy nilly adding grounds.
>>A ground can be exactly the wrong thing to have.
>[snip]
>>Remember that balanced antennas don't need grounds to function, and shouldn't
>>have any RF current paths to ground
>>(lightning suppression is a different topic).
>[snip]
>
>That last remark is an important one, and maybe an over-riding one.

Because "lightning protection is a different topic" I didn't mention
that the installation I was describing had the coax grounded at the base
of the tower for just that purpose. It made no difference to the RFI.

Actually there wasn't any conflict between the RFI considerations and
lightning safety in that particular case. The lightning ground was in
the right place - *outside* the shack - and the direct ground lead from
the shack was only creating an additional lightning path *through* the
shack. The installation was actually safer without it.

Winding all three mains conductors into an RF choke doesn't affect mains
safety; and it does create a higher impedance to the high-frequency
components of a lightning pulse, making the path through the shack to
the mains ground less attractive.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2282. Re: 6 Meter RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <v3mUIQAxC+12Ewv6@ifwtech.demon.co.uk>
Source record: 72978

Goldreged wrote:
><<You don't say what the RFI problem is. Maybe it isn't a transmitter
>problem at all. But if your transmitted signal does need cleaning up,
>you need to think more carefully about the kind of filter you need.
>>>
>Well, I have a new IC 706 MK II radiio. Just running stock high power gets into
>my TV (fixing w/ filters & chokes) & 2 different cordless phones(have to work
>on today)
>I do want to run full legal limit. I have an amp that I'm converting. I just
>want to ensure the cleanest output I can get.
>

Your rig is almost certainly clean enough already. (In the unlikely case that it's faulty, it needs a repair, not a filter.) Making the output even cleaner will do nothing to solve the RFI problems. It will only waste the goodwill of your family and neighbors, as they witness you trying a "cure" that fails to work.

The problems are almost certainly "out there", with the appliances that are suffering the RFI - so "out there" is where you need to be working to make them more RF-proof. 6m is a particularly difficult part of the spectrum because there are lots of near-resonant lengths of leads and power cords that can act as quite effective pickup antennas.

><<You haven't said what you really want it to do... but probably not. In a
>high-Q circuit at 1.5kW, you can expect over 10kV across the tuning
>capacitor, and circulating currents of a few hundred amps. In other
>words, expect fireworks!>>
>I have some Large var caps & a couple vacuum caps & a large junkpile. If
>there's a way, I can build.
>
Sure, you could do it, but it's still the wrong thing to try...

><<Be sure about what you really need, and then check the ICE catalog or
>web page for appropriate filters.>>
>I havent heard of ICE, but I'll check your website for a link, so if it's not
>there, just post it.

ICE make a good line of RFI filters, both bandpass and lowpass. (I'm not located in the USA, but they seem to advertise in every US ham radio magazine.) But now you've explained the problem, it's pretty clear that filters on your rig are not the answer.

>Thanks alot for your help.
>I have the ARRL RFI handbook, but need more 6 Meter info.
>If you have any suggestions....

Actually, yes: join the RFI mailing list (send a "subscribe rfi" message to majordomo@contesting.com and then follow the instructions you'll receive by e-mail). Some very helpful and competent people contribute to that list, including W1RFI, the man from ARRL who "wrote the book". It's not a very busy list, so you won't be swamped with mail... I just keep my subscription ticking over in case it's needed.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2283. Re: Identify these IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: j.m.franke@larc.nasa.gov
Message-ID: <j.m.franke-2702990804490001@franke.larc.nasa.gov>
Source record: 72979

In article <7b72o9$8uq$1@news8.svr.pol.co.uk>, "John Mortlock"
<jmort@global.freeserve.co.uk> wrote:

> John Mortlock wrote in message <7b6e5ulom1@news6.svr.pol.co.uk>...
> >I have a Lab frequency counter made in the 70's or 80 's
> >
> >Some of the counter / divider / latch IC's are marked
> >
> >59-926-29
> >69-958-79
> >59-914-29
> >
> >Anyone know if these DTL or RTL etc ??
> >
> >Can they be replaced with TTL functional equivalents or are the levels
> >different ?
>
>
> I've discovered that these are DTL chips 926, 958 and 914.
> Anyone know if DTL and TTL levels are compatible ??
>
> John

They are RTL, not TTL and operate from a 3.6V source.

John

2284. Re: Help with diode in wattmeter(URM-120)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <36D7F36A.8E42085A@ibm.net>
Source record: 72980
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There is an artical in the Sept 1996 issue of QST. Page 78.

It states they are special slected 1N21 for operation in the square law area. There is a Struthers part number given as an example SS-13154-1-n where the n is a digit that identifies the diode to a specific plugin. The artical sujusts that if you have a number of the diodes, you can try them and probably find one that will work. Test in the range so that 50 mv across the 2 K ohm meter movement gives full scale. If the diode operates in the square law region at this power level and is sensitive for the low power level, it should work.

Probably most of the diodes will work, but will not be accurate.

Guess that you know that you can take the knob off the top and there is a seperate adjusting screw for each power range under the cover plate.

nw2m@qsl.net wrote:

> Greetings,
>
> I have a Struthers URM-120 wattmeter from the 1960's. I blew one of the
> diodes in the 2-30MHz slug. :-(The diode has a marking of:
>
> ALPHA D4190-A 8703
>
> It is about 3/4 of an inch long and looks like a 22 bullet with a point.
>
> Are these special diodes, or simply in this form factor to be simply
> "dropped-in"? I have access to a hobby lathe and can make a plastic "shell"
> where a conventional diode can be placed inside. Are the diodes typically
> your off the shelf items, silicon, germanium, schottky, etc?
>
> Need help with a direct replacement, or equivalent that I can make into the
> form factor.
>
> Any thoughts or recommendations on diode performance over the HF band
> (3-30MHz) would also be helpful. Something tells me that a high performance
> switching diode would work just fine.... as the military stuff is over
> engineered for good reasons. I will look in the ARRL books to see what they
> use in their 2-30MHz watt meters.
>
> Thanks in advance,
>
> Al, NW2M
>
> -----------== Posted via Deja News, The Discussion Network ==----------

> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2285. Need: schematic for AX-190 receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Xva3toX@rac.ca
Message-ID: <36d7f6bb.0@lightning.ica.net>
Source record: 72981

I am in need of a schematic for the Allied/Radio Shack AX-190
Ham/Shortwave receiver.

Please remove both 'x' in my address
(inserted for anti-spamming) to reply.

Thanks.
Hugh VA3TO

2286. anti-muting tuning mod for Sony 2010

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36D7FE54.85234C4D@asu.uswest.net>
Source record: 72982
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

I read somewhere a while back that there is a mod for the Sony 2010 SWL receiver that allows tuning without the receiver muting in between 100 Hz steps. Allegedly, it really improves tuning weak stations and tuning under heavy QRM. Sounds sensible to me. I'd be happy if it just removed the "thumping" between tuning steps and the accompanying flicker of the S-meter and rapid peaking/nulling of the audio.

Can someone point me to a net-based or print source for this mod? I have the Sony service manual, schematics included, so if someone can guide me to the info I need to perform this mod, or describe even just the general principle (if such things can be safely generalized, hi, hi) I'd be forever in your debt. Well, OK, for a few hours anyway. . .
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

2287. 74XX and 74LSXXX for sale or trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: marwynnXXX@c-com.net
Message-ID: <lgTB2.21351$yv3.8418@news2.giganews.com>
Source record: 72983

I cleaning up my ham shack. I have the following IC's for sale or trade. This list is only about 5 - 10% of all I have. I am looking to sell or trade them with some one that can use them. These are brand new chips. Quanity count is by eye only , I picked 3 bags and gave them a count and found all them to have more than I have stated. I don't guarntee the count , but I tried to be conserative. Some of the IC's are the AJ case but most are AN. Several manufactures. If anyone is interested, I will catalog the rest of the IC's.

Part # Quanity
Total

7400 25
7401 50
7402 100
7404 75
7412 50
7425 50
7493 50
74107 50
74121 100
75451 50
74LS10 10
74LS11 50
74LS279 125
74LS30 10
74LS73 150
74LS74 50

2288. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <htTB2.322$wp.13976@news.goodnet.com>
Source record: 72984
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Colin Caulkins wrote
>I would like to bypass cellular providers by having a transceiver in my
>car and another at home which is connected to the phone line.

It's not that easy. Cellular is a low power, multi-site solution. In order
to
do what cellular does, you are going to need a very high antenna, or
oodles of power at both the home and handheld.

>Also, I'm not sure how security works on such
>repeater systems. How would I prevent someone else from using it to make
>a long-distance call?

The best plan would be to shut off long distance. Most repeater controllers
have this function.

> One alternative might be to use the FRS band, since
>that is less regulated and offers some kind of rudimentary security. The
>trouble with that is, I don't know of any FRS radios with DTMF keypads.
>Are there any?

FRS (Family Radio Service) is a very low power service. Tones are not
legal,
because the FRS shares frequencies with repeaters and they petitioned the
FCC to make sure tones weren't legal. The audio also uses 2.5 kHz deviation
I believe. It's a real failure, not anything like what Tandy wanted.

> Better still, are there any amateur transceivers that can
>transmit a full-duplex, encrypted, digital signal? If the answer is no,
>then why is the amateur market so technologically far behind cellular?

It's not a technical problem. Ham radio is not in competition with
commercial
radio. If it was a free-for-all then Hams would bury the commercial market,
because we don't have to have standards before deploying the service.

It's a legal issue. We are restricted by law. The law says no codes,
ciphers,
or anything to hide the content.

Just pay your Cell phone bill, and quit dreaming of getting a free ride in
life.

Steve

2289. schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: trinity santos <t.r.santos@worldnet.att.net>
Message-ID: <7b90gt$6s8@bgtnsc03.worldnet.att.net>
Source record: 72985

I need to find all possible scematics on bi-linear amplifers and export radios please. when recived please send to t.r.santos@worldnet.att.net thanks

2290. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <MYyE+IA7k$12Ew5z@corn2.freeserve.co.uk>
Source record: 72986
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

In article <7b7rac$vg5$1@news.ametro.net>, art <ignatz@datasync.com>
writes
>i am having a time trying to find #16 gauge magnet wire need about 75 foot
>or so on a spool and im also looking for the largest spools of #35 or so
>magnet wire.around 3lbs or so dose any one know where i can find?
>now i guess you want to know what im doing with this wire? hint winding a
>coil :-) tesla
>thanks in advance
>art
>ps
>please email any reply
>
>
If 'magnet wire' is an americanism for enamaled copper wire, try your
local alternator/electric motor re-wind shop. If you mean Steel wire..
no ideas..

Mike W mike@corn2.freeserve.co.uk

Never underestimate the power of Human stupidity {;o)>

2291. Need 572b tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19990227103817.23497.00000838@ng-fu1.aol.com>
Source record: 72987

Thanks for reading.

Recently I dropped my sb200 and now at least one tube has a short.
Need 2 good 572b pulls, or extra new ones you may have no need for.
Will pay decent price.
What have you?

Thanks,
Bennett ko2ok,
in NJ.

2292. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36D81F70.1C0B@ibm.net>
Source record: 72988
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Gerald Schmitt wrote:
> There are any nunber of amateur dual banders that are full duplex
> encryption would be easy but is not legal on the amateur bands thus
> no equipment of that nature is available for general amateur sales.
> So amateur radio is not so technologically far behind cellular just
> a bit hide bound by regulation.

It would be easy to digitize the voice using one of the methods
acceptable to the FCC. That would effectively encrypt it as far
as 99.9% of amateurs are concerned.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

2293. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Dick Carroll <dixieNS@townsqr.com>
Message-ID: <7b96jp$d8v$2@208.207.71.172>
Source record: 72989
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Colin Caulkins wrote:
>
Better still, are there any amateur transceivers that can
> transmit a full-duplex, encrypted, digital signal? If the answer is no,
> then why is the amateur market so technologically far behind cellular?

Simple answer: Hundreds and hundreds of billions of $$$$$$$$
Plus a *totally* different set of objectives, goals and
rules.

Dick c

2294. Simple data tranceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: danblair@hotmail.com
Message-ID: <7b99i0$lr7$1@nnrp1.dejanews.com>
Source record: 72990
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hi,

I have a TI-83 graphing calculator that has a data jack on the back for connecting 2 calculators for simple communication. After figuring out the protocol, it looks like there are only 3 lines, say A, B, and ground. A and B are both bi-directional, and have two states - high (+5 volts) and low (0 volts). Does anyone know of any schematics that could be used for this? I want to do something as simple as possible (I'd think that this would be a lot more simple than a voice transmission). If possible, I'd like to be able to transmit a couple miles. Does anyone have any plans/schematics for something like this? Thanks.

Dan

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2295. Re: Needed: High Current Power Supply Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Barry McCarthy <barry@g0wbf.qthr.freeserve.co.uk>
Message-ID: <8CZs5BAWaC22Ew3y@g0wbf.freeserve.co.uk>
Source record: 72991

In article <36D47E40.C5C1A185@ofm.com>, Bradley Risk <Brad_R@ofm.com>
writes
>I'll check that out. I hadn't seen it.
>
>Thanks!
>
>Brad
>N7IVV
>
>
>
Take look at http://www.nettaxi.com/citizens/ei9gq
or at http://www.qsl.net/ei9gq

Ed has a circuit for high current PSU using BUZ.... FET's. Should do
you nicely.
--
Barry McCarthy

G0WBF (remove qthr)

2296. FS: RF POWER AMP PARTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2702990956270001@murphy1.cts.com>
Source record: 72992

RF POWER AMP DECK. WITH 2 EA. 4CX250K/JAN-8245. WITH SOCKETS, MOUNTS, NEW COND. $90 EA.

PICT AT:

http://209.239.34.153/murphyjunk/5_VAC_CAPS_RELAYS_MIS_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

2297. FS: RF RELAYS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2702990958030001@murphy1.cts.com>
Source record: 72993
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

3 POLE BNC CONN RF RELAYS.

OPERATE ON 11-32 VDC $12 EA.

GOOD TO 400 MHZ AT 100 WATTS

PICT AT:

http://209.239.34.153/murphyjunk/5_VAC_CAPS_RELAYS_MIS_ITEMS

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401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

2298. Source of 9 Ghz Pucks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Demon <nick@g0hik.demon.co.uk>
Message-ID: <920139127.29762.0.nnrp-11.c2de5476@news.demon.co.uk>
Source record: 72994

Hello,
I recently went to the VHF Convention and had my interest in ATV re-kindled,
by going to one of the lectures, so I now would like to convert one of the
surplus LNB's I have, for the 10 Ghz band.
So can anyone tell me where I can obtain a dielectric resonator, to enable
me to convert an LNB.
Thankyou, Nick G0HIK

2299. Re: bleeder resistors/teflon wire HELP.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: ko5d@postoffice.swbell.net
Message-ID: <36D8511B.4C504BA2@postoffice.swbell.net>
Source record: 72995
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.cb,rec.radio.amateur.boatanchors

hi,i have the values,but the 5 inch factor is a killer,,,let me check my junk...you are looking for 400k at 100 watt ??

NI4L wrote:

> need 100 k @ 100 watt or 200k would work not over 5 inches long.
> looking for 400k total. space is big consideration dont have much.
> thanks every one for the info on the other resistors.
> need 10 feet #10 teflon wire with die electric hv

2300. Re: Wanted: HBR-12 Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: ko5d@postoffice.swbell.net
Message-ID: <36D852A4.633835B8@postoffice.swbell.net>
Source record: 72996

Chris,I may have just what you want.Although,what i have id a hbr-15.This was a update on the 12.Yes uses 3 plug in coils per band.This was built by a ham whom I used to know.He is a sk now.It was his receiver,beautiful work and a schematic.Also all the coils.Chris this is a large receiver,in a large bud cabinet.It was based on a article,I believe by doug DeMaw,about 55-57...73 let me know if you want more info...john,ko5d

TubePwr813 wrote:

> I used to have one of these RX's that an old ham built. I believe it was from
> an article in the 50's. It utilized 3 plug in coils for each band.
>
> I would be interested in having one of these sets. The one I had used an
> Eddystone type dial.
>
> Chris KX0Y

2301. Re: Wanted: HBR-12 Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: ko5d@postoffice.swbell.net
Message-ID: <36D852CF.3E246098@postoffice.swbell.net>
Source record: 72997

also eddystone type dial on this one as well...

TubePwr813 wrote:

> I used to have one of these RX's that an old ham built. I believe it was from
> an article in the 50's. It utilized 3 plug in coils for each band.
>
> I would be interested in having one of these sets. The one I had used an
> Eddystone type dial.
>
> Chris KX0Y

2302. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Colin Caulkins <caulkins@user2.teleport.com>
Message-ID: <iuYB2.3017$hC.1530750@news1.teleport.com>
Source record: 72998
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In rec.radio.amateur.misc Steve Sampson <ssampson@usa-site.net> wrote:

> It's not that easy. Cellular is a low power, multi-site solution. In order
> to do what cellular does, you are going to need a very high antenna, or
> oodles of power at both the home and handheld.

A range of ten miles would suit me, since that would get across the city.
How much power would that require? I'm assuming the mobile unit would be
something installed in my car, rather than a handheld.

> It's not a technical problem. Ham radio is not in competition with
> commercial radio. If it was a free-for-all then Hams would bury the
> commercial market, because we don't have to have standards before
> deploying the service.

And what a crying shame *that* would be. I consider the Internet to be
the model for all communications. The Internet has done quite well
without FCC regulation. New protocols are being developed all the time
and users accommodate by upgrading their software. When their hardware
can no longer handle the software they want to run, they upgrade that as
well. The main problem with the Internet is that it requires a costly
infrastructure that must be paid for somehow. Unlike fiber-optic cables,
however, radio frequencies exist naturally and therefore should be
accessible for free.

> It's a legal issue. We are restricted by law. The law says no codes,
> ciphers, or anything to hide the content.

Attempts by the government to restrict the use of encryption on the
Internet are scoffed at. Why are hams so willing to accept such
restrictions?

> Just pay your Cell phone bill, and quit dreaming of getting a free ride in
> life.

The government built the roads and highways and therefore has the right to
regulate their use. The government did not, however, build the radio
spectrum. Much as they would like to think otherwise, the government
doesn't own the airwaves any more than they own the air. Should I pay a
license fee for the right to breathe? After all, every lungfull of air I
take in is a lungfull of air someone else could be using, and that person
might be engaged in more productive enterprises than I am. Perhaps the
government should sell large amounts of air to commercial interests who
would then resell it to individual users? Of course, there would also be
amateur air-breathers, but they must be licensed and their use of the air
restricted (no playing of wind instruments or blowing up balloons).

I think if the FCC had its way, it would sell off the entire radio spectrum to big business. But (fortunately or unfortunately) many hams are retirees with lots of time on their hands to petition the FCC and lobby congress. They offer up decades-old stories of ham operators who were instrumental in emergency situations. So, large amounts of spectrum continue to be devoted to hams talking about little other than their equipment and what bullshit the no-code license is.

2303. fs:RI loudenboomer(ht-45) rf deck

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: ko5d@postoffice.swbell.net
Message-ID: <36D854DD.F116F98A@postoffice.swbell.net>
Source record: 72999

Hello,have a rf deck,it is the loudenboomer,or ht-45.This is the rf deck only,has a 3-400.chimmney(condition unknown).deck looks good,no burns or arcs.dont need the deck,make a decent offer,will sell deck or part out...73 tnx de john,ko5d

2304. ID of HV Diodes and Power Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: "Fred L. DeRoos" <flderoos@mmmpcc.org>
Message-ID: <36D85846.6AF2@mmmpcc.org>
Source record: 73000

I'm digging through some stuff in preparation for building an xmitter and came across some high voltage diodes and a power tube for which I have no specs. Can anyone provide specs for the following high voltage diodes:

1. Siemens B96-H090
2. VARO VC-80
3. IR 67D050H04LNN

or the specs for a Philips QB 3.5/750 tube. It is almost exactly the same size as a 4-400 and has five pins and a plate cap.

Thanks,

Fred
WA0GMH

2305. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <%xZB2.345$wp.15246@news.goodnet.com>
Source record: 73001
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Colin Caulkins wrote:
>Steve Sampson wrote:
>
>> It's not that easy. Cellular is a low power, multi-site solution. In
order
>> to do what cellular does, you are going to need a very high antenna, or
>> oodles of power at both the home and handheld.
>
>A range of ten miles would suit me, since that would get across the city.
>How much power would that require? I'm assuming the mobile unit would be
>something installed in my car, rather than a handheld.

Depends on the city. The number of buildings, interference, etc. I'd
probably
try 50 Watts on 440 to start.

Here's how you do it. Go to the Hamtronics Web page, and purchase a
2 meter transmitter, at about 50 Watts. Then buy their 440 receiver. Now
all
you need is their cheapo repeater controller, and a Dual-Band antenna and
duplexor (Comet makes a good system), and you are done. Just buy a
dual-bander for the car. You'll need about 50 Watts to go 10 miles with
varying terrain.

As long as you use this for personal use, or for emergencies, then you are
fully compliant with the law. If you use this for business, then you are in
competition, and will be shut down.

>> It's not a technical problem. Ham radio is not in competition with
>> commercial radio. If it was a free-for-all then Hams would bury the
>> commercial market, because we don't have to have standards before
>> deploying the service.
>
>And what a crying shame *that* would be. I consider the Internet to be
>the model for all communications. The Internet has done quite well
>without FCC regulation. New protocols are being developed all the time
>and users accommodate by upgrading their software. When their hardware
>can no longer handle the software they want to run, they upgrade that as
>well. The main problem with the Internet is that it requires a costly
>infrastructure that must be paid for somehow. Unlike fiber-optic cables,
>however, radio frequencies exist naturally and therefore should be
>accessible for free.

You've gone off on a tangent here. #1 you want a telephone system that is
basically free (after purchasing the equipment). If we commercialize the

Ham bands and go into competition with capitalists and big business, we
will lose. The reason is, they will buy our frequencies, and we'll be done
as
a hobby. Hams do not have 1% the PAC power that the commercial people
have.

>
>> It's a legal issue. We are restricted by law. The law says no codes,
>> ciphers, or anything to hide the content.
>
>Attempts by the government to restrict the use of encryption on the
>Internet are scoffed at. Why are hams so willing to accept such
>restrictions?

You don't need encryption for a hobby. Encryption means privacy, and
Ham radio is public. We accept such restrictions because it is a law.
Just like Freon and Crack Coccaine are laws. You can do whatever
you want, but as Grandpa asked: "are you willing to do the time, or
pay the fine?" I suspect it's cheaper to buy a scrambled cell phone.

>> Just pay your Cell phone bill, and quit dreaming of getting a free ride
in
>> life.
>
>The government built the roads and highways and therefore has the right to
>regulate their use. The government did not, however, build the radio
>spectrum.

Wrong. They did. Before the FCC and regulations, radio operators just
set up shop and jammed each other. The Government was needed to
regulate and impose standards. Same with airplanes. Ask all the Rock
Stars, and Country Music stars who died in plane crashes, whether they
think regulations are bad? (if you can).

> Much as they would like to think otherwise, the government
>doesn't own the airwaves any more than they own the air. Should I pay a
>license fee for the right to breathe? After all, every lungfull of air I
>take in is a lungfull of air someone else could be using, and that person
>might be engaged in more productive enterprises than I am. Perhaps the
>government should sell large amounts of air to commercial interests who
>would then resell it to individual users? Of course, there would also be
>amateur air-breathers, but they must be licensed and their use of the air
>restricted (no playing of wind instruments or blowing up balloons).

This reasoning is completely flawed. Here's what I propose. #1 You
decide if you want to persue a technical problem, or #2, a legal rights
problem. You are a child of the "Individual Rights" machine in America.
I'm from another Era, and that was "Community Rights." In my youth we
worried about what was good for "the people" and not what was
"good for me." Would having a free-for-all in the radio spectrum be
good for "the people" or even good "for me?"

Now, take your chosen thesis and develop it into a well reasoned essay
that is *against* what you believe should be the law.

Come back with the essay, and I will give you College Credit for anything
I feel is above C quality. it. It must be at least 2000 words, and have a
bibliography with at least five referenced works (Books, not magazines,
or newspapers, or internet). You should be able to do this in three or four
evenings at the Community College Library.

>I think if the FCC had its way, it would sell off the entire radio
>spectrum to big business. But (fortunately or unfortunately) many hams
>are retirees with lots of time on their hands to petition the FCC and
>lobby congress.

We exist at the benevolence of the ruling class. As the Ham population
dies off, Hams will be in no position to maintain the spectrum allocated.
Unless some plan is in the works, Ham radio as we know it, will pretty
much be dead above 50 MHz, by the next decade.

>They offer up decades-old stories of ham operators who
>were instrumental in emergency situations. So, large amounts of spectrum
>continue to be devoted to hams talking about little other than their
>equipment and what bullshit the no-code license is.

You can turn Ham radio into a big internet and telephone company, but it
will cost just as much as if you just paid for what is available now.

Steve
"Professor at Large"

2306. Trade: 900mhz Amps, antennas, filters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be629e$8725aa60$a2eee6ce@kovar.inav.net>
Source record: 73002

I have many fine working items for 902MHz with no hardware modification:

Antenna specialist 8 pole tunable helical filters.
Motorola tunable band and gain low noise preamps.
GE/ Ericson 45watts continuos duty RF amps with miliwatt drive levels.
Scala, Decibel, and Katrine broad band 9 dbd gain omni antennas.
Motorola receiver 6 way and 4 way splitters.

All of this is commercial high end manufactured.
The filters are fantastic to look at on the tracking generator.
Any trades or offers will be considered.
Preference will be given to Midwest candidates to avoid shipping.

I will trade the above equipment to anyone interested.
I would like to see more interest in using the 900 MHz band.
I need easy to convert transceivers.
All of my transceivers have non tunable Ceramic filters and are set at
824 to 849MHZ on receive with 45 Mhz split.

I have schematics of all the equipment if anyone would like to try
rework a whole Unit.

kovar@ia.net
319-378-9852
Jack Kovar
k0var
Iowa

2307. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36D870AB.5BDEB22D@erols.com>
Source record: 73003

The book doesn't mention pizza specifically but that's the way I read of the rules. So long as Pizza Hut doesn't get a ham license to take pizza orders. Some of the control ops around get really hyper about calling any business though (and I guess that's there prerogative since they have control of the repeater). Some don't want you to call your wife at her office even if the discussion is not business.

Tiuk wrote:

> >>If you use a repeater to, say, order a pizza, that is considered
> >>"commercial use" and the FCC can come down on you like a load of
> >>bricks.
>
> It may be my foggy brain or perhaps the time of night but I seem to remember
> reading in QST a couple of years ago that ordering a pizza through an
> auto-patch was not considered commercial use of the ham bands. Anyone with a
> current FCC ruleback have the correct answer to this question?
>
> 73's Roman Dementiuk, N2CDD

2308. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36D87690.BA997908@erols.com>
Source record: 73004
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Mouser Electronics has magnet wire (#16) but I don't see anyone with #35.
That's pretty small wire. Mouser has #28 if that helps.

art wrote:

> i am having a time trying to find #16 gauge magnet wire need about 75 foot
> or so on a spool and im also looking for the largest spools of #35 or so
> magnet wire.around 3lbs or so dose any one know where i can find?
> now i guess you want to know what im doing with this wire? hint winding a
> coil :-) tesla
> thanks in advance
> art
> ps
> please email any reply

2309. Re: CB --> 10m or 6m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Walter Wickersham <waffle@oz.net>
Message-ID: <36D87C45.58FBE055@oz.net>
Source record: 73005

Unfortunately, I cannnot locate that book... :(. do you know any place
i can get a copy?.. (even ordering it mailorder)?

Tim wrote:
>
> See if you can find or borrow a copy of the 10FM book that Bob Heil
> wrote. It will give you the complete skinny on converting to 10m AM/CW or
> FM using that board.
>
> Tim
>
> Walter Wickersham wrote:
>
> > I have a GE ssb cb that i would like to convert to either 10 or 6
> > meters,
> > i dont have the model number off hand, but I know it uses a 02a pll..
> >
> > any help would be appreciated..
> >
> > -Walter Wickersham
> > KD7AUR

2310. Re: Help with diode in wattmeter(URM-120)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36d85374.3116357490@news.online.no>
Source record: 73006
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Sat, 27 Feb 1999 08:30:18 -0500, Ralph Mowery <rmowery@ibm.net>
wrote:

>There is an artical in the Sept 1996 issue of QST. Page 78.
>
>It states they are special slected 1N21 for operation in the square law area.
>There is a Struthers part number given as an example SS-13154-1-n where the n is
>a digit that identifies the diode to a specific plugin. The artical sujusts
>that if you have a number of the diodes, you can try them and probably find one
>that will work. Test in the range so that 50 mv across the 2 K ohm meter
>movement gives full scale.

is it a 25ΩA-meter?

>If the diode operates in the square law region at
>this power level and is sensitive for the low power level, it should work.
>
>Probably most of the diodes will work, but will not be accurate.
>
>Guess that you know that you can take the knob off the top and there is a
>seperate adjusting screw for each power range under the cover plate.
>
>nw2m@qsl.net wrote:
>
>> Greetings,
>>
>> I have a Struthers URM-120 wattmeter from the 1960's. I blew one of the
>> diodes in the 2-30MHz slug. :-(The diode has a marking of:
>>
>> ALPHA D4190-A 8703
>>
>> It is about 3/4 of an inch long and looks like a 22 bullet with a point.
>>
>> Are these special diodes, or simply in this form factor to be simply
>> "dropped-in"? I have access to a hobby lathe and can make a plastic "shell"
>> where a conventional diode can be placed inside. Are the diodes typically
>> your off the shelf items, silicon, germanium, schottky, etc?
>>
>> Need help with a direct replacement, or equivalent that I can make into the
>> form factor.
>>
>> Any thoughts or recommendations on diode performance over the HF band
>> (3-30MHz) would also be helpful. Something tells me that a high performance
>> switching diode would work just fine.... as the military stuff is over

>> engineered for good reasons. I will look in the ARRL books to see what they
>> use in their 2-30MHz watt meters.
>>
>> Thanks in advance,
>>
>> Al, NW2M
>>
>> -----------== Posted via Deja News, The Discussion Network ==----------
>> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>

LA8AK@ONLINE.no

2311. Re: Want to put RS CB HT on 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Walter Wickersham <waffle@oz.net>
Message-ID: <36D884CB.652A204F@oz.net>
Source record: 73007

Can you give me a website, or phone # to "JAN or International", I need
a 10.4MHz Crystal to convert a 40ch am/ssb cb to 10m.

waffle@oz.net
kd7aur

"Mustang Maniac!" wrote:
>
> In article <36d03ad7.771366@news.erols.com>, wmeara@erols.com says...
> >
> >I picked up an old RADIO SHACK TRC-201 Hand held CB 2 watt
> >3 channel radio. It uses three crystals in the receiver and
> >three in the transmitter. The crystals are very small (like
> >the size of your smallest fingernail) and correspond to the
> >three channels. Any ideas on how to convert this thing to
> >ten meter AM? What kinds of crystals were they using in these
> >rigs? Third Overtone?
>
> 10m conversion on your handheld CB would be simple:
> - Order crystals for the desired operating frequencies from JAN
> or International (just tell them what kind of CB it is; they
> should have the tech info on it in their files);
> - plug the crystals in;
> - tweak up the transmitter coils for maximum output, starting
> with the oscillator and working toward the PA;
> - tweak up the receiver front end coils for maximum received
> signal strength (the i-f coils shouldn't need much tweaking).
> That's it.
>
> 73,
> Dean / K5DH

2312. ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Andrew Peppper <haggis@superior.net>
Message-ID: <36d896bf.0@nebula.superior.net>
Source record: 73008

Wonder if anyone can give me any answers... I have built a 2M to 6M Xverter from Ten Tec.. Set it up as per the manual.. When using it I get a lot of noise (S7-S9) in the 50 to 52Mhz part of the band... I was under the impression that 6M was very quiet... Has anyone else experienced this... I have also tried different antennas with no avail... Could this be local interference ??? when I disconect the antenna the noise dissapears which makes me feel it's local and not generated internally..
Thanks in advance for any suggestions :)

Andrew Pepper
GM1YMI/W2

2313. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: "Prof. Curt M. Breneman" <brenec@rpi.edu>
Message-ID: <36D8A09B.13B9@rpi.edu>
Source record: 73009
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Colin Caulkins wrote:
>
> In rec.radio.amateur.misc Steve Sampson <ssampson@usa-site.net> wrote:
>
> > It's not that easy. Cellular is a low power, multi-site solution. In order
> > to do what cellular does, you are going to need a very high antenna, or
> > oodles of power at both the home and handheld.
>
> A range of ten miles would suit me, since that would get across the city.
> How much power would that require? I'm assuming the mobile unit would be
> something installed in my car, rather than a handheld.
>
> > It's not a technical problem. Ham radio is not in competition with
> > commercial radio. If it was a free-for-all then Hams would bury the
> > commercial market, because we don't have to have standards before
> > deploying the service.
>
> And what a crying shame *that* would be. I consider the Internet to be
> the model for all communications. The Internet has done quite well
> without FCC regulation. New protocols are being developed all the time
> and users accommodate by upgrading their software. When their hardware
> can no longer handle the software they want to run, they upgrade that as
> well. The main problem with the Internet is that it requires a costly
> infrastructure that must be paid for somehow. Unlike fiber-optic cables,
> however, radio frequencies exist naturally and therefore should be
> accessible for free.
>
> > It's a legal issue. We are restricted by law. The law says no codes,
> > ciphers, or anything to hide the content.
>
> Attempts by the government to restrict the use of encryption on the
> Internet are scoffed at. Why are hams so willing to accept such
> restrictions?
>
> > Just pay your Cell phone bill, and quit dreaming of getting a free ride in
> > life.
>
> The government built the roads and highways and therefore has the right to
> regulate their use. The government did not, however, build the radio
> spectrum. Much as they would like to think otherwise, the government
> doesn't own the airwaves any more than they own the air. Should I pay a
> license fee for the right to breathe? After all, every lungfull of air I
> take in is a lungfull of air someone else could be using, and that person

> might be engaged in more productive enterprises than I am. Perhaps the
> government should sell large amounts of air to commercial interests who
> would then resell it to individual users? Of course, there would also be
> amateur air-breathers, but they must be licensed and their use of the air
> restricted (no playing of wind instruments or blowing up balloons).
>
> I think if the FCC had its way, it would sell off the entire radio
> spectrum to big business. But (fortunately or unfortunately) many hams
> are retirees with lots of time onis their hands to petition the FCC and
> lobby congress. They offer up decades-old stories of ham operators who
> were instrumental in emergency situations. So, large amounts of spectrum
> continue to be devoted to hams talking about little other than their
> equipment and what bullshit the no-code license is.

Your cell-phone or PCS bill is not a fee for using the RF spectrum -
it's a service fee to pay for the cell-site infrastructure and personnel
involved in keeping it all working. Let's keep our feet on the ground
here folks...

Curt Breneman
KC2EBP

2314. Re: ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <36D8A968.B8F46E65@ibm.net>
Source record: 73010

From what I have seen around my house, the 6 meter band seems to be the worst band from 3 to 432 mhz. Seems that every computer I have around the house wnats to put out some trash in that band. Talking with others, seems that many devices such as tvs, clocks and other items that have microprocessors in them want to give off something in that band also.

Andrew Peppper wrote:

> Wonder if anyone can give me any answers... I have built a 2M to 6M Xverter
> from Ten Tec.. Set it up as per the manual.. When using it I get a lot of
> noise (S7-S9) in the 50 to 52Mhz part of the band... I was under the
> impression that 6M was very quiet... Has anyone else experienced this... I
> have also tried different antennas with no avail... Could this be local
> interference ??? when I disconect the antenna the noise dissapears which
> makes me feel it's local and not generated internally..
> Thanks in advance for any suggestions :)
>
> Andrew Pepper
> GM1YMI/W2

2315. Re: Needed: High Current Power Supply Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Angel Vilaseca <avilaseca@popmail.smis.ch>
Message-ID: <36D83CDF.A8E21A6E@popmail.smis.ch>
Source record: 73011

Bradley Risk a ï¿½crit:
>
> I'm trying to build a 20+Amp 13.8V power supply, but am having a hard
> time finding a good schematic for one. Anyone have any good plans, or
> URL

How about taking three surplus PC power supplies (you can have them for less than $10 each) and wiring the 5 Volt outputs in series?

Many are rated at the 20+ amp you need on their 5 V outputs.

Sure, you will have 15 V instead of 13.8V. Just add a couple of (heatsinked!) high current diodes in series to drop the voltage a bit.

Angel Vilaseca HB9SLV

2316. Re: Wanted: Surveillance camera, free, cheap, or as a tax deduction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Lenny <captainvideo46@hotmail.com>
Message-ID: <36D8B750.895@hotmail.com>
Source record: 73012
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

DaveC wrote:
>
> In a thread in this n.g. I asked for suggestions on catching a thief on
> video who is pilfering office equipment. Thanks to all who have offered
> such creative ideas.
>
> Now I need a video camera, the smaller the better. This volunteer center
> where I've been asked to help catch the pilferer is -- how do you say --
> not cash-heavy. So, I'm asking for the loan of a survelliance camera, or
> as a tax write-off (the center is an IRS non-profit organization). Or, if
> you must have cash, will consider this last.
>
> Camera must have NTSC video output, and require only a single power
> source. Color prefered, but b/w is acceptable.
>
> Sorry about my modified return address, but I hate getting spammed.
> My correct address is provided below if you choose to e-mail me.
>
> Thanks,
> Dave
>
> --
> Dave Carpenter
> Sound Logic
>
> Note: "From" address is invalid.
> Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.
There is a company called Matco. They advertise in Nuts And Volts
magazine. They have a board pinhole camera advertised for 43 dollars.
Check it out. Lenny Stein

2317. Xtal Set wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7bah9d$5ng@newsops.execpc.com>
Source record: 73013

Does anybody have plans for a real kick-ass crystal set? I mean something
far beyond the 1 coil/1 cap design.

Yes, I've seen the Xtal Set Society page. Very nice and I will join it.
In the meantime..... anybody have anything good?

Thanks

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm
...
... "D'Oh!" said Troi as Enterprise fell towards the planet.

2318. RF system simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7bavprpci1@news.netcologne.de>
Source record: 73014

Hi,

are there other (cheap) RF system simulation (not circuit simulation)
programs like RF
Workbench?

Peter

2319. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36D735C7.E55065A4@worldnet.att.net>
Source record: 73062

mas wrote:

> How about more isolation?
>
> I remember -174dBm as the noise in a 1 Hz bandwidth in a resistor.

The radio doesn't receive in a 1 hz bandwidth, it receives in a 500 hz or 2 khz bandwidth. Doesn't matter though. No matter what bandwidth it has, the ratio between 1vpp and 1uVpp is still 120 dB.

2320. Re: SWR vs impeadance mismatch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Fujitsu <k5zpz@cetlink.net>
Message-ID: <01be61ec$137a2260$5805c6d1@default>
Source record: 73063
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Tim
Try checking SWR at higher point in the band and see if swr increases or
decreases,if it decreases, antenna is too short.
73 Jim K5ZPZ

Tim <ka8ddz@eaglequest.com> wrote in article
<36D46613.845BCEB0@eaglequest.com>...
>

2321. Re: Complex impedance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be61e9$0cd962c0$181e3bcb@default>
Source record: 73064

```
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Mike W <mike@corn2.freeserve.co.uk> wrote in article
<XmJiBCAV9h12Ew4G@corn2.freeserve.co.uk>...
> In article <01be610e$14a16330$12da52c3@p133>, Troels Pedersen
> <oz3tro@altavista.net> writes
> >I am thinking of making computer controlled impedance meter - but how do
I
> >measure the COMPLEX IMPEDANCE.

Elektor had a microcontrolled LCR meter design not long ago which looked
quite impressive - also described the theory of measuremnt

Richard
```

2322. Re: 6 Meter RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be61e9$d6b653a0$181e3bcb@default>
Source record: 73065

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Goldreged <goldreged@aol.comJUNKBLOK> wrote in article
<19990225172252.27311.00000239@ng17.aol.com>...
> I read about the stripline filter for 6 Meters in the ARRL RFI book.
> I need a unit for full legal limit. Will it make the grade?

I used a simple coax stub quite successfully to get rid of TVI in the
family TV - (1/4 wave open at the far end) - just trimmed it till the TVI
disappeared. Obviously it was just intermod in the TV front end. You could
do the same for your neighbours if you are on speaking terms

Richard

2323. Re: 6 Meter RFI?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990226201725.29934.00000639@ng133.aol.com>
Source record: 73066
Body handling: HTML body converted to readable text

<>

Well, the TV problem was just the VCR. I have a couple cordless phones that are being a pain.
I want to filter the output of the transmitter, now.

Thanks...
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

2324. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: maddog@io.com
Message-ID: <36d75176.1165496@news.io.com>
Source record: 73067

On Fri, 26 Feb 1999 18:35:07 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>There's a very important lesson here. Most hams seem to think that grounds
>solve RFI problems, but it is very often the case that grounds make RFI problems
>*worse*. Ground has no magical properties, it isn't a noise sink. Think about
>desirable and undesirable RF current paths before willy nilly adding grounds.
>A ground can be exactly the wrong thing to have.
[snip]
>Remember that balanced antennas don't need grounds to function, and shouldn't
>have any RF current paths to ground
>(lightning suppression is a different topic).
[snip]

That last remark is an important one, and maybe an over-riding one.
Think about it: Static from wind or a nearby electrical storm builds
up on your balanced antenna (with no ground). It tends to develop a
potential on both legs of your antenna, all the time looking for
someplace to flow. The easiest way to earth ground (where it would
naturally go) is through your rig's power transformer's secondary to
primary leakage impedance, or via the gap formed between the secondary
and primary windings. That, and the circuitry between the antenna and
your power transformer (i.e. your receiver front end and your
transmitter final). Eventually it ends up looking for the neutral
(grounded) side of your electric power service. Bet you can guess the
rest of the scenario. When it reaches a high enough potential,
current is going to flow, probably disastrously. Hopefully, your body
wont be part of the pathway.

If you're going to operate an antenna without an earth ground, PLEASE
consider placing a gas discharge tube between your rig's ground and
earth ground, for safety's sake. (a gas discharge tube across the
coax feedline isn't going to help in this case)

regards,
monty, N5FC

2325. Re: Does anyone know where I can BUY some bottles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: c&c@inforum.net
Message-ID: <36d7786f.4252465@206.170.187.2>
Source record: 73068
Cross-posted to: alt.beer.breweriana,alt.homebrewing,rec.radio.amateur.homebrew,uiuc.org.homebrewers

Call C&C Distributing @ 530 622 TANK (8265). They have cases of new
heritage glass for $3.50/case + ups shipping. Matt

2326. Re: Identify these IC's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <7b7sin$fcu@canyon.sr.hp.com>
Source record: 73069

John Mortlock (jmort@global.freeserve.co.uk) wrote:

>I have a Lab frequency counter made in the 70's or 80 's
>
>Some of the counter / divider / latch IC's are marked
>
>59-926-29
>69-958-79
>59-914-29
>
>Anyone know if these DTL or RTL etc ??
>
>Can they be replaced with TTL functional equivalents or are the levels
>different ?

>I've discovered that these are DTL chips 926, 958 and 914.
>Anyone know if DTL and TTL levels are compatible ??
>
>John

These are RTL. 926 = Single JK F/F with set/reset inputs
914 = Dual 2 input NOR Gate
958 = Decade Counter

The 958 is one of the CuL (Counter MicroLogic) family. Most likely
this chip is driving a 960 BCD Decoder/Driver chip in your counter.

RTL was termed Micrologic, sold by Fairchild and Motorola Semiconductor
in the middle 60's to early 70's. It fell into disfavor when DTL was
introduced.

RTL was an interesting logic family and enjoyed some linear applications,
but had very poor noise immunity (about 200 mV) as opposed to about
1 volt for DTL and TTL. You can confirm your chips are RTL by measuring
the supply voltage at 3.6 volts +/- 10%. The pin at the tab (metal can)
or flat (plastic) is usually Vcc, opposite pin is ground.

DTL and TTL are pretty much compatible, operating at 5 volts. Fair-
child called DTL/TTL Compatible Current Sinking Logic; DTL was
replaced by TTL when Texas Instruments brought out its grassroots
74XXX line. DTL had a resistor pullup (2K for normal DTL, 6K for
low power) in its output stage while TTL utilized a totem-pole
output structure with active pullup, giving it greater switching
speed and current driving capability.

Hope this helps somewhat.

Don Montgomery, K6LTS
donrm@sr.hp.com

2327. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: tiuk@aol.com
Message-ID: <19990227013803.13612.00000759@ng-fx1.aol.com>
Source record: 73070

>>If you use a repeater to, say, order a pizza, that is considered
>>"commercial use" and the FCC can come down on you like a load of
>>bricks.

It may be my foggy brain or perhaps the time of night but I seem to remember reading in QST a couple of years ago that ordering a pizza through an auto-patch was not considered commercial use of the ham bands. Anyone with a current FCC ruleback have the correct answer to this question?

73's Roman Dementiuk, N2CDD

2328. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Ningauble <s.denham@computer.org>
Message-ID: <36D7A899.4D2736A@computer.org>
Source record: 73071
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

art wrote:

> i am having a time trying to find #16 gauge magnet wire need about 75 foot
> or so on a spool and im also looking for the largest spools of #35 or so
> magnet wire.around 3lbs or so dose any one know where i can find?
> now i guess you want to know what im doing with this wire? hint winding a
> coil :-) tesla
> thanks in advance
> art
> ps
> please email any reply

That's going to be one big Tesla Coil!

I usually get my magnet wire at a local Electronics store. Most places will
have it or will be able to order it in.

--
Ningauble

2329. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <7b8a9l$3ue@sjx-ixn6.ix.netcom.com>
Source record: 73072
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In <_KJB2.2514$hC.1141684@news1.teleport.com> Colin Caulkins
<caulkins@user2.teleport.com> writes:
>
>I would like to bypass cellular providers by having a transceiver in
my
>car and another at home which is connected to the phone line. I'm not
>sure how to go about this, however. I know hams have been doing this
sort
>of thing for years with repeaters and two-meter handhelds. The
trouble
>with this is that the FCC restricts what kind of conversation can take
>place on the two-meter band. If you use a repeater to, say, order a
>pizza, that is considered "commercial use" and the FCC can come down
on
>you like a load of bricks. Also, I'm not sure how security works on
such
>repeater systems. How would I prevent someone else from using it to
make
>a long-distance call? One alternative might be to use the FRS band,
since
>that is less regulated and offers some kind of rudimentary security.
The
>trouble with that is, I don't know of any FRS radios with DTMF
keypads.
>Are there any? Better still, are there any amateur transceivers that
can
>transmit a full-duplex, encrypted, digital signal? If the answer is
no,
>then why is the amateur market so technologically far behind cellular?

There are any nunber of amateur dual banders that are full duplex
encryption would be easy but is not legal on the amateur bands thus
no equipment of that nature is available for general amateur sales.
So amateur radio is not so technologically far behind cellular just
a bit hide bound by regulation.

2330. WTB: 3CV1500A7 Vacuum Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: pkluwe@aol.com
Message-ID: <19990227063348.11192.00000787@ng-cc1.aol.com>
Source record: 73073

Want to buy a 3CV1500A7 vapor phase vacuum tube. Please advise condition and price. Thanks & 73, -Paul W8ZO

2331. Help with diode in wattmeter (URM-120)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: nw2m@qsl.net
Message-ID: <7b8oso$8s0$1@nnrp1.dejanews.com>
Source record: 73074
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.botanchors,rec.radio.amateur.homebrew

Greetings,

I have a Struthers URM-120 wattmeter from the 1960's. I blew one of the diodes in the 2-30MHz slug. :-(The diode has a marking of:

ALPHA D4190-A 8703

It is about 3/4 of an inch long and looks like a 22 bullet with a point.

Are these special diodes, or simply in this form factor to be simply "dropped-in"? I have access to a hobby lathe and can make a plastic "shell" where a conventional diode can be placed inside. Are the diodes typically your off the shelf items, silicon, germanium, schottky, etc?

Need help with a direct replacement, or equivalent that I can make into the form factor.

Any thoughts or recommendations on diode performance over the HF band (3-30MHz) would also be helpful. Something tells me that a high performance switching diode would work just fine.... as the military stuff is over engineered for good reasons. I will look in the ARRL books to see what they use in their 2-30MHz watt meters.

Thanks in advance,

Al, NW2M

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2332. Help with diode in wattmeter(URM-120)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: nw2m@qsl.net
Message-ID: <7b8p1p$8sp$1@nnrp1.dejanews.com>
Source record: 73075
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.botanchors,rec.radio.amateur.homebrew

Greetings,

I have a Struthers URM-120 wattmeter from the 1960's. I blew one of the diodes in the 2-30MHz slug. :-(The diode has a marking of:

ALPHA D4190-A 8703

It is about 3/4 of an inch long and looks like a 22 bullet with a point.

Are these special diodes, or simply in this form factor to be simply "dropped-in"? I have access to a hobby lathe and can make a plastic "shell" where a conventional diode can be placed inside. Are the diodes typically your off the shelf items, silicon, germanium, schottky, etc?

Need help with a direct replacement, or equivalent that I can make into the form factor.

Any thoughts or recommendations on diode performance over the HF band (3-30MHz) would also be helpful. Something tells me that a high performance switching diode would work just fine.... as the military stuff is over engineered for good reasons. I will look in the ARRL books to see what they use in their 2-30MHz watt meters.

Thanks in advance,

Al, NW2M

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2333. Re: Q - Astro Van Radio Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-27 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <g9cplKAv$112Ew$o@corn2.freeserve.co.uk>
Source record: 73076

In article <36d72eae.2597435@netnews.worldnet.att.net>,
billx@bigfoot.com writes
>I own a 1990 Chevy Astro Van. I get a pulsing noise over my 10 meter
>radio when ever the van moves. The faster I go the more rapid the
>pulse becomes until it becomes a steady noise level. I believe it is
>from the speedometer sensor circuit. Does anyone know how to stop
>this radio noise.
>
> Thank You
>
> Bill Hayhurst KE4IDU
apply liberal quantity of BRAKE :-). could it not also be coming from
the petrol pump / injectors, assuming that the van has electrical fuel
supply systems

Mike W mike@corn2.freeserve.co.uk

Never underestimate the power of Human stupidity {;o)>

2334. WTB: .01 TO .5 MF HV CAPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Norman Hockler <norsan@bright.net>
Message-ID: <7bbrjm$l8g$1@cletus.bright.net>
Source record: 72877

Hi All,

Looking for HV caps..say 6KV in the range of .01 to .5 mf.
Need to make two strings for 20kv at cap range of .01 to .5 mf.
Anybody have them or can you point me to a supplier.

Norm N8RGR

2335. Re: RF system simulation software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7bbsot$1s5$1@news1.fast.net>
Source record: 72878

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Peter Bolch <nc-bolchpe@netcologne.de> wrote in message
news:7bavprpci1@news.netcologne.de...
>Hi,
>
>
>are there other (cheap) RF system simulation (not circuit simulation)
>programs like RF
>Workbench?
>
>
>Peter

TESLA (Transient Electronic System Level Analysis) from Tesoft
is a very capable system-block-diagram-level simulator which is
very useful for folks who are deisgning and evaluating (through
simulation) designs from baseband up through RF ... including
complete end-end systems.

See http://www.tesoft.com

I don't work for or have any affiliation with Tesoft, I'm just a very
satisfied user.

If you're looking for transistor-level RF design/simulation TESLA
is NOT the right tool ... take a look at Eagleware/Genesis
at http://www.eagleware.com

I have no affiliation (other than being a user) with the Eagleware
folks, either.

Neither of these software packages is "cheap" if you mean
"a hundred dollars or so" or even "$2-300" ... but they are
FAR less costly than anything else I'm aware of with similar
capabilities.

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!

http://www.nocode.org

```
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBNtl1+Ze+N6+q84HiEQLnMwCguNfVWK59wuqil5fZ9Hh6LNHtmPYAn0Gz
zqWo51sBuFbgtt/JnOYSgC/7
=jov2
-----END PGP SIGNATURE-----
```

2336. Re: ANZAC FM-104

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: ss <ssluz@worldnet.att.net>
Message-ID: <36D97BF2.A80A6370@worldnet.att.net>
Source record: 72879

Anzac is now MA/Com which is now AMP. Got that? Good chance your part is still made.

Steve, NY3A

JohnsonHE wrote:

> Can anyone identify the above component for me or even give a proper homepage
> address for Anzac the electronics corporation...About all I've found is an
> Argentinian company and a travel agency.
>
> W4ZCB

2337. Re: Help with modifying radar detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990228122306.13044A-100000@Ocean.CAM.ORG>
Source record: 72880

On Sun, 28 Feb 1999, Ryan Bosley wrote:

> I've been toying with the idea of trying to modify an old scrapped
> radar detector for use in X band Ham receiver. Has anyone done this?
> If so, are there any good articles/websites/other info?
>
> Thanks,
> Ryan (N4ONS)
>
This is vague, but there was an article in 73 about converting a radar detector to a ham receiver. It would have been in the late eighties or very early nineties.

Michael VE2BVW

2338. WTB 88 Mhy toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: nospam@softcom.net
Message-ID: <36dc8613.6718135@news.softcom.net>
Source record: 72881

These were the torroids that were popular in the sixties to make filters
for radio teletype TU's. Please respond off list by changing nospam to
buzz.
Thanks,
Buzz

For direct response change nospam to buzz

2339. SWR meter for LF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: John Barker <john@chelcom.com>
Message-ID: <920226500.24400.0.nnrp-09.c2de5f0e@news.demon.co.uk>
Source record: 72882

Has anybody a design for an SWR meter for use between 180 KHz and 1 MHz.

2340. Re: ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: mojaveplan@aol.com
Message-ID: <19990228133948.15906.00000195@ng20.aol.com>
Source record: 72883

>> Wonder if anyone can give me any answers... I have built a 2M to 6M Xverter
>> from Ten Tec.. Set it up as per the manual.. When using it I get a lot of
>> noise (S7-S9) in the 50 to 52Mhz part of the band... I was under the
>> impression that 6M was very quiet... Has anyone else experienced this... I
>> have also tried different antennas with no avail... Could this be local
>> interference ??? when I disconect the antenna the noise dissapears which
>> makes me feel it's local and not generated internally..
>> Thanks in advance for any suggestions :)
>>
>> Andrew Pepper
>> GM1YMI/W2

I have operated on six using a ten tec 20 to 6 transverter and i had lots of noise coming through it. it seemed to me, in addition to the fact that six is full of man made electrical noise, that the mosfet rf amp in the front end of my 1210 was "hotter" than it needed to be and increased the noise up to s7 sometimes. other times it would be very quiet. i had (i sold) an icom 706 that was quieter on six and was plenty sensitive. i drove the transverter with a ten tec argosy which has no rf gain control. however, the tx sounded great with this setup! good luck.
jeff kd7dcy

2341. Re: Help with modifying radar detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: bosley@mindspring.com
Message-ID: <36d9b23e.1145721333@news.mindspring.com>
Source record: 72884

On Sun, 28 Feb 1999 12:24:09 -0500, Michael Black <blackm00@CAM.ORG>
wrote:

>
>
>On Sun, 28 Feb 1999, Ryan Bosley wrote:
>
>> I've been toying with the idea of trying to modify an old scrapped
>> radar detector for use in X band Ham receiver. Has anyone done this?
>> If so, are there any good articles/websites/other info?
>>
>> Thanks,
>> Ryan (N4ONS)
>>
>This is vague, but there was an article in 73 about converting a radar
>detector to a ham receiver. It would have been in the late eighties or
>very early nineties.
>
> Michael VE2BVW
>
>

Thanks for the lead. I think I've got the reference to the article:

TI: Radar detector to microwave receiver conversion
AU: Noll-SJ
SO: 73-Amateur-Radio-Today. no.365; Feb. 1991; p.10-12, 15.
PY: 1991
RT: Journal-article
CP: USA
LA: English
AB: Self-contained receivers are designed to detect police
speed-measuring radar energy just above the 10.0-10.5 GHz Amateur
Radio Service allocation. Although there are plenty of these on the
market, many of them are expensive for experimenting. The
reasonably-priced BEL XKR-IX Micro-Eye model is a
dual-conversion superheterodyne X-band and K-band detector. The author
explains the necessary modification.

Now all I have to do is find a Feb. 1991 issue of 73 magazine....
Thanks again es 73,
de N4ONS.

2342. 8 pin microphone jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <uAQ3w91Y#GA.147@upnetnews05>
Source record: 72885

Dear Newsroup Members,

I would like sources, part numbers and prices of Female 8
pin Microphone jacks, Chassis Mount. Must be fairly current.

Thanks,
Gregory

2343. Re: Return Loss, Please Explain

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: "Dale R. Parfitt" <parinc@bellsouth.net>
Message-ID: <36D9B99F.7EE7D901@bellsouth.net>
Source record: 72886

AMDX wrote:

> Feb. 99 QST has a modified chebychev lowpass filter.
> The insertion loss is more than 20db better than the 7
> element chebychev at the second harmonic!
> The graphs show "Insertion loss vs freq." and
> "Return Loss vs freq"
>
> What is return loss?
> If it applies, relate this to a 50 ohm signal source,
> and the load seen by it.
>
> Is a higher number better? (20 db vs 25db)
>
> Mike

Return loss is another way of looking at VSWR. It is more meaningful
for very small mismatches. For example, a return loss of 26 dB is around
a 1.1:1 VSWR as I recall. 40 dB RL is about 1.02:1 VSWR. 2:1 is around
10 dB RL.
The new MFJ259B has a RL readout.
I would guess the ARRL Handbook probably has the formula for relating
VSWR, reflection coefficient and RL.

Dale W4OP

2344. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: The Ham Informer <THI@resolute.com>
Message-ID: <jPiC2.2559$w57.272919@news3.mia>
Source record: 72887
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

We have indeed seen some excellent quality communications privacy (encryption devices) gear showing up for sale at regional ham fests for use with amateur radio VHF/UHF equipment.

These items are very popular and reasonably priced. The vendor has several demonstration units set up at ham fests and potential buyers are encouraged to try out the gear before buying.

This is high-quality equipment, not junk!

2345. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Phil Kane <philkane>
Message-ID: <cuvyxnarpbzzynjpragrepbz.f7vpn80.pminews@nntp1.ba.best.com>
Source record: 72888
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 28 Feb 1999 21:46:55 GMT, The Ham Informer wrote:

>We have indeed seen some excellent quality
>communications privacy (encryption devices) gear
>showing up for sale at regional ham fests for use
>with amateur radio VHF/UHF equipment.
>
>These items are very popular and reasonably
>priced. The vendor has several demonstration
>units set up at ham fests and potential buyers
>are encouraged to try out the gear before buying.
>
>This is high-quality equipment, not junk!
>
Use it at your own risk......all ":privacy" systems have been
held to be in violation of the following:

§Sec. 97.113 Prohibited transmissions.

(a) No amateur station shall transmit:

(4) Music using a phone emission except as
specifically provided elsewhere in this section;
communications intended to facilitate a criminal
act; MESSAGES IN CODES OR CIPHERS INTENDED TO
OBSCURE THE MEANING THEREOF, except as otherwise
provided herein; obscene or indecent words or
language; or false or deceptive messages, signals or
identification;

(Emphasis CAPS added.)

73 de Phil Kane - K2ASP

2346. Re: Needed: High Current Power Supply Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36d9c98c.110988807@netnews.worldnet.att.net>
Source record: 72889

Something about wiring three switching-type power supplies *in series*
seems terribly wrong....

On Sat, 27 Feb 1999 19:43:43 +0100, Angel Vilaseca
<avilaseca@popmail.smis.ch> wrote:

>Bradley Risk a ï¿½crit:
>>
>> I'm trying to build a 20+Amp 13.8V power supply, but am having a hard
>> time finding a good schematic for one. Anyone have any good plans, or
>> URL
>
>How about taking three surplus PC power supplies (you can have them for
>less than $10 each) and wiring the 5 Volt outputs in series?
>
>Many are rated at the 20+ amp you need on their 5 V outputs.
>
>Sure, you will have 15 V instead of 13.8V. Just add a couple of
>(heatsinked!) high current diodes in series to drop the voltage a bit.
>
>Angel Vilaseca HB9SLV

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

2347. Re: 8 pin microphone jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36dacad9.111321062@netnews.worldnet.att.net>
Source record: 72890

You might take a look at:

< http://www.digikey.com >
< http://www.jameco.com >
< http://www.mouser.com >
< http://www.techamerica.com >

I'm sure there are more but I can't recall them right now.

On Sun, 28 Feb 1999 13:15:32 -0800, "gbowne" <gbowne@email.msn.com>
wrote:

>Dear Newsroup Members,
>
> I would like sources, part numbers and prices of Female 8
>pin Microphone jacks, Chassis Mount. Must be fairly current.
>
> Thanks,
> Gregory
>
>

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

2348. Re: ANZAC FM-104

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990228185100.24154.00000908@ng57.aol.com>
Source record: 72891

Many thanks Steve.

W4ZCB

2349. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <tXkC2.578$wp.18075@news.goodnet.com>
Source record: 72892
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

The Ham Informer Spam Machine wrote:

>We have indeed seen some excellent quality
>communications privacy (encryption devices) gear
>showing up for sale at regional ham fests for use
>with amateur radio VHF/UHF equipment.

Sure you did...

>These items are very popular and reasonably
>priced. The vendor has several demonstration
>units set up at ham fests and potential buyers
>are encouraged to try out the gear before buying.

Sure they do...

>This is high-quality equipment, not junk!

Sure it is...

Nice try. Go back to spamming the alt groups...

2350. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <OeICNT6Y#GA.261@upnetnews03>
Source record: 72893

Dear Newsgroup:

It seems I have the Happy99.exe problem, and I (think) have fixed it. I just noticed tons of my posts with "Re: Homebrew HF Transmitter" in the subject.

And I still need sources of Female 8 pin Microphone connectors. Local RatShack's can't locate any. They can locate only male 8 pin connectors which were in stock.

I have decided on using the 80C31 and 8051 series processors, and have purchased a few examples. I think this is my best bet.

My project is pretty much per "Build your own intelligent amateur radio transceiver", Tab Books, Autor: Randy L. Henderson (ISBN 0-07-028264-1), exept with a few major improvements, some asthetic.

My chassis is per SpireAudio See: Http://www.spireaudio.com and is 6" H x 17" W (L to R) x 10" L (Front to Rear). Cost $99.00. Could revise Transceiver later by making it 2" Taller and Wider, to 8"x19"x10".

The Chassis front panel is .250" thick ALCOA (Aluminum Company of America) and is and is silver annodized. I did have an old .125" ALCOA plate of 6061 (billet) which was 6" x 17"

Are SO-239 jacks standard for antenna's?

How are Morse Code "CW" Paddle Keys connected? Are they plugged into a 1/4" Phone Jack?

My plan inlcudes 1 each 4 pin and 8 pin microphone jacks, which are switchable. Has decent red rocker A/C power switch from RatShack mounted on front panel, and a Jameco #JR101 AC Power connector (see pg. 63 of current catalog) which is mounted on the rear panel of the rig next to a fuse holder from RatShack.

The rig will have bands from 10m to 160m

Thanks,
Gregory Bowne
Ham-to-Be

2351. FS 45 watt Motorola Micor mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Rolly <dx_ing@hotmail.com>
Message-ID: <7bd9sc$as2$1@nuhou.aloha.net>
Source record: 72894
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have a 45 watt Motorola Micor converted to a repeater and currently on 444.025rx / 449.025tx. Just resently tune and working great. Asking $100.00 dollars or trade of what you may have preferably vhf/uhf related unit. Please reply to dx_ing@hotmail.com

thanks,
de john

2352. Amateur Radio Mailing Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: "D." <donotspam@donotspam.com>
Message-ID: <7bdc88$ac6$1@camel18.mindspring.com>
Source record: 72895
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
ArizonaONE Wired & Wireless PUBLIC Mailing Lists
------------------------------------------------

ARCCOMM Forum For Discussion & Announcements Concerning The
Central Arizona Chapter of The American Red Cross
Disaster Communications Committee
(Phoenix, Arizona)

F6FBB-LIST Forum Discussing The Amateur Packet Radio BBS Program
Developed By Jean-Paul Roublatt F6FBB
(Worldwide)

PHXAPRS Forum For Discussion of The Amateur Radio Program APRS
(Phoenix, Arizona)

****

Subscription/deletion requests and other administration requests go to:

listserv@phx-az.com

To subscribe, send the line:

subscribe listname

****

Would you like to add a mailing list? If so, please contact the site
administrator, for further information.
```

2353. Heathkit HD-19 phone patch $13.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36da3923@news1.us.ibm.net>
Source record: 72896
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Untested. No manual. looks okay. $13.00 plus shipping from San Diego 92139.

Give name, call, and zip when replying.

Lane
Ku7i
San Diego 92139

2354. Alliance U-100 ant. control $13.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36da3931@news1.us.ibm.net>
Source record: 72897
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

no manual. untested. $13.00 plus shipping from San Diego.

Give name, call, and zip when replying.

Lane
Ku7i
San Diego

2355. Aerovox oil filled caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36da3983@news1.us.ibm.net>
Source record: 72898
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

4uF 4kv each. Have two. Sell both for $25.00 plus shipping from San Diego.

Give name, call, and zip when replying.

Lane
Ku7i
San Diego 92139

2356. Knwd SW-2000 wattmeter $95.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36da39e6@news1.us.ibm.net>
Source record: 72899
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

HF range 2 kilowatt wattmeter. Forward and reflected power meters. Reads PEP or Avg. Looks pretty good. Works FB. $95.00 plus shipping from San Diego

Give name, call, and zip when replying.

Lane
Ku7i
San Diego 92139

2357. Re: I talk, it Types! RFI problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3757a95e.1125981940@news.atl.bellsouth.net>
Source record: 72900

On Sat, 27 Feb 1999 02:14:35 GMT, maddog@io.com (Monty Northrup) wrote:
>On Fri, 26 Feb 1999 18:35:07 GMT, ke4zv@bellsouth.net (Gary Coffman)
>wrote:
>>There's a very important lesson here. Most hams seem to think that grounds
>>solve RFI problems, but it is very often the case that grounds make RFI problems
>>*worse*. Ground has no magical properties, it isn't a noise sink. Think about
>>desirable and undesirable RF current paths before willy nilly adding grounds.
>>A ground can be exactly the wrong thing to have.
>[snip]
>>Remember that balanced antennas don't need grounds to function, and shouldn't
>>have any RF current paths to ground
>>(lightning suppression is a different topic).
>[snip]
>
>That last remark is an important one, and maybe an over-riding one.
>Think about it: Static from wind or a nearby electrical storm builds
>up on your balanced antenna (with no ground). It tends to develop a
>potential on both legs of your antenna, all the time looking for
>someplace to flow. The easiest way to earth ground (where it would
>naturally go) is through your rig's power transformer's secondary to
>primary leakage impedance, or via the gap formed between the secondary
>and primary windings. That, and the circuitry between the antenna and
>your power transformer (i.e. your receiver front end and your
>transmitter final). Eventually it ends up looking for the neutral
>(grounded) side of your electric power service. Bet you can guess the
>rest of the scenario. When it reaches a high enough potential,
>current is going to flow, probably disastrously. Hopefully, your body
>wont be part of the pathway.
>
>If you're going to operate an antenna without an earth ground, PLEASE
>consider placing a gas discharge tube between your rig's ground and
>earth ground, for safety's sake. (a gas discharge tube across the
>coax feedline isn't going to help in this case)

Static build up on antennas is *extremely* low current. It has nothing to do
with lightning safety, which is an *extremely* large current. Static neither
attracts nor discourages lightning strikes. It is a separate phenomena.
A gas discharge suppressor can help snub lightning surge, when installed
properly, but it is exactly the wrong thing to use to cure static buildup problems.
Static will build to the gas tube's firing potential, it will fire and discharge the
static, then the cycle repeats, over and over. In your receiver, you'll hear
POP POP POP as the gas tube fires.

The correct way to deal with static buildup is to use a *high* impedance
connection between the antenna and Earth. A 1 megohm resistor will do,

a RF choke will do. The idea is to drain the static, a very small amount of charge, while not shunting the desired lower voltage higher current signals you're transmitting and receiving. A megohm in shunt with the 50 ohm impedance of the line will be virtually invisible to your equipment, but it will nicely drain off static buildup (nanoamps). It will keep the gas discharge tube (which you should have too for snubbing lightning surge) from ever reaching firing potential, so no POP POP POP in your receiver. But it won't snub the voltage of a high current lightning pulse (kiloamps), so that will still fire the gas discharge tube and protect your equipment.

The conditions for static buildup and for thunderstorms are nearly diametrically opposite. When you have one, you don't have the other, and vice versa. Conditions have to be very dry for static buildup to occur. Lightning is most common when conditions are humid. In areas where thunderstorms are common, you probably won't need a static discharge shunt impedance. In areas where high static buildup is common, you may not need lightning protection (at least statistically, lightning can occur anywhere, so you should always protect against it, but it is most likely in areas which frequently experience thunderstorms). Note that both lightning protective grounds and static drains should be *outside*, not at the station. You don't want to invite either static or lightning indoors. The entrance bulkhead (your ground window) should be arranged to stop them from coming inside.

Now all that said, there is no RF performance reason, or RFI suppression reason, for a station RF ground when using a balanced antenna. It doesn't help, and it can hurt. If you use an unbalanced antenna, then you must have an RF ground, but that ground needs to be out at the antenna feedpoint, not back at the station. All you need back at the station is a safety ground. That can be a high impedance to RF, as long as it is a low impedance to 60 Hz and DC.

Gary

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2358. Re: Wanted: Surveillance camera, free, cheap, or as a tax deduction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Greg Menke <xxx@erols.com>
Message-ID: <90djyv0k.fsf@erols.com>
Source record: 72901
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Lenny <captainvideo46@hotmail.com> writes:

We've used the tv-out CCD modules to evaluate ideas for monitoring the insides of our products- not for theives, but to keep an eye on the hardware. Focusing can be kind of a drag, but the output is clean. We rigged a little lens from a cheap Jeweller's loupe and some PVC pipe- not desirable in the long run, but it works and is cheap.

The ccd cameras are available all over the place, check out Jameco and JDR- Nuts and Volts will have ads for them all over.

Gregm

> DaveC wrote:
> >
> > In a thread in this n.g. I asked for suggestions on catching a thief on
> > video who is pilfering office equipment. Thanks to all who have offered
> > such creative ideas.
> >
> > Now I need a video camera, the smaller the better. This volunteer center
> > where I've been asked to help catch the pilferer is -- how do you say --
> > not cash-heavy. So, I'm asking for the loan of a survelliance camera, or
> > as a tax write-off (the center is an IRS non-profit organization). Or, if
> > you must have cash, will consider this last.
> >
> > Camera must have NTSC video output, and require only a single power
> > source. Color prefered, but b/w is acceptable.
> >
> > Sorry about my modified return address, but I hate getting spammed.
> > My correct address is provided below if you choose to e-mail me.
> >
> > Thanks,
> > Dave
> >
> > --
> > Dave Carpenter
> > Sound Logic
> >
> > Note: "From" address is invalid.
> > Use: "voicebox at dnai dot com" with the"@"and"."inserted appropriately.
> There is a company called Matco. They advertise in Nuts And Volts
> magazine. They have a board pinhole camera advertised for 43 dollars.
> Check it out. Lenny Stein

2359. Re: anti-muting tuning mod for Sony 2010

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: J W Schermerhorn <skemi@capital.net>
Message-ID: <36D8FF9B.69BF@capital.net>
Source record: 72902
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.amateur.misc

2/28/99

That mute mod was primarily for the scan mode. I haven't noticed any
serious chugging with the tuning knob on mine.

Will White wrote:
>
> I read somewhere a while back that there is a mod for the Sony 2010 SWL
> receiver that allows tuning without the receiver muting in between 100
> Hz steps. Allegedly, it really improves tuning weak stations and tuning
> under heavy QRM. Sounds sensible to me. I'd be happy if it just removed
> the "thumping" between tuning steps and the accompanying flicker of the
> S-meter and rapid peaking/nulling of the audio.
>
> Can someone point me to a net-based or print source for this mod? I have
> the Sony service manual, schematics included, so if someone can guide
> me to the info I need to perform this mod, or describe even just the
> general principle (if such things can be safely generalized, hi, hi) I'd
> be forever in your debt. Well, OK, for a few hours anyway. . .
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

2360. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990228011929.14110.00001310@ng-ca1.aol.com>
Source record: 72903

knox_k_NOBS@nemaine.com (Ken Knox (N1JRO)) wrote:

>Although they tend to be pricey, Newark carries#34, #36, and #38. I
>don't however see any reference to *any* odd numbered wire guages.
>
>

Also, if the guy wants 3 pounds all on one roll, that can be a problem at places like Newark. Maybe they have it, but my experience has been that they will only have 1 lb rolls. For the 16 AWG, I'd visit a local motor rewind shop. For the 35 AWG, assuming that's really what he wants, do a search on the web for magnet wire. There are a couple companies that I've come across looking for Litz wire that I think also do single-strand, and they are able to supply odd gauges, and even sizes in between gauges, though you better be prepared to pay for it! Names that come to mind are New England Electric Wire Company, www.neewcweb.com/index.htm, and MWS, www.mwswire.com/. But if you enter +wire +magnet into an altavista search, you'll come up with many other suppliers. Some of these companies list local reps and stocking distributors, and someone will probably be willing to help you out.

I've gotten _small_ quantities of odd-gauge magnet wire from Amidon Associates, but they are in the business of selling cores, not wire, and the wire is just to help the core customers. (Small toroid cores.)

Regards,
Jay

2361. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: jayomegac@aol.com.wospam
Message-ID: <19990228013643.14110.00001316@ng-ca1.aol.com>
Source record: 72904

I just posted a couple references for magnet wire. While I had my browser open, I looked at a couple others. It looks like WireTronic, Inc., solicits small orders. (3lbs is a very small order for a company that deals in only wire, at least for copper magnet wire.) You can find them at www.wiretron.com/magnet.html. They show the common credit card logos (like VISA) on their home page.

Regards,
Jay

2362. autek dip meter add on

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Andy <andy_m_99@yahoo.com>
Message-ID: <7baq6p$ne7$1@reader1.reader.news.ozemail.net>
Source record: 72905

I was wondering has anybody hombrewed a dip meter adapter for the Autek Rf analyser. It seem it would be ideal since the output is quite high.

just curious

2363. homebrew HV resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Andy <andy_m_99@yahoo.com>
Message-ID: <7baq7h$ne7$2@reader1.reader.news.ozemail.net>
Source record: 72906

Has anybody experimented with High Voltage home brew resistors using Nichrome wire. What voltage is the dissipation calculated at? I just cant seem to find them at a reasonable price. Any advice would be appreciated.

Thanks

2364. "hot rodding" simple tube radios, web page on

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseF7usus.My1@netcom.com>
Source record: 72907

If you have a tube shortwave or just medium wave (AM) radio you'd like
to hack around with, look at
http://www.geocities.com/CapeCanaveral/9178/radios/12ba7.html

2365. Return Loss, Please Explain

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be62b3$bd53b400$67874d0c@default>
Source record: 73015

Feb. 99 QST has a modified chebychev lowpass filter.
The insertion loss is more than 20db better than the 7
element chebychev at the second harmonic!
The graphs show "Insertion loss vs freq." and
"Return Loss vs freq"

What is return loss?
If it applies, relate this to a 50 ohm signal source,
and the load seen by it.

Is a higher number better? (20 db vs 25db)

Mike

2366. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <36d89493.1016872@news.nemaine.com>
Source record: 73016
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Although they tend to be pricey, Newark carries#34, #36, and #38. I
don't however see any reference to *any* odd numbered wire guages.

Ken

On Sat, 27 Feb 1999 17:49:52 -0500, Bob Lewis <aa4pb@erols.com> wrote:

>Mouser Electronics has magnet wire (#16) but I don't see anyone with #35.
>That's pretty small wire. Mouser has #28 if that helps.
>
>art wrote:
>
>> i am having a time trying to find #16 gauge magnet wire need about 75 foot
>> or so on a spool and im also looking for the largest spools of #35 or so
>> magnet wire.around 3lbs or so dose any one know where i can find?
>> now i guess you want to know what im doing with this wire? hint winding a
>> coil :-) tesla
>> thanks in advance
>> art
>> ps
>> please email any reply
>

2367. Re: Return Loss, Please Explain

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Jerry or Thor <thor.jerry@att.net>
Message-ID: <7ba68d$daj@bgtnsc02.worldnet.att.net>
Source record: 73017

Well, to keep it really simple, think of it as another numeric for reflections from a load (like VSWR). A return loss of 0 dB would mean all energy put into a transmission line or a load was reflected from that line and/or load (none absorbed), while an infinite return loss would mean total absorption of the energy in the transmission line and/or the load. Since it's in dB it's a log scale so its useful over a wide range.

If you're interested in this, you might want to spend a little time looking into S parameters for two port networks. They can express both the transmission and reflection parameters in very useful ways! That will lead you to Smith charts - a really neat tool.

Jerry K0MTZ

AMDX wrote in message <01be62b3$bd53b400$67874d0c@default>...
> Feb. 99 QST has a modified chebychev lowpass filter.
>The insertion loss is more than 20db better than the 7
>element chebychev at the second harmonic!
>The graphs show "Insertion loss vs freq." and
> "Return Loss vs freq"
>
> What is return loss?
>If it applies, relate this to a 50 ohm signal source,
>and the load seen by it.
>
> Is a higher number better? (20 db vs 25db)
>
> Mike
>
>
>

2368. Svetlana 4CX800A Tube For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: JOHN <john@penwortham.idps.co.uk>
Message-ID: <PA0C2.16812$_3.1505@stones>
Source record: 73018

I have a brand new boxed and guaranteed 4CX800A tube for sale. It has never been connected to a supply!

Cost in UK £165 new. Will sell for £100 ono.

Genuine reason for sale.

Contact me for info

John, G0JJL

2369. WTB:HEATH SB-220 AMP.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: "A. Billings" <abillings@worldnet.att.net>
Message-ID: <36D92AAD.25F40A29@worldnet.att.net>
Source record: 73019

I am looking for a Heath SB-220 Amp.
Must be clean and in good working condition. priced reasonably.
Also looking for the same for parts.

Thanks Art./kc5doo
318 424-3312

2370. Re: Return Loss, Please Explain

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6355$8f60ac40$d0efabc3@default>
Source record: 73020

Return loss is another way of measuring/defining the
Reflection Coefficient and VSWR in terms of a power ratio.

If at ANY POINT in a two-way transmission system, the ratio
of the reflected power to the forward power is P =
(reflected power) / (forward power) then -

Return Loss = 10 * Log (P) decibels.

P is obviously the square of the modulus of the Voltage
Reflection Coefficient at the point where the reflection
occurs.

It is usually desirable that return loss be greater than
some specified high value.

It is most commonly used by long-distance telephone line
engineers as a measure of degradation of system performance
due to reflections. On long lines, usually amplified at
intervals, reflections cause echos. Echos and the delay of
an echo can make a mess of both speech and data circuits.
But poor performance can be corrected ONLY at the point at
which the reflection occurs.

It is important to remember return loss data ignores the
time delay between the forward and reflected signals. It is
only at the point of reflection that the time delay is
zero. Only there are VSWR, Reflection Coefficient and
Return Loss directly related to each other.

Return Loss data is not of much practical use on very
short, low-loss lines such as antenna feeders. It ignores
phase shift and angles. Better to think in terms of R and
jX impedance and SWR.

****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

2371. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <P6pS0PA1RS22EwTg@corn2.freeserve.co.uk>
Source record: 73021

In article <19990228011929.14110.00001310@ng-ca1.aol.com>, Jay OmegaC
<jayomegac@aol.com.wospam> writes
>I've gotten _small_ quantities of odd-gauge magnet wire from Amidon Associates,
>but they are in the business of selling cores, not wire, and the wire is just
>to help the core customers. (Small toroid cores.)
> ==============
>Regards,
>Jay
just the select few then ;-)

Mike W mike@corn2.freeserve.co.uk

Never underestimate the power of Human stupidity {;o)>

2372. Help with modifying radar detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: bosley@mindspring.com
Message-ID: <36d95fdf.1124631549@news.mindspring.com>
Source record: 73022

I've been toying with the idea of trying to modify an old scrapped
radar detector for use in X band Ham receiver. Has anyone done this?
If so, are there any good articles/websites/other info?

Thanks,
Ryan (N4ONS)

2373. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <7bbo7j$ati@sjx-ixn9.ix.netcom.com>
Source record: 73023
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In <7b6kdofqh1@nnrp1.dejanews.com> clintbrad4d@earthlink.net writes:
>
>In article <7b69jl$8sa@dfw-ixnews11.ix.netcom.com>,
> kc5egg@ix.netcom.com(Gerald Schmitt) wrote:
>
>> Yes you twit I did purchase all of them.
>> ...[RT Systems] happily sold me an upgrade without any idea who I
was.
>
>Wow...yet another case of RT Systems caring for their customers.You
didn't
>even follow the basic rules (sending in the Registration Card) yet
they
>treated you like you did.

They did no such thing. I walked up to their table at a hamfest and exchanged Federal Reserve Notes for a small cardboard box that contained: a diskette and a 2 to 3 converter. The software is the entire new version because this is how they do it. They gave me no special or wonderful service in fact sold me yet another adapter that I did not want or need. Their copy protection is a nightmare the only thing worse is how they treat recent customers when a new version comes out.

>
>Thank you for your input.
>
> - Clint Bradford
>
>-----------== Posted via Deja News, The Discussion Network
==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your
Own

2374. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: parnass@nwsgpb.lucent.com
Message-ID: <7bbndv$oe2@ssbunews.ih.lucent.com>
Source record: 73024
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

In article <7b7rac$vg5$1@news.ametro.net>,
art <ignatz@datasync.com> wrote:

>i am having a time trying to find #16 gauge magnet
>wire need about 75 foot or so on a spool and im
>also looking for the largest spools of #35 or so....

Joe Cassata, my father-in-law, owns a small wire business which sells
magnet wire and coax. I know he supplies magnet
wire to retailers who resell the wire to Tesla coil builders.

He sells small quanities direct, too.

Contact:

The Coax Connection
10S226 Meadow Lane
Naperville, IL 60565

tel. 630-420-0342
--
==========
Copyright 1999, Bob Parnass, AJ9S parnass@bell-labs.com

Locate & identify transmitters in your area with a color RadioMap(tm)

2375. Re: Q - Astro Van Radio Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: al <72335.725@compuserve.com>
Message-ID: <u7fPDAzY#GA.111@nih2naae.prod2.compuserve.com>
Source record: 73025

billx@bigfoot.com wrote in message
<36d72eae.2597435@netnews.worldnet.att.net>...
>I own a 1990 Chevy Astro Van. I get a pulsing noise over my 10 meter
>radio when ever the van moves. The faster I go the more rapid the
>pulse becomes until it becomes a steady noise level. I believe it is
>from the speedometer sensor circuit. Does anyone know how to stop
>this radio noise.
>
> Thank You
>
> Bill Hayhurst KE4IDU

Although I haven't seen a problem in Astro's with electric speedos(some Astros are cable driven and therefore not affected) CAUSING radio interference(probably because I am usually putting UHF or 800 radios in them), I have seen a possibly related situation. I frequently install Taxi meters in various vehicles and have noticed that Astro vans in particular tend to PICK UP interference in the speedo wiring which causes the taxi meter to advance even when the van is stationary. In extreme cases, it will even cause the speedo needle to move. In some cases, rewiring the ground side of the sender (Its located on the tranny case near the driveshaft, driver's side) clears this problem. In other instances, checking the grounding between engine, battery, and chassis has proven useful. On at least 2 occasions, I have had to simply refer it to the dealer. I suspect there is some sort of odd wiring on this particular model, either a ground loop of some sort or just awful shielding or such because this problem doesn't seem to happen on either Caprices or full-size vans which use the same transmission and a similar electric speedo.

Al
KD4TMW

2376. How to build UHF repeater from 2 mobiles?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-02-28 00:00:00 UTC
From: Tony Szablowski <a2112szablowski@worldnet.att.net>
Message-ID: <7bbppg$e94@bgtnsc02.worldnet.att.net>
Source record: 73026

Yep, I've seen plenty of info on converting Master 2's and Motorola's
into repeaters, but I've got 2 Uniden programmable 25W mobiles that
I'd like to make into a repeater(Rx: 462, Tx: 467MHz). A few
questions, please.

What's needed to be done to the mobiles?
What's needed for the radios so they don't get desensitized (quickly)
in a crowded tower site?
Can a tone-panel be used with this setup for 2 PL's, 1DPL operation?

I really appreciate any and all help you folks could give.
--
Regards,
Tony
a2112szablowski@worldnet.att.net (remove 2112 to e-mail)

2377. Re: Return Loss, Please Explain

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <36d9dd4c.31912303@news.azstarnet.com>
Source record: 72908

On 28 Feb 1999 00:44:39 GMT, "AMDX"
<AMDX@worldnet.att.net> wrote:

> Feb. 99 QST has a modified chebychev lowpass filter.
>The insertion loss is more than 20db better than the 7
>element chebychev at the second harmonic!
>The graphs show "Insertion loss vs freq." and
> "Return Loss vs freq"
>
> What is return loss?
>If it applies, relate this to a 50 ohm signal source,
>and the load seen by it.
>
> Is a higher number better? (20 db vs 25db)
>
> Mike
>
Return loss is another way of describing mismatch
and yes higher is better.

In this case,

RL = -20 log(rho)

where rho is the reflection coefficient:

rho = abs(gamma)
where:
gamma = (Zl-Zo)/Zl+Zo)

when Zl is the load impedance and Zo is the line
or system impedance. (Both complex)

The VSWR is:

VSWR = (1+rho)/1-rho)

So you can see return loss, VSWR and reflection
coefficient are different ways of saying the same
thing.

Contrary to what else you might read in this
thread, all of these numbers apply at the point
where you make the measurement. If there is line
loss (isn't there always) then the numbers are
different at different points on the line, but it
doesn't have anything to do with time.

N7WS

2378. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Jeff Sears <Jeff28@overallson.net>
Message-ID: <FpmC2.2603$w57.388189@news3.mia>
Source record: 72909
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Sure you are trolling for a reaction...

Steve Sampson wrote in message ...
>.

>*Sure* you did...
>
>*Sure* they do...
>
>*Sure* it is...
>
>Nice try. Go back to spamming the alt groups...
>

2379. ANTIQUE NATIONAL RADIO SET, KIT BUILT, 3PCS FOR AUCTION

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7bd5p0$l8b$1@nnrp1.dejanews.com>
Source record: 72910

antique radio set. (3pcs) radio, PS/spkr, and vfo. look to be from the 40's. obtained from the family of the builder. units are all original down to the cloth cords. still have handrawn schematics inside cases. pics are available. heres the link..
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=72615492
thanks
robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2380. Re: WTB 455 Khz Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990228230339.14580.00001935@ng-fb1.aol.com>
Source record: 72911

Dave ,I have a 455 xtal, it was for a calibration gen ,,I will dig it out tomorrow if you are interested.. Harold W4PQW

2381. GE 800 MARKV RADIOS, GOOD TO MOD FOR 2.4 GIG HAM for auction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7bd640lbn1@nnrp1.dejanews.com>
Source record: 72912

ge mark v radios. 2 radios, 1 chassis and 2 boards. some folks have moded these to make 2.4 gig ham transmitters. sold as parts/experimenter radios. units are on ebay. heres the link http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=72661629 thanks' robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2382. Re: Tape Head Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: hexster@blazenet.net
Message-ID: <6HoC2.1526$Ra1.1301@news7.ispnews.com>
Source record: 72913

In article <7766-36CFBEAD-36@newsd-131.iap.bryant.webtv.net>,
kc8com@webtv.net says...
>
>I want to build a couple 4 channel cassette player/recorders using
>autoreverse tape heads, now here are the questions:
>1.What is the impedance of the typical head?
>2.What level of audio voltage will be required to record?
>3.How much gain will I need for playback (to drive line-level inputs)?
>4.Where can I find inexpensive autoreverse tapeheads?
>5.What is the frequency reponse of a typical head at normal speed?
>6.What hampers the low frequency response?
>7.Would it be possible to gang 2 of these beasts without a noticable
>delay?
>tnx,
>matt
>

well, let's see,

get yourself a nortronics catalog, and find what you need.

you missed one obvious point. you must have bias to record. 40 to
maybe 100 khz and then you add the audio to it. the audio needs
special frequency boost/reduction tailoring. in short, just go buy
a used 4 channel 'porta-studio' unit for under 200 bucks used.

low freq limit typically 40 hz at -3 db for most units

can't gang side by side heads without substantial delay.

2383. Programming info on a uPD861C PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7bda46$jo8@news.Hawaii.Edu>
Source record: 72914
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Anyone have information on which pins are used for frequency
programming with a uPD861C PLL chip? I would like to raise
its output frequency say, one megahertz. (Converting a CB
for 10m CW.) I believe this is an easier route than replacing
the PLL's reference crystal.
73, Jeff WH6U

2384. List of the rec.radio newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7bdc0l$kus@news.Hawaii.Edu>
Source record: 72915
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

rec.radio.broadcasting (devoted to the broadcast industry; moderated)
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed
with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-
running thread results from a single cross-posted article, and the
contents of such a thread drift further and further away from being
"on-topic" in the various NGs that receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups"
posted on the 15th of each month.

Jeffrey Herman, WH6U
(rec.radio.amateur working-group)
```

2385. Re: ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be63db$4a023980$f1193bcb@default>
Source record: 72916

```
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Andrew Peppper <haggis@superior.net> wrote in article
<36d896bf.0@nebula.superior.net>...
> Wonder if anyone can give me any answers... I have built a 2M to 6M
Xverter
> from Ten Tec.. Set it up as per the manual.. When using it I get a lot of
> noise (S7-S9) in the 50 to 52Mhz part of the band... I was under the
> impression that 6M was very quiet... Has anyone else experienced this...
I
> have also tried different antennas with no avail... Could this be local
> interference ??? when I disconect the antenna the noise dissapears which
> makes me feel it's local and not generated internally..
> Thanks in advance for any suggestions :)
>
> Andrew Pepper
> GM1YMI/W2
>
Andrew

Maybe your RF amp/mixer is being overloaded by strong signals locally but
not on frequency. (eg phones (48 MHz)) Lots of signals cousing intermod
are just heard as hash. Try 10 -20 dB attenuation - if the noise suddenly
disappears as you increase the attenuation this might be the problem. If so
you will need a stronger front end.

Richard
```

2386. Re: Tape Head Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36dd927a.162434318@netnews.worldnet.att.net>
Source record: 72917

On Mon, 01 Mar 1999 04:27:46 GMT, hexster@blazenet.net (gudmundur) wrote:

< snipped >
>can't gang side by side heads without substantial delay.

Back a few years (1950s and early 1960s as I recall) two stereo (binaural) formats existed. One was called "inline" and used vertically-aligned tracks on the tape. The other was called "staggered". The right and left channels were offset slightly and recorded / played by two independent heads.
I had an old Voice of Music machine which incorporated both modes of playback by providing a switch to move from one format to the other. Listening to an inline tape in the staggered mode was quite interesting :)

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

2387. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36de94e6.163054232@netnews.worldnet.att.net>
Source record: 72918

On Sun, 28 Feb 1999 21:32:01 -0800, "gbowne" <gbowne@email.msn.com>
wrote:

>And I still need sources of Female 8 pin Microphone connectors. Local
>RatShack's can't locate any. They can locate only male 8 pin connectors
>switchable. Has decent red rocker A/C power switch from RatShack mounted on
>from RatShack.

I wasn't aware people shopped in rat shacks.

I often do shop in RadioShack.

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

2388. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36df958a.163218182@netnews.worldnet.att.net>
Source record: 72919

Of course, the fact that encryption for reasons of personal privacy is
illegal in Amateur Radio makes no difference.

On Sun, 28 Feb 1999 21:46:55 GMT, "The Ham Informer"
<THI@resolute.com> wrote:

>We have indeed seen some excellent quality
>communications privacy (encryption devices) gear
>showing up for sale at regional ham fests for use
>with amateur radio VHF/UHF equipment.
>
>These items are very popular and reasonably
>priced. The vendor has several demonstration
>units set up at ham fests and potential buyers
>are encouraged to try out the gear before buying.
>
>This is high-quality equipment, not junk!
>
>
>

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

2389. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <01be63ed$b0489ba0$148592d0@Bit-Net.bit-net.com>
Source record: 72920
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> Bad Boys Rape Our Young Girls But Violet Gives Willingly
> Thats how I learned it!
> Chuck (W3FJJ)

Perhaps Bill Clinton was a Ham in Hot Springs as a boy?

2390. Re: Balun/choke help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Tim <ka8ddz@eaglequest.com>
Message-ID: <36DAA564.381A1C7C@eaglequest.com>
Source record: 72921

Roy Lewallen wrote:

> Tim wrote:
> >
> > I've just recently put up a 6m Jpole, I've looked in the handbook and an
> > old antenna handbook for feeding options. I don't understand the
> > difference between a transforming 4:1 balun and a choke balun. Are they
> > the same?
>
> They refer to different properties. There are two fundamentally
> different types of baluns.

Thanks Roy, I've reffered to the handbook on this but still didn't quite get it. Thank you for your input.

Tim

2391. WTS(wap) for or Buy, Old Hammarlund Pro 310, dead or alive

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <36DA753A.8D6@ns.atl.org>
Source record: 72922

Lotsa debris to swap, depending on condition of 310.

Have a Nice KWM2A RE with rejection tune, a very nice Drake TR4CW (not
RIT) with blanker, PS, and MS4, A Drake TR7 with PS7, a Novice
station with HQ170A, DX60, HG10, Johnson matchbox, and old straight key.
A turbine looking thing that has been refurbed with paperwork. I think
it's a PTO as it is marked CSD (constant speed drive) and appears
to run on bleed air. Readuy to use, with documentation stating so.
http://www.atl.org/images/turbine.jpg application, Grumman A-6.
Also looking for an older HiFi speaker in unmolested, good, condition
to match the one I have so as to move up from HiFi to this new stereo
stuff everyone is talking about. Here is a PIX of the speaker.
http://www.atl.org/images/altec.jpg Not keen on selling any of the
gear outright at this time. Perhaps after I get the webserver rebuilt...
Thank you

-bob
I'm in Atlanta
404-888-0389

2392. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: clintbrad4d@earthlink.net
Message-ID: <7bej5mqnb1@nnrp1.dejanews.com>
Source record: 72923
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7bbo7j$ati@sjx-ixn9.ix.netcom.com>,
kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

> Their copy protection is a nightmare...

How does this negatively affect anyone using the software on a system that
meets RT Systems's published "system requirements" for running the software?

- Clint Bradford

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2393. Light Beam Communications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: DJohnson@DJandAssoc.Com
Message-ID: <7bekdprsm1@nnrp1.dejanews.com>
Source record: 72924

An area hardly touched by experimenters and hobbyists is light beam communications. Many of the things currently being done with radio frequency techniques could be done with light. They can be done without any FCC license requirements. True, you have to have a line-of-sight alignment with the other station and yes some bad weather can block the signal. But, with no FCC to get in your way, high speed data can be transmitted over long distances (20 miles) using light. I have some information on the subject at my web site: www.DJandAssoc.Com within my "Imagineering On-line Magazine." I would love to see more experiments conducted in this virgin area.

Dave Johnson, P.E. &#65533; Consulting Engineer

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2394. Re: Heathkit HD-19 phone patch $13.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Jonesy <jonesy@rmi.nospam.net>
Message-ID: <7behfq$s02$1@news1.rmi.net>
Source record: 72925
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

In rec.radio.amateur.homebrew zeitler@ibm.net
spammed with this and other postings:

: Untested. No manual. looks okay. $13.00 plus shipping from San Diego 92139.

Damn! Now the crap-for-sale people are invading the homwbrew ng --
after having made the equipment ng unusable for its purpose.

sigh...

Jonesy

2395. WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <WXYcQEAjbv22EwDw@falstaf.demon.co.uk>
Source record: 72926
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Dear All,
Does anyone know of a reasonable but simple to use smith chart program.
I want to be able to tell it to behave as though I was doing it
graphically with a ruler and a chart. the purpose is to design some
matching circuits.

Rgds

robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

2396. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be646a$aa07c720$563cac3e@default>
Source record: 72927
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

If the matching circuits are transmission lines then
program RJELINE3 will do everything a Smith Chart will do,
much faster and exactly. Enter dimensions of a real line
and terminate with any impedance R + jX. Program computes
line performance, SWR and input impedance, R + jX.

Download in a few seconds. Not zipped up. One
self-contained file only. Can be run immediately. Data
input on a what-if? basis.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Robin Birch <robin@falstaf.demon.co.uk> wrote in article
<WXYcQEAjbv22EwDw@falstaf.demon.co.uk>...
> Dear All,
> Does anyone know of a reasonable but simple to use smith
chart program.
> I want to be able to tell it to behave as though I was
doing it
> graphically with a ruler and a chart. the purpose is to
design some
> matching circuits.
>
> Rgds
>
> robin
>

> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome
>

2397. Re: WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36DB0481.54A575AA@teleport.com>
Source record: 72928
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

You might take a look at MicroSmith, sold by the ARRL. It's quite inexpensive and would suit your purpose well. You should be able to find more information at their web site www.arrl.org. It may also be available through the RSGB.

Roy Lewallen, W7EL

Robin Birch wrote:
>
> Dear All,
> Does anyone know of a reasonable but simple to use smith chart program.
> I want to be able to tell it to behave as though I was doing it
> graphically with a ruler and a chart. the purpose is to design some
> matching circuits.
>
> Rgds
>
> robin
> ---
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

2398. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6473$c1947060$f0e5abc3@default>
Source record: 72929
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I forgot to add : -

Program TPINET calculates L and C component values of T and
Pi impedance matching .networks. Enter load resistance,
required input resistance and frequency. Internal loss is
also computed. Available by downloading from my website.
Input data on a what-if? basis.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

2399. Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: dalien <dalien@pacifier.com>
Message-ID: <36DB116E.73C5D141@pacifier.com>
Source record: 72930
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Seeing several unassembled Heathkits for sale brought back memories:

"It is cold outside, but the house is warm and smells of Christmas
decorations. The fireplace crackles; a soldering pencil waits to warm.
My cold wet feet slowly thaw in thick socks as the flurries turn to
blizzard. Supper is finally over, and it's time to sort the parts. It
is 1961, and I am young again..."

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=72559967
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=72644977
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=72052492
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=70362517

2400. Help: Passive Filters - Toroid Inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Jack Hardin <jhardin@hal-pc.org>
Message-ID: <01be6431$49176e40$c081b4ce@jhardin>
Source record: 72931

I need some cheap 44 mH and 88 mH toriod inductors and/or some schematics
for passive audio filters for CW and SSB which use some other kind of
inductors. If you have any old 44mH (NE8844) or 88 mH (NE8867) toroid
inductors, let me know how much you want for them, shipped to me in Texas.
I need 2 of the 44 mH and 3 of the 88 mH.
Please email me direct -- I don't check this newsgroup that often.
Jack, KD5EDO
jhardin@hal-pc.org

2401. Re: ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Andrew Pepper <haggis@superior.net>
Message-ID: <36db1be1.0@nebula.superior.net>
Source record: 72932

Richard this sounds right as I know my front end is not all that great.. Am using a FT290MkII. So this maybe well what is going on... Thanks for the suggestions

Andrew Pepper
GM1YMI/W2

Richard Hosking <richardh@iinet.net.au> wrote in message news:01be63db$4a023980$f1193bcb@default...
>
>Maybe your RF amp/mixer is being overloaded by strong signals locally but
>not on frequency. (eg phones (48 MHz)) Lots of signals cousing intermod
>are just heard as hash. Try 10 -20 dB attenuation - if the noise suddenly
>disappears as you increase the attenuation this might be the problem. If so
>you will need a stronger front end.
>
>Richard

2402. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Jack Nuscome <Rapsody@gttelcom.net>
Message-ID: <920339747.196.93@news.remarQ.com>
Source record: 72933
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Listen to two meters in any major U.S. city. It's
full of bootleggers from 144 to 148. Who the hell is
going to catch them all? It's an enforcement
nightmare. Mission Impossible! The commission
barely has resources to get people with call signs!
Bootleggers don't use call signs, at least legal ones.
Smell the roses & wake Up!

Phil Kane > wrote in message ...

Use it at your own risk......all ":privacy" systems have been
held to be in violation of the following:

Sec. 97.113 Prohibited transmissions.

2403. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36DB57FB.5890EC31@teleport.com>
Source record: 72934
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

MicroSmith does that. You can also create a ladder matching network, with R, L, C, X, or transmission line elements in any combination, then see how the impedance changes on the Smith chart as you vary any element or the frequency. It's a great learning tool as well a graphical and intuitive way of designing matching circuits.

Roy Lewallen, W7EL

Don wrote:
>
> NO, NO, He said he wanted it to do it as though he were doing it
> graphically. I've been looking for a program like this too. You should
> be able to click a spot and draw a line, etc, move it toward and away
> from the generator, solve multiple stubs (graphically, not a specific
> programmed equation); kind of like using cad software....he dont want to
> enter a number and have a program compute another number. You can
> program a pocket calculator with the transmission line equations. What
> he is looking for, I think, and what I would like to see is a graphical
> program to let you play with a smith chart like you could do with a
> chart and a ruler and a pencil on top of a table. This way, you could
> use the chart applied to your own situation instead of having a few
> transmission line equations programmed.
>
> Don

2404. Re: PIN DIODES.. Where do you find them???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <36DB58E5.1F41@northwest.com>
Source record: 72935

Motorola. Call your local Motorola rep, or the 1-800 operator for their
WATS number.
==========

TLNixon@revealed.net wrote:
>
> Have had this problem in the past, not able to locate diodes such as
> MI-301 and UM9401. Any ideas where one could order a few at
> reasonable prices????
>
> Terry WB0VQP

2405. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-01 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <JVKC2.90$U4.16241@news.goodnet.com>
Source record: 72936
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Come on Jack. It's a simple little task, and you are blowing
it all out of proportion. It's not the end of the world, but
you will have to get off your ass.

Jack Nuscome wrote
> Listen to two meters in any major U.S. city. It's
>full of bootleggers from 144 to 148. Who the hell is
>going to catch them all? It's an enforcement
>nightmare. Mission Impossible! The commission
>barely has resources to get people with call signs!
>Bootleggers don't use call signs, at least legal ones.
>Smell the roses & wake Up!

2406. Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: "John Kirk, VE6XT" <jakirk@calcna.ab.ca>
Message-ID: <7bib89$9nk@ds2.acs.ucalgary.ca>
Source record: 72777

I seem to have lots of applications for RF sources up in the high vhf to 1 GHz or so region lately. I'm hesitant to use oscillator/multiplier schemes to get there, as I lack the proper test gear to make sure they are clean. Is there some kind of "minimum parts count/minimum engineering" solution? I saw something once in a Plessey catalog that needed only 5 parts to give me stable, clean 900 MHz (one of the applications I actually needed!) from an hf crystal, but Plessey is not widely available in North America. Is there something more mainstream?
Thanks!
John

2407. Re: VX-5 + satellite/TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: firewave@REMOVE.videotron.ca
Message-ID: <firewave-0203992315090001@192.168.1.4>
Source record: 72778
Cross-posted to:
rec.radio.amateur.packet,rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur

> I use a BayPac modem and HP200LX Paltop PC running BayCom software.

ok and how much does this cost? (not the WinCE but the modem ;) i still
need to make my home made cable work for the vx-5 to PC interface...so i
think i wont be able to build this... :)

> Well... for Mir a simple ground plane antenna is all the is needed. It's
> quite easy to work with a ground plane, I do it mobile from a patrol car
> with a mag mount antenna and at home with a homebrew J-pole.

ok my english vocabulary surrounding ham radio isnt very good...what is a
ground plane antenna? how does it look like?

> You can work AO-27 with the rig with just a simple whip antenna. I use my
> FT50 and a MFJ-1715S to work the bird almost daily. The Arrow antenna will
> work much better, but it costs a bit more than the whip. The price of the
> Arrow is not very expensive and you'll have an excellent antenna!

same here (:) what is an arrow antenna? the whip antenna is a metal antena
like on most car? :) (ill have to learn my ham-vocabulary soon =)

i wont do packet on the road but i ll probably try to do sats
though...(while walking i dont have a car :)

this is pretty new stuff to me, at what altitude are those sats? can you
be multiple people on 1 sat using ctcss tones?(or dcs) and are there
packet sats? how does it work? hehe :) (i m too much curious :)

also, if i try to build an atenna myself how do i calculate its impedance?
(is that the right word in english ?:/)

thanks a lot!

alex

2408. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: dalien <dalien@pacifier.com>
Message-ID: <36DCC1A1.F3768AE5@pacifier.com>
Source record: 72779
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Great story, Dave. Bet there are lots of other "stories" reading this and wondering whether to tell. We hope so.

Here's another Heathkit Memory:

It is the summer of 1953. After a year in college and exposure to other electronics types, mostly "hi-fi" and "stereo" freaks, I had to try and build something from a kit. Decided on a Heathkit VTVM, because, well, you have to be able to measure things, don't you?

It was a hard-earned $24.95 (??? Help me, I don't have the old catalogs here) that went to Benton Harbor, but it was my summer fun project after sweating hard on Iowa farms at $5/day to make next years tuition. The VTVM was such fun to build, those cool evenings in the damp basement, using the big new 250 watt 2-speed Weller soldering gun (another $10 or so) and the big soldering iron. (Still have 'em).

Dad thought I was nuts. He asked dumb questions like "what are you going to measure"? Well, um, how about the voltage at the wall outlet? It got a lot of measuring that summer. "Do you really need one of those?" Of course I needed one of those. "Well, then, why don't you use this acid core solder? We have lots of it."

I built lots of Popular Mechanics electronics projects in the late '40s and early '50s, but never met a ham. The local TV mechanic gouged this 12 year old $3.50 for a 20/20/150v electrolytic capacitor when that was a full days laborers pay, and he could easily have clipped one out of an old TV set and given it away. I finally met hams in college, and that Heathkit VTVM became the first piece of test gear at WN0ZSR. I still have it, and it works just fine.

Dad later became the very active W0LTB/W0KD, and built his own Heathkits. (1899-1986. RIP). So did a Son who built Heathkits, and a Daughter, and that VTVM played an important role.

-Dave W6OVP

Dave Hinerman wrote:

> On Mon, 01 Mar 1999 14:15:11 -0800, dalien <dalien@pacifier.com>
> wrote:
>
> >Seeing several unassembled Heathkits for sale brought back memories:
> >

> >"It is cold outside, but the house is warm and smells of Christmas
> >decorations. The fireplace crackles; a soldering pencil waits to warm.
> >My cold wet feet slowly thaw in thick socks as the flurries turn to
> >blizzard. Supper is finally over, and it's time to sort the parts. It
> >is 1961, and I am young again..."
>
> Yup. Not -quite- 1961, I built my first in 1976.
>
> Sitting at my desk in July, the window open, a gentle breeze stirring
> the solder smoke about my head as I assembled a HW-16 and wondering if
> my Novice ticket would arrive before I finished it, and how would I
> test the transmitter if it didn't? I knew I could use some light bulbs
> for a dummy load, but I also knew they'd radiate from DC to daylight
> (well, incandescent light), and the FCC was just WAITING for this new
> Novice to screw up so they could yank his license before he even got
> it, so I'd better wait...
>
> Then Mom comes in, wanting to know what kind of trouble I was in NOW
> because there was this letter from the FCC in the day's mail and she
> just KNEW I'd blown up NORAD or something...
>
> All to the tune of "Afternoon Delight."
>
> A child of the 70's? Darned right.
>
> Where's my soldering iron? I gotta build something.

2409. Re: Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36DCC741.510F@pop.removethistomailme.net>
Source record: 72780

Dave Hinerman wrote:
>
> On Tue, 2 Mar 1999 20:43:20 -0700, "John Kirk, VE6XT"
> <jakirk@calcna.ab.ca> wrote:
>
> >I seem to have lots of applications for RF sources up in the high vhf to 1
> >GHz or so region lately. I'm hesitant to use oscillator/multiplier schemes
> >to get there, as I lack the proper test gear to make sure they are clean.
> >Is there some kind of "minimum parts count/minimum engineering" solution?
> >I saw something once in a Plessey catalog that needed only 5 parts to give
> >me stable, clean 900 MHz (one of the applications I actually needed!) from
> >an hf crystal, but Plessey is not widely available in North America. Is
> >there something more mainstream?
>
> National Semiconductor, Philips (was Signetics), and Motorola all make
> PLL chips/chip sets that are rated up to 1.2 or 2.4 GHz. But PLL
> doesn't necessarily guarantee clean - you'd probably want the same
> unavailable equipment to design a PLL for that range.

True -- you stand a better chance of building a clean multiplier chain
"blind", than a clean PLL.

>
> Besides, I don't have a clue where to buy any of these parts in hobby
> quantities. At work I but Motorola parts from Future Electronics (and
> at my last job from Hamilton Avnet), but they all want to sell a rail
> of chips at a time. I can't afford 18 chips at $20 each.
>

Give http://www.newark.com a try.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2410. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: electronstream@webtv.net
Message-ID: <18074-36DCCA8C-72@newsd-243.iap.bryant.webtv.net>
Source record: 72781

My first and only Heathkit was a CPO. I finally got my parents to give me some money to order a HW-99 , I think it was. It was on sale , I guess they were discontinuing it. I was too late , they sent back the check and told me they had no more. And my parents told me I couldnt have anything more expensive.....But I still have all those memories of getting that first homebrew regenerative receiver to work. Ill never forget tuning in on oldies 680 and hearing Ferry Cross the Merzy. Every time I hear that song it makes me smile .Such good memories come from being so involved with what you are experimenting with that all the worries of the world seem to vanish as you carefully melt solder around the leads of all those magical parts. The feeling is hard to explain unless youve been there. ......Doug N0WVA

2411. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36DC7673.EC833582@bellsouth.net>
Source record: 72782

Phil Kane wrote:
> >We have indeed seen some excellent quality
> >communications privacy (encryption devices) gear
> >showing up for sale at regional ham fests for use
> >with amateur radio VHF/UHF equipment.
> >
> >These items are very popular and reasonably
> Use it at your own risk......all ":privacy" systems have been
> held to be in violation of the following:

I wonder what region? I've never seen one, either at Dayton or any of
the 'fests around Tennessee. Nor have I ever heard one on the air.
(despite scanning the entire band on numerous occasions, from a location
about 3 miles from a major interstate)

I *have* heard bootleggers in the 2m band. Two of them in 25 years. I
can live with that.
The ones in the 10m band are a much bigger problem - and unfortunately,
most are outside FCC jurisdiction.

I think what we're seeing here are trolls from people who can't accept
the idea that some people are opposed to no-code HF. (very unfortunate
- I actually *support* no-code HF, but this kind of troll provides
excellent ammunition to the other side of the debate....)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

2412. Modifications Required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Stew <swilson@geelong.hotkey.net.au>
Message-ID: <HFzC2.16$fq.3122@vic.nntp.telstra.net>
Source record: 72937

Hi All;

I am putting together a new radio site which will contain a section on modifications.

Do any of you have any good, or new mods for scanners, or transceivers? I already have the ones found at qth/qrz and barc.
What I am looking for is *new* mods, or websites where they can be found, although with the websites, only send details is those websites have the mods in text form, and not HTML

Also required are homebrew circuits, and QRP projects.

Thanks In Advance;
Stew

2413. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: wa9vrh <wa9vrh@ocslink.com>
Message-ID: <01be6450$ca8f41e0$057b9ece@larry>
Source record: 72938
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Built alot of Heathkits never remembered needing a jar of vasaline just to get it to the workbench.

2414. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36DB4670.EDDEDF97@usit.net>
Source record: 72939
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

NO, NO, He said he wanted it to do it as though he were doing it graphically. I've been looking for a program like this too. You should be able to click a spot and draw a line, etc, move it toward and away from the generator, solve multiple stubs (graphically, not a specific programmed equation); kind of like using cad software....he dont want to enter a number and have a program compute another number. You can program a pocket calculator with the transmission line equations. What he is looking for, I think, and what I would like to see is a graphical program to let you play with a smith chart like you could do with a chart and a ruler and a pencil on top of a table. This way, you could use the chart applied to your own situation instead of having a few transmission line equations programmed.

Don

Don

Reg Edwards wrote:
>
> If the matching circuits are transmission lines then
> program RJELINE3 will do everything a Smith Chart will do,
> much faster and exactly. Enter dimensions of a real line
> and terminate with any impedance R + jX. Program computes
> line performance, SWR and input impedance, R + jX.
>
> Download in a few seconds. Not zipped up. One
> self-contained file only. Can be run immediately. Data
> input on a what-if? basis.
> --
> ******************************
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp
>
> ******************************
>
> Robin Birch <robin@falstaf.demon.co.uk> wrote in article
> <WXYcQEAjbv22EwDw@falstaf.demon.co.uk>...
> > Dear All,
> > Does anyone know of a reasonable but simple to use smith
> chart program.
> > I want to be able to tell it to behave as though I was
> doing it
> > graphically with a ruler and a chart. the purpose is to
> design some

> > matching circuits.
> >
> > Rgds
> >
> > robin
> >
> --
> --------
> > Robin Birch robin@falstaf.demon.co.uk
> >
> > M1ASU/2E0ARJ Old computers and radios always welcome
> >

2415. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36DB46C0.C36D9686@usit.net>
Source record: 72940
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

No, thats not what he asked for.

Don

Reg Edwards wrote:
>
> I forgot to add : -
>
> Program TPINET calculates L and C component values of T and
> Pi impedance matching .networks. Enter load resistance,
> required input resistance and frequency. Internal loss is
> also computed. Available by downloading from my website.
> Input data on a what-if? basis.
> --
> ******************************
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp
>
> ******************************

2416. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7bfij4$7l0@bgtnsc02.worldnet.att.net>
Source record: 72941
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

dalien wrote in message <36DB116E.73C5D141@pacifier.com>...
>Seeing several unassembled Heathkits for sale brought back memories:
>
>"It is cold outside, but the house is warm and smells of Christmas
>decorations. The fireplace crackles; a soldering pencil waits to warm.
>My cold wet feet slowly thaw in thick socks as the flurries turn to
>blizzard. Supper is finally over, and it's time to sort the parts. It
>is 1961, and I am young again..."

One of the most exciting events from the past for many of us has been
arriving home after school or work, and seeing that UPS has left a package
from Heath on the front porch.
Al, N2NKB

2417. Re: WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <36db5003.1281455@news.azstarnet.com>
Source record: 72942
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Mon, 1 Mar 1999 20:21:55 +0000, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>Dear All,
>Does anyone know of a reasonable but simple to use smith chart program.
>I want to be able to tell it to behave as though I was doing it
>graphically with a ruler and a chart. the purpose is to design some
>matching circuits.
>
>Rgds
>
>robin
>____

Robin,

For a free program that might suit your needs try:

http://mot2.mot-sps.com/rf/designtds/mimp.html

If it's not what you want, well...it's free.

Otherwise, Roy's suggestion of the MicroSmith
program is a good one.

Wes N7WS

2418. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be649a$c3456a00$3efdabc3@default>
Source record: 72943
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

If he was unable to find what he is looking for within the next half hour, then I was offering something which MIGHT do the job he wants done, more easily and quickly. But he gave only a very vague idea of the purpose for which he wanted a computerised Smith Charts. You are not sure yourself about what he wants.

Regarding your own project - if you prefer to attach more importance to the tools you use than the final product, whatever that is, then good luck with your search. I have felt like that about a hobby myself and understand very well how you feel.

While you are waiting for something to turn up, why not download program RJELINE3 and DIPOLE1 and amuse yourself. Better than staring at TV programs. Absolutely free !
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Don <bjmcpher@usit.net> wrote in article
<36DB4670.EDDEDF97@usit.net>...
> NO, NO, He said he wanted it to do it as though he were doing it
> graphically. I've been looking for a program like this too. You should
> be able to click a spot and draw a line, etc, move it toward and away
> from the generator, solve multiple stubs (graphically, not a specific
> programmed equation); kind of like using cad software....he dont want to
> enter a number and have a program compute another number. You can
> program a pocket calculator with the transmission line equations. What
> he is looking for, I think, and what I would like to see is a graphical
> program to let you play with a smith chart like you could do with a
> chart and a ruler and a pencil on top of a table. This

way, you could
> use the chart applied to your own situation instead of
having a few
> transmission line equations programmed.
>
> Don
>
>
> Don
>
>
> Reg Edwards wrote:
> >
> > If the matching circuits are transmission lines then
> > program RJELINE3 will do everything a Smith Chart will
do,
> > much faster and exactly. Enter dimensions of a real
line
> > and terminate with any impedance R + jX. Program
computes
> > line performance, SWR and input impedance, R + jX.
> >
> > Download in a few seconds. Not zipped up. One
> > self-contained file only. Can be run immediately.
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> > input on a what-if? basis.
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> > Reg, G4FGQ For free software go to:-
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> > Robin Birch <robin@falstaf.demon.co.uk> wrote in
article
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> > chart program.
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to
> > design some
> > > matching circuits.
> > >
> > > Rgds
> > >

> > > robin
> > >
> >

> > _____
> > > Robin Birch robin@falstaf.demon.co.uk
> > >
> > > M1ASU/2E0ARJ Old computers and radios always
welcome
> > >
>

2419. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: maddog@io.com
Message-ID: <36db5c4c.398284@news.io.com>
Source record: 72944

On 1 Mar 1999 13:35:42 GMT, roncook@worldnet.att.net (Ron Cook) wrote:

>On Sun, 28 Feb 1999 21:32:01 -0800, "gbowne" <gbowne@email.msn.com>
[snip]
>I wasn't aware people shopped in rat shacks.
>
>I often do shop in RadioShack.

Ahhh... out-of-the-closet... there, that feels much better, doesn't
it?

2420. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: maddog@io.com
Message-ID: <36db5d9e.736953@news.io.com>
Source record: 72945
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On 2 Mar 1999 02:49:02 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
wrote:

[snip]
>Regarding your own project - if you prefer to attach more
>importance to the tools you use than the final product,
>whatever that is, then good luck with your search.

Actually, some of us learn graphically and visually better than
numerically. Smith charts were made for people like us. We can learn
more about circuit behavior by fooling with Smith charts, than we can
by application of formulae. When dealing with microstrip circuitry,
and uhf transmission lines, you're not going to have much success
applying "rule of thumb" and "cut and try" techniques, and even if you
get lucky, you'll not have learned much (except that you're lucky ;-)
In this case, tools *are* important.

monty, N5FC

2421. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: maddog@io.com
Message-ID: <36db60ab.1517974@news.io.com>
Source record: 72946

On Sun, 28 Feb 1999 21:32:01 -0800, "gbowne" <gbowne@email.msn.com>
wrote:
>My project is pretty much per "Build your own intelligent amateur radio
>transceiver", Tab Books, Autor: Randy L. Henderson (ISBN 0-07-028264-1),
>exept with a few major improvements, some asthetic.
>
>My chassis is per SpireAudio See: Http://www.spireaudio.com and is 6" H x
>17" W (L to R) x 10" L (Front to Rear). Cost $99.00. Could revise
>Transceiver later by making it 2" Taller and Wider, to 8"x19"x10".
>
>The Chassis front panel is .250" thick ALCOA (Aluminum Company of America)
>and is and is silver annodized. I did have an old .125" ALCOA plate of 6061
>(billet) which was 6" x 17"
>[snip]
>The rig will have bands from 10m to 160m

Wow! Great project, Gregory. Hang in there! Let us know how it comes
out!

monty, n5fc

2422. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: KD5GEH <kd5geh@arrl.net>
Message-ID: <7bfv4q$ns5$1@newnews.startext.net>
Source record: 72947
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Oh well.. One of mine was just seeing the new CATALOG.. I was too young to be able to buy any of the stuff (with stingy/strict parents, atleast), but that and Edmond, well.... ;)

Al, N2NKB <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote in
>
>One of the most exciting events from the past for many of us has been
>arriving home after school or work, and seeing that UPS has left a package
>from Heath on the front porch.
>Al, N2NKB
>
>

2423. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19990302.0859.9900806snz@microvest.demon.co.uk>
Source record: 72948
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

On Tuesday, in article <36DB46C0.C36D9686@usit.net>
bjmcpher@usit.net "Don" wrote:

> No, thats not what he asked for.

If the only available solution is a hammer, then every problem
becomes a nail :-)

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

2424. Swing Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Keith Brigode <brigode@ibm.net>
Message-ID: <36DBC1AC.8158F99E@ibm.net>
Source record: 72949

Looking for a 5/25 uh swing choke perhaps 750 ma 4,000. Any out there?
Who winds chokes?

2425. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Fred Peerenboom <peerenbf@dmapub.dma.org>
Message-ID: <fpQC2.92$zt2.208@news6.ispnews.com>
Source record: 72950
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In rec.radio.amateur.misc Colin Caulkins <caulkins@user2.teleport.com> wrote:
: I would like to bypass cellular providers by having a transceiver in my
: car and another at home which is connected to the phone line. I'm not
: trouble with that is, I don't know of any FRS radios with DTMF keypads.
: Are there any? Better still, are there any amateur transceivers that can
: transmit a full-duplex, encrypted, digital signal? If the answer is no,
: then why is the amateur market so technologically far behind cellular?
Amateur radio is not really technologically far behind cellular. Take a
gander at the frequency that the cell system uses and you will see how
such a small device can have the ability to run full duplex. Then look at
the size of the duplexers that you need for say 2 meter full duplex
operation. By the way, in the ancient past car phones used to run in the
400 meg ranges and they had a trunk full of equeipment, well not full but
a rather large transciever/duplexer unit back there to accomplish this.
Physical size of components in the system are very decisive factors in the
game. Not so much the technological ability.

Fred

---
peerenbf@dma.org

Fred KE8TQ
Lorraine KC8HWV

Sunny Dayton, Ohio
Look for us on Amateur Radio

2426. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be64ea$ab24e7c0$51f9abc3@default>
Source record: 72951
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Monty,

Smith's charts were designed, for use by overworked RF transmission line engineers in the 1930's* to reduce the enormous computational labour involved with complex hyperbolic functions. We now have Intel and computer programs.

As computer programs are to Smith Charts, so pocket calculators are to log tables and slide rules.

*Smith simplified previous charts which had been in use since around 1900 by telephone and telegraph cable engineers. The earlier, more comprehensive charts, covered frequencies from 50 Hz upwards. Smith's simplified charts are applicable only at radio frequencies and approximations arise because of various assumptions. The assumptions were necessary to permit the charts to be printed on a flat sheet of paper. Otherwise they would have to be 3D.

The principal assumption is that the line impedance Zo is a pure resistance. Zo for real lines is never real. Errors caused by this assumption can usually be neglected on practical lines above 100 KHz. But it's just as well to be aware of their existence. Smith charts are useless on telephone lines and at power frequencies.

I have affectionate feelings for antique tools. Smith Charts fall into that category, even computerised versions. Long may they appear in our educational text books.

I think Bob, W9DMK, may have some software which automates use of Smith Charts. He is usually on the antenna newsgroup. I've mislaid his website URL.

****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Monty Northrup <maddog@io.com> wrote in article
<36db5d9e.736953@news.io.com>...
> On 2 Mar 1999 02:49:02 GMT, "Reg Edwards"
<G4fgq.Regp@btinternet.com>
> wrote:

>
> [snip]
> >Regarding your own project - if you prefer to attach
more
> >importance to the tools you use than the final product,
> >whatever that is, then good luck with your search.
>
> Actually, some of us learn graphically and visually
better than
> numerically. Smith charts were made for people like us.
We can learn
> more about circuit behavior by fooling with Smith charts,
than we can
> by application of formulae. When dealing with microstrip
circuitry,
> and uhf transmission lines, you're not going to have much
success
> applying "rule of thumb" and "cut and try" techniques,
and even if you
> get lucky, you'll not have learned much (except that
you're lucky ;-)
> In this case, tools *are* important.
>
> monty, N5FC
>

2427. FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: napoli@i-2000.com
Message-ID: <36e1e2d7.5245646@news.i-2000.com>
Source record: 72952

F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
with rectangular face 0--10 amp- scale..brand new..pse remove the
(ns) from my address..thanks..Bob ..on Long Island....

2428. Re: WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36DBF7E5.33A90E87@mwci.net>
Source record: 72953
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Robin Birch wrote:

> Dear All,
> Does anyone know of a reasonable but simple to use smith chart program.
> I want to be able to tell it to behave as though I was doing it
> graphically with a ruler and a chart.

The ARRL linear circuit analysis program Radio Designer has a feature called the Circles Utility. Radio Designer is a simplified, low cost version of the very expensive Compact Harmonica program.

The purpose of this Utility is as an electronic Smith chart. The chart appears on the screen and the user uses keyboard instructions to draw lines and circles of various kinds on the screen. It is almost exactly the same as using an actual paper Smith chart.

This chart is a YZ chart. Resistance and reactance are in red, conductance and susceptance are in green. Y and Z appear simultaneously and the chart is navigated by switching back and forth, with both in full view.

This Utility is excellent for designing matching networks, using LC components and transmission lines. It gives the visual interaction that the Smith chart provides and that you are looking for.

This utility is also used to do graphical design of amplifiers, using S-parameters. Complete instructions for doing this are provided.

The other features of Radio Designer take the values from the Smith chart and "analyzes" and "optimizes" the network that you have "designed" on the Smith chart.

A recent two-part article in QEX magazine describes in detail the usage of the Circles Utility. I am the author. I will email a copy of this in .pdf format if you want it.

Radio Designer can be purchased from the ARRL website for $150.

Bill W0IYH

2429. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: dalien <dalien@pacifier.com>
Message-ID: <36DC0CCD.BAF71126@pacifier.com>
Source record: 72954
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I couldn't afford much then either. Mostly lots of catalog looking. Had them memorized. But I did get to built several inexpensive transmitters for myself, and some stereo gear, then LOTS of lab equipment for schools. It was all lots of fun.

W6OVP

KD5GEH wrote:

> Oh well.. One of mine was just seeing the new CATALOG.. I was too young to
> be able to buy any of the stuff (with stingy/strict parents, atleast), but
> that and Edmond, well.... ;)
>
> Al, N2NKB <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote in
> >
> >One of the most exciting events from the past for many of us has been
> >arriving home after school or work, and seeing that UPS has left a package
> >from Heath on the front porch.
> >Al, N2NKB
> >
> >

2430. sat tracks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: kc4tzn@webtv.net
Message-ID: <27006-36DC0836-4@newsd-244.iap.bryant.webtv.net>
Source record: 72955

looking for software for tracking amateur satellites that will run under windows 98,
any suggestions?

tnx in advance.

2431. Re: 8 pin microphone jack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: adam@onramp.net
Message-ID: <MPG.1145d707b5bc6d389896a1@news.onramp.net>
Source record: 72956

In article <uAQ3w91Y#GA.147@upnetnews05>, gbowne@email.msn.com says...

> I would like sources, part numbers and prices of Female 8
> pin Microphone jacks, Chassis Mount. Must be fairly current.

Try Radio Shack (no kidding!) I think I have seen them at the
local store, for perhaps $4-5 each.

Adam, KM5SS
adam@onramp.net

2432. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <36DC2AE8.B0ED6AF8@usit.net>
Source record: 72957
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

There may be a good general purpose chart program somewhere, but the ones I have used will only compute certain common calculations. A smith chart can be used for a lot more than just calculating the input impedance of a transmission line terminated with a load. After using one to solve a variety of problems, you get to where you can think on the fly and use it in a manner to work for the problem at hand, which may well not be the input to a line. As an example, consider a double stub tuner. These can be designed in a few minutes using a chart. Maybe some particular programs have a set of equations for this purpose, but some dont, and so far what I have looked at has some problems programmed, but isnt general enough to cover all possibilities. I admit I havent looked in some time and wouldnt waste the time looking unless I had a feel that something better than a few equations was available. This should be a natural use for a computer, primarily to enhance the accuracy of using a chart. The real advantage of having the chart (or a simulation of the chart) is to be able to see where you want or need to go before being there, if that makes any sense. Then sometimes, the method to get there becomes obvious. If a person hasnt used a chart much for anything but line input impedance, these last two sentences wont make any sense to him at all. A person who has will know exactly what I mean.

I didnt mean to ruffle any feathers, and I must say that I have used transmission line calculating programs since the early 80's. Indeed, if all you want to do is to calculate input impedance, etc, then it is much easier that screwing around with charts. Or complicated graphical programs, for that matter. But there are some problems that are more complicated and I just havent found a faster way than using the chart, albeit, the numbers in the end are only approximate. These are typically combinations of various line calculations as well as lumped circuit calculations, where the parameters are designed rather that being knowns and plugged in to get an answer.

I wouldnt be surprised if there were such a package as we would like, but I suspect that it would be an expensive item.

Again, sorry if I pissed anyone off.

Don

Reg Edwards wrote:
>
> Monty,
>
> Smith's charts were designed, for use by overworked RF
> transmission line engineers in the 1930's* to reduce the

> enormous computational labour involved with complex
> hyperbolic functions. We now have Intel and computer
> programs.
>
> As computer programs are to Smith Charts, so pocket
> calculators are to log tables and slide rules.
>
> *Smith simplified previous charts which had been in use
> since around 1900 by telephone and telegraph cable
> engineers. The earlier, more comprehensive charts, covered
> frequencies from 50 Hz upwards. Smith's simplified charts
> are applicable only at radio frequencies and approximations
> arise because of various assumptions. The assumptions were
> necessary to permit the charts to be printed on a flat
> sheet of paper. Otherwise they would have to be 3D.
>
> The principal assumption is that the line impedance Zo is a
> pure resistance. Zo for real lines is never real. Errors
> caused by this assumption can usually be neglected on
> practical lines above 100 KHz. But it's just as well to be
> aware of their existence. Smith charts are useless on
> telephone lines and at power frequencies.
>
> I have affectionate feelings for antique tools. Smith
> Charts fall into that category, even computerised versions.
> Long may they appear in our educational text books.
>
> I think Bob, W9DMK, may have some software which automates
> use of Smith Charts. He is usually on the antenna
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> > [snip]
> > >Regarding your own project - if you prefer to attach
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> > Actually, some of us learn graphically and visually

> better than
> > numerically. Smith charts were made for people like us.
> We can learn
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> than we can
> > by application of formulae. When dealing with microstrip
> circuitry,
> > and uhf transmission lines, you're not going to have much
> success
> > applying "rule of thumb" and "cut and try" techniques,
> and even if you
> > get lucky, you'll not have learned much (except that
> you're lucky ;-)
> > In this case, tools *are* important.
> >
> > monty, N5FC
> >

2433. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36dc2994.0@news.netwalk.com>
Source record: 72958
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Bob Lewis wrote in message <36D87690.BA997908@erols.com>...
>Mouser Electronics has magnet wire (#16) but I don't see anyone with #35.
>That's pretty small wire. Mouser has #28 if that helps.

It comes even smaller than that. I have a spool of #40 around somewhere.
Hate to use it, however, because a piece of my hair is stronger!

Jim
N8EE

2434. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36dc2bf9.0@news.netwalk.com>
Source record: 72959
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Jack Nuscome wrote in message <920339747.196.93@news.remarQ.com>...
> Listen to two meters in any major U.S. city. It's
>full of bootleggers from 144 to 148. Who the hell is
>going to catch them all? It's an enforcement
>nightmare. Mission Impossible! The commission
>barely has resources to get people with call signs!
>Bootleggers don't use call signs, at least legal ones.
>Smell the roses & wake Up!
>
>

So everybody is a bootlegger.....And that makes it right???

2435. Re: sat tracks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <36DC337F.B71D1B94@ibm.net>
Source record: 72960

Look under:

www.amsat.org

in the download area. While there pick up a copy of the latest Kipliran
(sp) elements.

Most of the dos programs will also run under 98.

mark saterfield wrote:

> looking for software for tracking amateur satellites that will run under
> windows 98,
> any suggestions?
>
> tnx in advance.

2436. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.99Mar2150652@colossus.stdavids.picker.com>
Source record: 72961
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

In article <36dc2994.0@news.netwalk.com> "Jim" <jbolinger@lintek.com> writes:

> It comes even smaller than that. I have a spool of #40 around somewhere.
> Hate to use it, however, because a piece of my hair is stronger!

Heck, that's nothing. The inverter and trigger transformers in disposable camera flash units use something like #44 - #46! Talk about being weaker than a hair! :) Try to disassemble one of those without breaking the wire!

--- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
+Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
| Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html

2437. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <7bhhoc$h78@dfw-ixnews7.ix.netcom.com>
Source record: 72962
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In <7bej5mqnb1@nnrp1.dejanews.com> clintbrad4d@earthlink.net writes:
>
>In article <7bbo7j$ati@sjx-ixn9.ix.netcom.com>,
> kc5egg@ix.netcom.com(Gerald Schmitt) wrote:
>
>> Their copy protection is a nightmare...
>
>How does this negatively affect anyone using the software on a system
that
>meets RT Systems's published "system requirements" for running the
software?

Since you apparently do not have the computer skills to determine this for yourself I'll help you. Every time you defrag the disk you have to reinstall the software. You cannot easily make a backup copy of the floppy disk. If you backup and restore your hard disk you have to reinstall ADMS. This is abusive copy protection. I got so fed up with it I hacked the copy protection in self defense. But naturally since Clint is satisfied all this crap is just fine. Give it break Clint I'll send you a buck buy a clue.

>
> - Clint Bradford
>
>-----------== Posted via Deja News, The Discussion Network
==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your
Own

2438. Re: ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Paul Martin <pmartin@bright.net>
Message-ID: <7bhibp$d4t$1@cletus.bright.net>
Source record: 72963

I run a ten-tec with an old Icom 245 and get the same noise. After a lot of experimenting I believe it is just normal atmospheric and local manmade noise. Six is just noisy, period. When others comment on it being quiet they mean no actual activity. I still love the ten-tec and 6M.
Paul 73

2439. WTB: CAPACITORS-OIL FILLED AND DOORKNOBS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: ericjw@my-dejanews.com
Message-ID: <7bhpqt$l0p$1@nnrp1.dejanews.com>
Source record: 72964

WANTED TO BUY FOR CASH OR TRADE:
1. 30 UF (OR MORE) OIL FILLED CAPS AT >6KV
2. STYLE 57 CERAMIC DOORKNOB CAPS. >400PF PER CAP.
Please respond via email to:
ericw@accessone.com
THANKS, ERIC KR7A

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2440. FS: 10,000 IN4148

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0203991349400001@murphy1.cts.com>
Source record: 72965
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

PLEASE MAKE OFFER ON 10,000 NATIONAL 1N4148
NEW, PACKED 500 PER BAG, 2000 PER BOX:

MIKE

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

2441. Re: Q - Astro Van Radio Noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Mark Schoonover <schoon@adnc.com>
Message-ID: <36DC6402.55911CB1@adnc.com>
Source record: 72966

Bill:

I have some tips on chasing down noise problems in mobiles. Take a
lookat:

http://www.qsl.net/ka6wke

HTH

.mark

billx@bigfoot.com wrote:

> I own a 1990 Chevy Astro Van. I get a pulsing noise over my 10 meter
> radio when ever the van moves. The faster I go the more rapid the
> pulse becomes until it becomes a steady noise level. I believe it is
> from the speedometer sensor circuit. Does anyone know how to stop
> this radio noise.
>
> Thank You
>
> Bill Hayhurst KE4IDU

2442. Re: Driving Impedance of 4CX250's ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: skipp@dilbert.ucdavis.edu
Message-ID: <7bhqad$c5d$2@mark.ucdavis.edu>
Source record: 72967

: CommQuart (commquart@erols.com) wrote:
: One final comment (no pun intended!!)
: The 4CX250 has rather poor IMD performance.
: If you can find some 4CX350 tubes, they will
: perform better in SSB service.
:
Not really,
Depends on the Ep and class of service. You don't qualify that statement
with references.
I would encourage post readers to search the amps@contesting.com
web archives to review information that might indicate otherwise.

cheers
skipp

skipp@pilot.ucdavis.edu

2443. Re: ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36dc735f.208826816@news.online.no>
Source record: 72968

On 28 Feb 1999 18:39:48 GMT, mojaveplan@aol.com (MojavePlan) wrote:

>>> I was under the
>>> impression that 6M was very quiet... Has anyone else experienced this... I
>>> have also tried different antennas with no avail... Could this be local
>>> interference ??
>>> Andrew Pepper
>>> GM1YMI/W2
>
>I have operated on six using a ten tec 20 to 6 transverter and i had lots of
>noise coming through it. it seemed to me, in addition to the fact that six is
>full of man made electrical noise,i drove the transverter with a ten
>tec argosy which has no rf gain control. however, the tx sounded great with
>this setup! good luck.
>jeff kd7dcy

if it is a lift you probably hear at least one of 6 TV transmitters in
this country transmitting 5kW PEP with 60kW EiRP - here in JO38 it
sounds like S9+++++ of 50Hz hum starting 0700z and stays on at least
until at least 0000z

Jan_Martin LA8AK

LA8AK@ONLINE.no

2444. Re: SWR meter for LF ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36dc748a.209126524@news.online.no>
Source record: 72969

On Sun, 28 Feb 1999 18:30:44 -0000, "John Barker" <john@chelcom.com>
wrote:

>Has anybody a design for an SWR meter for use between 180 KHz and 1 MHz.
>
>
have seen some VSWR bridges described, but RLB's are at least easy
find mentioned in every ARRL handbooks

LA8AK@ONLINE.no

2445. Re: ten tec 2M-6M transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Andrew Pepper <haggis@superior.net>
Message-ID: <36dc80c7.0@nebula.superior.net>
Source record: 72970

Yeah don't get me wrong.. :).. I like the transverter and had a alot of fun building it.... Spent a while the other night trying to work Aurora... to no avail :)... Does not help having a station just down the road running 1200W..lol... But I'm having fun and that's the main thing... I think as many of you have said is man made noise.. I live right in a small city.. and am sure that I'm picking up everything in the area :)

Andrew Pepper
GM1YMI/W2

Paul Martin <pmartin@bright.net> wrote in message
news:7bhibp$d4t$1@cletus.bright.net...
>I run a ten-tec with an old Icom 245 and get the same noise. After a lot of
>experimenting I believe it is just normal atmospheric and local manmade
>noise. Six is just noisy, period. When others comment on it being quiet
they
>mean no actual activity. I still love the ten-tec and 6M.
>Paul 73
>
>

2446. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <#w18$6QZ#GA.220@upnetnews05>
Source record: 72971

NG,

I certainly will, Monty. It's taken a year and a half or more to get where I am in the design process, and the procurement of parts which I may need.

The book has been a great help! I wish there was a web site based on the book, but there isn't. I was thinking about making one for my rig once I get it done.

Anyone else read that book by Randy L. Henderson?

2447. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Phil Kane <philkane>
Message-ID: <cuvyxnarpbzzynjpragrepbz.f7zm450.pminews@nntp1.ba.best.com>
Source record: 72972
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Mon, 1 Mar 1999 21:02:56 -0500, Jack Nuscome wrote:

> Listen to two meters in any major U.S. city. It's
> full of bootleggers from 144 to 148. Who the hell is
> going to catch them all? It's an enforcement
> nightmare. Mission Impossible! The commission
> barely has resources to get people with call signs!
> Bootleggers don't use call signs, at least legal ones.
> Smell the roses & wake Up!

Believe me, when the Commission needs to do something, it has a way of finding the troops to do it. "Think harder, work smarter...."

I should know - my job there was finding and coordinating troops for special targeted operations (I was chief of enforcement in San Francisco for 18 years). Some involved the amateur service, most involved other services.

You are right - smell the roses, and make sure what you are smelling is not yourself being held over the coals.

73 de Phil Kane - K2ASP

2448. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7bi66timk1@winter.news.rcn.net>
Source record: 72973

That is my understanding also. And, I also believe it has been at least four
years since rules changes went into effect that now permit "ordering pizzas" via ham autopatches, retransmitting NOAA wx transmissions on the ham bands, etc.

Peter

Ron Cook wrote in message <36df958a.163218182@netnews.worldnet.att.net>...
>Of course, the fact that encryption for reasons of personal privacy is
>illegal in Amateur Radio makes no difference.
>
>

2449. Re: 10,000 IN4148

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: Jim <mt2000@aol.com>
Message-ID: <7bi671$ia5$1@news1.fast.net>
Source record: 72974
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

What are they?
mike wrote in message ...
>PLEASE MAKE OFFER ON 10,000 NATIONAL 1N4148
> NEW, PACKED 500 PER BAG, 2000 PER BOX:
>
>
>MIKE
>
>--
>MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk
>
>401 N. JOHNSON AVE.
>EL CAJON, CA. 92020
>
>619 444 7717
>FAX 444 6750

2450. VX-5 + satellite/TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: firewave@REMOVE.videotron.ca
Message-ID: <firewave-0203992143520001@192.168.1.4>
Source record: 72975
Cross-posted to:
rec.radio.amateur.packet,rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur

Hi, i just bought a vx-5r and i d like to know what do i need to use it to communicate by modem with someone? (cheap hardware...could i use a sound modem in linux? if so how does it key the PTT on and off? a special cable?)

also how do i communicate with satellite at 5Watts? is there a special antenna for that?

Any suggestion for having more fun with this radio is appreciated thanks :)

alex

2451. Re: 10,000 IN4148

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-02 00:00:00 UTC
From: "Neal N." <nealn@alpha1.net>
Message-ID: <7bi9oplej1@news2.alpha1.net>
Source record: 72976
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

I'd bet that if you don't know what a 1N4148 is then you're probably are not interested in 10,000 of them.

Jim wrote in message <7bi671$ia5$1@news1.fast.net>...
>What are they?

2452. Re: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be655a$417066e0$ade5abc3@default>
Source record: 72783
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Tony, from where do you collect these particles of wisdom
- or were you born with them ? Genetic ?
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

"Anthony R. Gold" <tgold@microvest.demon.co.uk> wrote in
article <19990302.0859.9900806snz@microvest.demon.co.uk>...
> On Tuesday, in article <36DB46C0.C36D9686@usit.net>
> bjmcpher@usit.net "Don" wrote:
>
> > No, thats not what he asked for.
>
> If the only available solution is a hammer, then every
problem
> becomes a nail :-)
>
> Regards,
> --
> Tony - G3SKR / W2TG email:
tgold@panix.com
>

2453. Re: VX-5 + satellite/TNC?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Jeff Johns <jeffj@scott.net>
Message-ID: <42949544932424864636NEWS2LX@news.scott.net>
Source record: 72784
Cross-posted to:
rec.radio.amateur.packet,rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur

On Tue, 02 Mar 1999 21:43:52 -0500, firewave@REMOVE.videotron.ca (Alex) wrote:

> Hi, i just bought a vx-5r and i d like to know what do i need to use it to
> communicate by modem with someone? (cheap hardware...could i use a sound
> modem in linux? if so how does it key the PTT on and off? a special
> cable?)

I use a BayPac modem and HP200LX Paltop PC running BayCom software.

> also how do i communicate with satellite at 5Watts? is there a special
> antenna for that?

Well... for Mir a simple ground plane antenna is all the is needed. It's
quite easy to work with a ground plane, I do it mobile from a patrol car
with a mag mount antenna and at home with a homebrew J-pole.

> Any suggestion for having more fun with this radio is appreciated thanks :)

You can work AO-27 with the rig with just a simple whip antenna. I use my
FT50 and a MFJ-1715S to work the bird almost daily. The Arrow antenna will
work much better, but it costs a bit more than the whip. The price of the
Arrow is not very expensive and you'll have an excellent antenna!

73 es gl Jeff W4JEF

```
*--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------*
|jeffj@scott.net w4jef@amsat.org | Reserve Patrol Captain |
| Satellite: Mir R0MIR-1, AO-27 | Jefferson County Sheriff's Dept|
|200LX+BayPac+FT50=Portable Packet| QTH Birmingham, AL USA |
*-----------------------------------------------------------------*
```

2454. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36dcb5af.3524359@netnews.worldnet.att.net>
Source record: 72785

On Mon, 01 Mar 1999 14:15:11 -0800, dalien <dalien@pacifier.com>
wrote:

>Seeing several unassembled Heathkits for sale brought back memories:
>
>"It is cold outside, but the house is warm and smells of Christmas
>decorations. The fireplace crackles; a soldering pencil waits to warm.
>My cold wet feet slowly thaw in thick socks as the flurries turn to
>blizzard. Supper is finally over, and it's time to sort the parts. It
>is 1961, and I am young again..."

Yup. Not -quite- 1961, I built my first in 1976.

Sitting at my desk in July, the window open, a gentle breeze stirring
the solder smoke about my head as I assembled a HW-16 and wondering if
my Novice ticket would arrive before I finished it, and how would I
test the transmitter if it didn't? I knew I could use some light bulbs
for a dummy load, but I also knew they'd radiate from DC to daylight
(well, incandescent light), and the FCC was just WAITING for this new
Novice to screw up so they could yank his license before he even got
it, so I'd better wait...

Then Mom comes in, wanting to know what kind of trouble I was in NOW
because there was this letter from the FCC in the day's mail and she
just KNEW I'd blown up NORAD or something...

All to the tune of "Afternoon Delight."

A child of the 70's? Darned right.

Where's my soldering iron? I gotta build something.

2455. Re: 10,000 IN4148

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36dcb7be.4050899@netnews.worldnet.att.net>
Source record: 72786
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

On Tue, 2 Mar 1999 21:15:38 -0500, "Jim" <mt2000@aol.com> wrote:

>What are they?

Jim,

They're small-signal silicon diodes. Not bad for switching, I guess -
we use 'em by the ton at work for spike suppression in digital
signals, and even for slow logic gates.

Dave

2456. Re: Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36dcb82c.4161261@netnews.worldnet.att.net>
Source record: 72787

On Tue, 2 Mar 1999 20:43:20 -0700, "John Kirk, VE6XT"
<jakirk@calcna.ab.ca> wrote:

>I seem to have lots of applications for RF sources up in the high vhf to 1
>GHz or so region lately. I'm hesitant to use oscillator/multiplier schemes
>to get there, as I lack the proper test gear to make sure they are clean.
>Is there some kind of "minimum parts count/minimum engineering" solution?
>I saw something once in a Plessey catalog that needed only 5 parts to give
>me stable, clean 900 MHz (one of the applications I actually needed!) from
>an hf crystal, but Plessey is not widely available in North America. Is
>there something more mainstream?

National Semiconductor, Philips (was Signetics), and Motorola all make
PLL chips/chip sets that are rated up to 1.2 or 2.4 GHz. But PLL
doesn't necessarily guarantee clean - you'd probably want the same
unavailable equipment to design a PLL for that range.

Besides, I don't have a clue where to buy any of these parts in hobby
quantities. At work I but Motorola parts from Future Electronics (and
at my last job from Hamilton Avnet), but they all want to sell a rail
of chips at a time. I can't afford 18 chips at $20 each.

The proliferation of cellular and PCS is making UHF parts downright
cheap, if you can afford commercial quantities.

Dave

2457. DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36dcba06.4634886@netnews.worldnet.att.net>
Source record: 72788

Can anybody point me to a source of small quantites (like maybe 1) of the Analog Devices DDS chips that are appearing in the Ham magazines? I tried to find a source of some Harris chips a few years ago, but the best I could do was (I think) Newark Electronics, and their minimum purchase was 18 pcs (1 tube) because it wasn't a stocked item, and they had to buy by the tube from Harris. At $30 each, a tube was a little too expensive.

Dave

2458. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: clintbrad4d@earthlink.net
Message-ID: <7bihhb$995$1@nnrp1.dejanews.com>
Source record: 72789
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <7bhhoc$h78@dfw-ixnews7.ix.netcom.com>,
kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

>> Their copy protection is a nightmare...
>> Since you apparently do not have the computer skills to determine this
>> for yourself I'll help you. Every time you defrag the disk you have to
>> reinstall the software.

Sorry your system is so instable...I regularly degfragment my systems, with
noi such problem with ADMS as you have encountered.

After installation, I file my original diskettes away...no need to make an
"archival" copy for any reason.

- Clint Bradford

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2459. VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: pje@haystack.mit.edu
Message-ID: <7bigal$8b5$1@nnrp1.dejanews.com>
Source record: 72790

Hi folks,

I've been reading through old posts here, and looking at various articles
and references. (Don't have a source of QEX articles yet, though)

I'm trying to decide right now what sort of VFO to build (my first one).
The myriad of options available now has my head spinning as to picking
a design. I hope you can offer me your considered opinions as to which
way to go, having been there and done that yourselves.

Here's my list of features:
- low drift (everyone wants this, of course)
- fairly wide coverage, since I'll use this with <<insert your favorite
Rick Campbell-derived direct conversion receiver here>>. I'd like to
cover 40 meters on up, but I can certainly start small with one or two
bands and expand from there.
- doesn't have to be portable.

Traditional LC or VXO designs abound, but I also see lots of "couldn't
get it to oscillate worth $#%" notes too. I notice lots of activity
around the AD9850 DDS chip, but then again I see people posting here
who don't like its SFDR (due to spurs) and who are worried about soldering
surface mount parts themselves. Plus, with the Jan/Feb 1999 QEX issue
and the original 1997 one, I guess there are now two published VFO designs
using this chip. (As I mentioned above, I haven't seen either yet)
It's certainly attractive for its complete coverage, but I have the
feeling there are some caveats.

So give me your opinions. If YOU were starting to build from scratch as
I am, which would you pick? A more traditional LC design? A VXO? The
all-purpose DDS? Which ones are "good enough" for most purposes, and which
are the rabid gotta-dig-that-last-ounce-out solutions? Importantly, which
ones are going to work nicely the first or second time, and which are going
to leave me fiddling with a trimpot and a spectrum analyzer for the next
6 months of lunchtimes at work?

Thanks as always,

Phil Erickson
pje@haystack.mit.edu

PS: Whatever it is, it's got to be better than the drift on the National
NC-125 tube receiver I'm restoring now. That 6SK7-G based oscillator drifts
when I look at it crossways! Maybe society was more patient in the '50s...

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2460. WTB: Beginners book on PLL frequency synthesis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7bil69$lhr@news.Hawaii.Edu>
Source record: 72791
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

My library doesn't do too well in this area. I have some non-amateur radios begging to be converted to the ham bands. Can someone suggest or sell me a book on PLL circuitry?
73, Jeff WH6U

2461. Re: Wanted: Home Brew DCI Filter (how-to)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: jpoulin@honk.org
Message-ID: <7bj15i$m35$1@nnrp1.dejanews.com>
Source record: 72792

> How far away is it? Some years ago we had a police transmitter getting
> into the input of a local repeater. A friend and I drove around and
> located the signal, and it turned out to be a spur from a transmitter at
> a PSAP about 8 miles from the repeater. We notified the Chief of Police
> and he had it fixed... twice (the repairman didn't get it the first time).

The transmitter in question is 2Km away.

James Poulin

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2462. Power Transistor Data Sheets.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Jim <jim-p@ihug.co.nz>
Message-ID: <36DC6727.1C314DFD@ihug.co.nz>
Source record: 72793

Can anyone please let me know of a site where I can download data on some power transistors.

Or can anyone supply data on them.

The transistors are:

PT9782A, made by TRW and used in transmitting equipment made in New Zealand in 1978.

SD1480 and SD1219, also PT9733. Used in transmitting equipment made in New Zealand in 1983.

Please reply direct to me.

Jim Parnell, ZL2APE.
jim-p@ihug.co.nz

2463. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Calvin Gordon <forwardtoA870@teletron.org>
Message-ID: <NMaD2.116$VR3.1657905@news4.mia>
Source record: 72794
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

VERY impressive credentials and a sweeping
enforcement statement!

You are more than qualified to enlighten us
neophytes then as to how, given this massive enforcement
army, that KV4FZ has managed for over 25 years to
elude and frustrate the commission? Perhaps he has
"thought harder and worked smarter" than this mighty
enforcement army which has mobilized against him?

Phil Kane > wrote in message ...
>>
> Believe me, when the Commission needs to do something, it
> has a way of finding the troops to do it. "Think harder, work
> smarter...."
>
> I should know - my job there was finding and coordinating
> troops for special targeted operations (I was chief of
> enforcement in San Francisco for 18 years). Some involved
> the amateur service, most involved other services.
>
> 73 de Phil Kane - K2ASP
>
>
>
>
>

2464. WTB: Modulator Deck for T-368 and other parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: "Bruce J. Howes KG2IC" <bhowes@buffnet.net>
Message-ID: <36dd3c56.0@news3.buffnet.net>
Source record: 72795
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

If per chance if you have a modulator deck for a T-368 transmitter, or parts there from (such as mod xformer, relays, etc.) I would like to hear frm you.

I have nice unit that was modified for MARS use by removal of the mod deck components.

The unit that I am restoring in a early non-lettered unit, but I can still use the deck from a C-F model if available.

Also interested in any other T-368 parts that you might have.

Thank you.

--

73,

****
****
Bruce J. Howes KG2IC email:kg2ic@amsat.org
East Amherst, NY 14051 web:http://www.buffnet.net/~bhowes
AMSAT-NA Area Coordinator ARMY MARS AAR2AJ
****
****

begin 666 Bruce J. Howes.vcf
<encoded_portion_removed>

2465. Re: 10,000 IN4148

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Spehro Pefhany <speff@interlog.com>
Message-ID: <7bjdno$240$3@news.interlog.com>
Source record: 72796
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

In sci.electronics.components Jim <mt2000@aol.com> wrote:
> What are they?

Silicon switching diodes in a glass package. They are worth maybe half a
cent to a cent each in large quantities.

--
=-=
Spehro Pefhany "The Journey is the reward"
speff@interlog.com
Fax:(905) 271-9838 (small micro system devt hw/sw + mfg)
=-=

2466. Re: 10,000 IN4148

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: bohdan@ihgp4.ih.lucent.com
Message-ID: <7bjfr4$stq@ssbunews.ih.lucent.com>
Source record: 72797
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,sci.electronics.equipment

In article <36dcb7be.4050899@netnews.worldnet.att.net>,
Dave Hinerman <hinermad@woodnet.att.net> wrote:
>On Tue, 2 Mar 1999 21:15:38 -0500, "Jim" <mt2000@aol.com> wrote:
>
>>What are they?
>
>Jim,
>
>They're small-signal silicon diodes. Not bad for switching, I guess -
>we use 'em by the ton at work for spike suppression in digital
>signals, and even for slow logic gates.
>
>Dave
>

Yes, fairly good low-cost Si switching diodes. I use them a lot for
home-brewed digital and analog design. My recollection is that
they're similar to the antedeluvian 1N914 switching diode. Typical cost in
unit quantities is around $0.05 to $0.10, depending one where one purchases
them.

Cordially,

Bohdan Bodnar

2467. Tons of stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: charger7878@my-dejanews.com
Message-ID: <7bjj67$52r$1@nnrp1.dejanews.com>
Source record: 72798

If you have not checked out the Message board on the CB City website, you are missing out. There are tons of CB & HAM gear in there listed by all sorts of people. If you have something for sale you may want to post it there as well. In 2 months time it has had over 6,000 hits, so it is being viewed by a lot of people. Don't just take my word for it, check it out for yourself. You will be glad that you did.

If you have something you are looking for, or have something for sale, please post it on this message board.

It is located at www.cbcity.com

Dean

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2468. WTB for 155

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <36dd5a4d.0@news1.vip.uk.com>
Source record: 72799
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

I need 1 but would prefer 2 of the 8 way cable mounted Jones plugs to fit
the Visual Indicator and Transmitter panel mounted plugs.

I'm near Taunton, Somerset.
---
simon.cox@breathe.co.uk

2469. WTB for 1155

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Simon Cox <simon.cox@breathe.co.uk>
Message-ID: <36dd5b3b.0@news1.vip.uk.com>
Source record: 72800
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,uk.radio.amateur

Sorry missed a 1 from the subject of the initial posting.

I need 1 but would prefer 2 of the 8 way cable mounted Jones plugs to fit
the Visual Indicator and Transmitter panel mounted plugs.

I'm near Taunton, Somerset.

--

People worry about me, I ride a Z1000 LTD
and listen to RA 17's, nobody's perfect !
simon.cox@breathe.co.uk

2470. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Dick Carroll <dixieNS@townsqr.com>
Message-ID: <7bjmgsmqp1@208.207.71.144>
Source record: 72801
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Calvin Gordon wrote:
>
> VERY impressive credentials and a sweeping
> enforcement statement!
>
> You are more than qualified to enlighten us
> neophytes then as to how, given this massive enforcement
> army, that KV4FZ has managed for over 25 years to
> elude and frustrate the commission? Perhaps he has
> "thought harder and worked smarter" than this mighty
> enforcement army which has mobilized against him?
>

Nope. Herb has taken full advangage of all the "appeal"
process that is available to all citizens of the USA - if
one can afford it. You can bet it has cost him plenty. And
recently I read that his 'final appeal' has been denied, so
now he WILL be leaving the air.....

> Phil Kane > wrote in message ...
> >>
> > Believe me, when the Commission needs to do something, it
> > has a way of finding the troops to do it. "Think harder, work
> > smarter...."
> >
> > I should know - my job there was finding and coordinating
> > troops for special targeted operations (I was chief of
> > enforcement in San Francisco for 18 years). Some involved
> > the amateur service, most involved other services.
> >
> > 73 de Phil Kane - K2ASP

2471. 1750Hz toneburst ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: leigh@media.media.keele.ac.uk
Message-ID: <7bjqdr$fn8$1@cfs2.kis.keele.ac.uk>
Source record: 72802

Hi.

Does anyone have the details for building a 1750Hz toneburst I need to add to an ex-PMR Radio please ?

Pointers to websites appreciated or email me at the address in the signature only.

Many thanks.

Leigh.....
--

Leigh M. Preece, Media and Communications Centre, Keele Univ. Staffs. UK

WARNING: My ONLY reply address is: leigh@media.keele.ac.uk

2472. FT101ZD Chip Wanted!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Duncan Walters <Duncan@g4dfv.freeserve.co.uk>
Message-ID: <7bk09gkm1@news8.svr.pol.co.uk>
Source record: 72803

Wanted Urgently!

Display chip MSM9520 for Yaesu
FT101ZD transceiver. This chip has
been discontinued by Yaesu and is
no longer available.
Anyone out there got one?
Any help will be greatly appreciated.
Please reply soon.

Duncan G4DFV

Duncan@g4dfv.freeserve.co.uk

2473. Re: Tons of stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <920491426.760485@cs1.sdd.hp.com>
Source record: 72804

Dean OM,

I looked. I saw 10-meter ONLY transceivers for sale to CB'ers. No mention whatsoever that these are completely illegal to use for CB. Geez.... a Bootlegger's Supply House. If I wanted to post any ham gear for sale, this is the last place I would consider posting it on.

Don, W6JL

charger7878@my-dejanews.com wrote in message <7bjj67$52r$1@nnrp1.dejanews.com>...
>If you have not checked out the Message board on the CB City website, you are
>missing out. There are tons of CB & HAM gear in there listed by all sorts of
>people. If you have something for sale you may want to post it there as well.
>In 2 months time it has had over 6,000 hits, so it is being viewed by a lot
>of people. Don't just take my word for it, check it out for yourself. You
>will be glad that you did.
>
>If you have something you are looking for, or have something for sale, please
>post it on this message board.
>
>It is located at www.cbcity.com
>
>
>Dean
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2474. WTB R390A receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: James Skalski <jskalski@buffnet.net>
Message-ID: <36DDA00F.BF0A4078@buffnet.net>
Source record: 72805

Looking for one of the above receivers.
Please respond directly with description and serial number.
--
73,

Jimn n2go

2475. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Joseph Mowery <jmowery@nswc.navy.mil>
Message-ID: <36DDA57D.FD453FD@nswc.navy.mil>
Source record: 72806
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You forgot to add Get Some Now, Gold - 5%, Silver - 10%, None - 20%
Joe
KF4YYA

DavidC wrote:

> > Bad Boys Rape Our Young Girls But Violet Gives Willingly
> > Thats how I learned it!
> > Chuck (W3FJJ)
>
> Perhaps Bill Clinton was a Ham in Hot Springs as a boy?

2476. Source of small quantities of the Siliconex U310 JFET in the UK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Chris Price <chris@peterprice.freeserve.co.uk>
Message-ID: <7bka4c$887$1@news5.svr.pol.co.uk>
Source record: 72807

I am looking for a source to purchase about six U310 Junction FETs in the UK. Can anybody help.

Chris
G4AGJ

2477. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7bkejn$69o@eldborg.rhi.hi.is>
Source record: 72808

Hi

I'm currently building my first VFO as a part of a project of
designing a direct conversion receiver. The VFO is to be used
for the 20meters and thus covering the range from
14,000MHz to 14,350Mhz. Here is what I am doing, might
be interesting to you:

So far I've decided up on most components and built an oscillator
prototype.

I'm using a series tuned Colpitts oscillator. Why series tuned?
Because I read somewhere that someone tried both a series and
paralell tuned one and found the series tuned more stable.
Theoretically there should be no difference and I had to
make a choice :)
I choosed Colpitts because it is easyer to use two capacitors
than to place a tap on the inductor (not much difference though).

The inductor I'm using currently is a solenoid coil wound on
chem. lab glass, 14mm diameter and I use a magnet wire with
0,65mm diameter. With about 18 windings I got the size of the
inductance to be 4.23uH and its Q was 180. These values were
measured with a HP network analyzer (neat instrument :-)
Today I wound a similar coil on a PVC plastic pipe and
will compare that to the other one. Then I'll probably compare
it to a coil wound on a #7 toroidal core.

The chem. lab glass should give excelent temperature stability as
the glass is very unsensitive to temperature. I use
styroflex (polystyrene) capacitors as they have good temperature
stability. I will probably allso use one or two trim capacitors
in the final version to set the desired frequency range excact.
I think ceramic trim capacitors have low sensitivty to temperature.

Mecanical stability is very important too. Today I was listening
to the drift of the oscillator on a receiver and because the
coil had no support other than the wires it was wound from the
frequncey drifted quite noticably when nocking on the table it stood on.

Proper shielding is ofcourse very important! If not properly
shielded you can vary the oscillating freq. just by walking
across the room.

As the amplifying device I use a n-channel JFET, 2N4416. Why?
Because it was avalilable at the local electronic components shop.
Other general n-type JFETs should work too.

I'll use varicaps to tune the freq. of the VFO. I choose
to use BB204B varicap from Philips. This device is actually
made from two diodes with a common cathode. That should
minimize non-linear behavior.

Next I'll design the buffer to place in front of the
oscillator. It has to be as unilateral as possible.

Hope this helps.

--
//-----------------------//---
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

2478. WTB "Bird 2500C Slug"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Bob Dodson WB5APD EM84ak <wb5apd@stc.net>
Message-ID: <36DDCE7A.3D47@stc.net>
Source record: 72809

I am looking for a Bird 2500C slug for 2 meters. Slug must still look new and have no problems with it. If you have one you would like to part with please let me know price and condition. Many thanks. Please RESPOND VIA E-MAIL I am not on news group much.

--
73's
Bob Dodson
Dahlonega Ga. WB5APD/EM84AK
"ex-WA4WQC, ex-WV6SKV"
mailto:wb5apd@stc.net

2479. HELP: Do I need a duplexer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: "Christopher Zeman, KB9RHA" <zman.SCREW.YOU.SPAMMERS@iwc.net>
Message-ID: <nYkD2.208$CM6.3741@news14.ispnews.com>
Source record: 72810
Cross-posted to: alt.ham-radio,alt.ham-radio.nocode,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

I have two transmitters, one on 6 meters and one on 2 meters, for my repeater under construction. I will be using a dual-band repeater antenna and need to find out if I need a transmitter combiner or would a duplexer, such as the kind used with multi-band transceivers, work?

Thank you,
Christopher Zeman, KB9RHA
zman@iwc.net

2480. Re: Source of small quantities of the Siliconex U310 JFET in the UK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990303212259.13708A-100000@Stratus.CAM.ORG>
Source record: 72811

On Wed, 3 Mar 1999, Chris Price wrote:

> I am looking for a source to purchase about six U310 Junction FETs in the
> UK. Can anybody help.
>
> Chris
> G4AGJ
>

For what it's worth, the J310 may be the same thing. In a twenty year old Siliconix FET data book, both the U310 and J310 use the same set of performance curves. The J310 is in a plastic case, and the U310 is in a metal case but other than that there is no clear indication of a difference. I imagine the plastic cased ones are cheaper, and perhaps more common.

Michael VE2BVW

2481. Re: HELP: Do I need a duplexer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: munsch@ibm.net
Message-ID: <36de028e@news1.us.ibm.net>
Source record: 72812
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

If there are no frequency related spurious (harmonics and the like) then a simple band split combiner will be adequate. If, on the other hand for example, some particular harmonic of, say the 2 meter transmitter falls within the passband of the 6 meter receiver, there ain't no way you're gonna make it work anyway. Suggestion: Try the two repeaters through a combiner into a dummy load and see what happens. Band reject duplexers, the kind we can afford, do not suppress out of band emissions very much. A transmitter suck out cavity on each opposite receiver may be necessary, depending on the specific hardware. The old tube type boat anchors were better in this regard. We all had to relearn the isolation curves when solid state came along.
--
Crazy George

2482. 100 KC Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Don Cunningham <wb5hak@texhoma.net>
Message-ID: <7bl268$78h$1@ionews.ionet.net>
Source record: 72813

I need to build up a 100KC frequency standard that will output 100KC at about 1 volt. Can anyone point me to a website that might offer a kit??
Tks, Don, WB5HAK

2483. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7bl3fi$n1e@nnrp4.farm.idt.net>
Source record: 72814

Dave did you check out Digikey at:

http://www.digikey.com/

Leland C. Scott
KC8LDO

Dave Hinerman wrote in message
<36dcba06.4634886@netnews.worldnet.att.net>...
>Can anybody point me to a source of small quantites (like maybe 1) of
>the Analog Devices DDS chips that are appearing in the Ham magazines?
>I tried to find a source of some Harris chips a few years ago, but the
>best I could do was (I think) Newark Electronics, and their minimum
>purchase was 18 pcs (1 tube) because it wasn't a stocked item, and
>they had to buy by the tube from Harris. At $30 each, a tube was a
>little too expensive.
>
>Dave
>

2484. Potentiometers at R.F.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-03 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <36DDF72A.1AA1@pacbell.net>
Source record: 72815

I need a 5k pot that will look reasonably like a resistance up to 40 Mhz. Mouser carries a bewildering variety of pots variously called carbon, cermet, conductive plastic, and wire wound. This is for a low power, high rotational life application - lots of fiddling. Will someone tell me the relative merits of these different pots?

Thank you,

Tom Donaly KA6RUH

2485. Capacitor Analyzer Sprague Model TO-6 For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <36DE3D8E.5571@ix.netcom.com>
Source record: 72727
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have a Sprague Model TO-6 Capacitor analyzer. This one also reforms electrolytics. It's in excellent condition and an excellent addition to any bench/shack. $165+shipping Email me for a jpg.
73 Chris VE3NGW/W4 Florida

2486. WTB: HEATH SB-220 AMP.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: "A. Billings" <abillings@worldnet.att.net>
Message-ID: <36DE7EBF.9E869827@worldnet.att.net>
Source record: 72728

I am looking for a Heath SB-220 Amp.
Must be clean and in good working condition. priced reasonably.
Also looking for the same for parts.

Thanks Art./kc5doo
318 424-3312

2487. Re: Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <36e08837.263422212@news>
Source record: 72729

On Thu, 04 Mar 1999 02:36:01 GMT, maddog@io.com (Monty Northrup)
wrote:

>Hi John!
>
>On Tue, 2 Mar 1999 20:43:20 -0700, "John Kirk, VE6XT"
><jakirk@calcna.ab.ca> wrote:
>
>>[snip]I saw something once in a Plessey catalog that needed only 5 parts to give
>>me stable, clean 900 MHz (one of the applications I actually needed!) from
>>an hf crystal, but Plessey is not widely available in North America. Is
>>there something more mainstream?
>
>If I recall correctly, Plessey was sold to GEC, then sold again to
>Harris Semiconductor, about 3 years ago. At any rate, the kind of
>chip sets you're interested in might be found there:
>
>http://www.semi.harris.com/
>
>Good luck!
>
>monty, n5fc

National Semiconductor, http://www.nsc.com sells PLL chips that hit
900 MHz very nicely. Local distributors carry them.

Good luck,

73

Dave
K1MBO

2488. Micor conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: EC Therapy <docshok@sunlink.net>
Message-ID: <36DE93D1.F9B83415@sunlink.net>
Source record: 72730

I just purchased a bunch of Motorola Micor radios. Does anyone have any idea as to what numbers of the model # tells the power out, the band, etc???? Also, has anyone converted these to the Ham bands? If so, I would be interested in knowing what you did or a source for the article. I have no control heads... anyway to bypass this problem? Thanks for reading!!!!

Paul,
N3PEE

2489. Re: Web Page editor with graphics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7bm93i$ge3$1@nnrp1.dejanews.com>
Source record: 72731

In article <01be65e3$fbeac040$191e3bcb@default>,
"Richard Hosking" <richardh@iinet.net.au> wrote:
>
> --
> Richard Hosking
> VK6BRO
> http://www.iinet.net.au/~richardh/VK6BRO.htm
> richardh@iinet.net.au
> QRP/Amateur Radio/Microcontrollers
>
> Gday all
> I am looking for software to construct webpages with converters
> for various graphics formats to insert schematics and PCBs
> I use the old Protel Autotrax for PCB design. I can output files in
> HPGL or maybe PCX (Autocad) format. I would prefer not to have to do lots
> of
> conversions. Also the ability to crop and rotate/edit the graphics file
> would be nice
> Preferably freeware/cheap!

Richard,

I recommend LVIEWPRO. It'll read a LOT of bitmap image formats including BMP, JPG, PCX, GIF, etc. It'll convert among these formats as well. The only bitmap graphic format that I've encountered that is -doesn't- handle is CGM. (It doesn't do your HPGL, either.) It'll crop, resize, adjust the color depth (anywhere from 2-color to "millions of colors"), and it has image enhancement algorithms like contrast adjustment, edge enhancement, etc. I believe it'll rotate in 90 degree increments, too. and it'll even mirror horizontally and vertically. You can get it from Simtel.Net, CDROM.COM, and other common shareware sources.

As for schematic and PC board software, I'm starting to be impressed with CIRCAD. It'll output BMP files directly.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2490. Re: FT101ZD Chip Wanted!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: kt4ht@aol.com
Message-ID: <19990304095116.20123.00000077@ng-cg1.aol.com>
Source record: 72732

Duncan:

Contact Jack, KT4YD at KT4YD@AOL.COM. I believe that he had a similar problem and found a chip.

Mike, KT4HT

2491. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7bmauu$i65$1@nnrp1.dejanews.com>
Source record: 72733

In article <36dcba06.4634886@netnews.worldnet.att.net>,
hinermad@woodnet.att.net (Dave Hinerman) wrote:
> Can anybody point me to a source of small quantites (like maybe 1) of
> the Analog Devices DDS chips that are appearing in the Ham magazines?
> I tried to find a source of some Harris chips a few years ago, but the
> best I could do was (I think) Newark Electronics, and their minimum
> purchase was 18 pcs (1 tube) because it wasn't a stocked item, and
> they had to buy by the tube from Harris. At $30 each, a tube was a
> little too expensive.

Which ones are you looking for? While the Harris chips can indeed be
hard to get in onesies and twosies, the various Analog Devices chips
are no problem. Try Newark, or Future/Active, or just about anybody
who carries Analog Devices parts.

No, they don't sample them on their web page. :-(

The first DDS VFO I built used a Qualcomm Q2220 chip from an article
in 73 (I designed my own Basic Stamp controller board for it). Am I
showing my age here? :-)

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2492. Re: Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7bmbge$in5$1@nnrp1.dejanews.com>
Source record: 72734

In article <36e08837.263422212@news>,
dpotter@bbn.com (Dave Potter) wrote:

> (snip...)
> National Semiconductor, http://www.nsc.com sells PLL chips that hit
> 900 MHz very nicely. Local distributors carry them.

They go a lot higher than that (e.g. LMX2325), and if local distributors fail you, try Digi-Key.

Depending on the accuracy and stability you need, the various VCOs (e.g. Mini-Circuits) can solve a lot of problems too. They're idiot proof, and can be just the ticket for sweep oscillators and such. I once aligned the frequency multiplier stages in a VHF receiver's LO with the help of such a VCO, a direct-conversion receiver, a sawtooth oscillator and a scope. Ugly (*really* ugly), but it worked.

You'll need a VCO for your PLLs anyway.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2493. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7bmi41$p5o$1@nnrp1.dejanews.com>
Source record: 72735

In article <7bmauu$i65$1@nnrp1.dejanews.com>,
marsgal42@hotmail.com wrote:
> Which ones are you looking for? While the Harris chips can indeed be
> hard to get in onesies and twosies, the various Analog Devices chips
> are no problem. Try Newark, or Future/Active, or just about anybody
> who carries Analog Devices parts.

For the past week, Newark's Web site hasn't been answering my calls. Future Active's Web site doesn't seem to have a catalog, at least not that I can find. (I called them for a print catalog and got their little flyer thingy - looks like it's geared toward TV repair and telephone installers.) Pioneer admits to having the chips - now I have to find out if they'll take plastic.

> No, they don't sample them on their web page. :-(

Heh, heh. They'll sample -me-! I'm an electronic design engineer. (Well, actually, the title if Sr. Software Engineer, but the reps all know I'm about as good with a soldering iron as I am with an editor.) But conscience dictates that I not accept samples for what will amount to a personal project. My work isn't likely to require a DDS synthesizer.

But DSP chips, that's another matter...

> The first DDS VFO I built used a Qualcomm Q2220 chip from an article
> in 73 (I designed my own Basic Stamp controller board for it). Am I
> showing my age here? :-)

I'm not familiar with it. What issue (or year) was that published? I've contemplated building a DDS with TTL chips, and EPROM for the sine table, and a DAC. But it wouldn't be very fast - a few MHz at best. But I'm mainly interested in longwave anyway, right now. And since I've found a way to make PC boards without shelling out $3 a sheet for toner transfer paper, time spent wiring up chips isn't as big a problem.

Thanks for the tips on the DDS sources.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2494. GE RANGR VHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Paul Mierop <FIRE@us.ibm.com>
Message-ID: <36DEC64E.1E9E138B@us.ibm.com>
Source record: 72736

Has anyone done a 222-225 mhz conversion on a GE VHF RANGR. I am using Rangrs for 2 meters, 70 cm and 6 meters and sure would like to have one on 222-225 mhz.

73's
Paul Mierop
KE2LS

2495. Meter FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Paul Hellenberg <paulh@truline.com>
Message-ID: <QGBD2.439$R6.67833@homer.alpha.net>
Source record: 72737

FOR SALE

There has been some discussion about meters.

6 Modutec 0-2 M/A 3L $10/ea

1 Simpson 0-500 m/a 3" $10
1 Simpson 0-1 m/a 3" $10

4 Simpson 3" Bezles $5/ea

w9ja@contesting.com

Paul J Hellenberg K4JA ex W9JA KS9K
Tru Line Lithographing Inc.
414 554 7300 -125 Fax 414 554 8217 Home 414 554 9170
http://www.contesting.com/tours/W9JA/index.html

2496. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7bn21r$8a5$1@nnrp1.dejanews.com>
Source record: 72738
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc

I've wound some coils using #40 and, if I had any hair left, I'd agree that it is indeed stronger than the #40. 73 de VE6INM sam@stdavids.picker.com (Sam Goldwasser) wrote:

> In article <36dc2994.0@news.netwalk.com> "Jim" <jbolinger@lintek.com> writes:
>
> > It comes even smaller than that. I have a spool of #40 around somewhere.
> > Hate to use it, however, because a piece of my hair is stronger!
>
> Heck, that's nothing. The inverter and trigger transformers in disposable
> camera flash units use something like #44 - #46! Talk about being weaker
> than a hair! :) Try to disassemble one of those without breaking the wire!
>
> --- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
> Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
> +Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
> | Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2497. RE : Beginners book on PLL frequency synthesis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: vk3em@hotmail.COM
Message-ID: <19990304215634.9207.qmail@hotmail.com>
Source record: 72739

G'day from VK,

>Date: 3 Mar 1999 06:34:49 GMT
>From: jeffreyh@Hawaii.Edu (Jeffrey Herman)
>Subject: WTB: Beginners book on PLL frequency synthesis
>
>My library doesn't do too well in this area. I have some non-amateur
>radios begging to be converted to the ham bands. Can someone suggest
>or sell me a book on PLL circuitry?

There is only one book I could reconmend. "Microwave and
Wireless Synthesizers - Theory and Design" by Ulrich L. Rohde.
It will cost you a bit, but is by far, one of the best books
on PLLs with practical examples and analysis of current PLL
devices and how to use them.

Regards,
Luke

_____
Get Your Private, Free Email at http://www.hotmail.com

2498. Re: Potentiometers at R.F.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36df034f.0@news.netwalk.com>
Source record: 72740

Donaly wrote in message <36DDF72A.1AA1@pacbell.net>...
>I need a 5k pot that will look reasonably like a resistance up to
>40 Mhz. Mouser carries a bewildering variety of pots variously
>called carbon, cermet, conductive plastic, and wire wound. This
>is for a low power, high rotational life application - lots of
>fiddling. Will someone tell me the relative merits of these different
>pots?
>
>Thank you,
>
> Tom Donaly KA6RUH

Forget wire wound. What you would have would be a variable lossy inductor.

Any of the others are worth the look, but have you considered using a couple of FETs (one in series and one in parallel)? Then you could control the resistance with a DC voltage. FETs are available that work up to 100s of MHz or more.

Jim
N8EE

2499. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7bn472ppb1@scotty.tinet.ie>
Source record: 72741

Everyone has their own particular favourite VFO. I have had a
lot of success with the series tuned Colpitts (Clapp) oscillator.

I use a JFET Clapp oscillator in my H/B transceiver. It runs
reliably at various frequencies between 9 and 23 MHz,
despite the fact that the feedback capacitors are fixed
at 220pF for all bands. Stability at 9 MHz is quite good,
about 200Hz per hour, not so good at 23 MHz. I use a
digital stabilizer (Elektor Feb. 1998) to keep the VFO
stable on all bands.

The Franklin oscillator also makes a good VFO.

Remember that VFO builders are worse than fishermen
when it comes to telling tall tales. Don't believe the stories
about the 30Mhz VFO with less than 10HZ drift. Most
crystal oscillators are not as good as this.

The AD9850 should make an excellent 7 MHz VFO. You
can get the data sheet from: www.analog.com

73, Ed. EI9GQ

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.qsl.net/ei9gq
www.nettaxi.com/citizens/ei9gq/

****

2500. Homemade Duplexer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: "Christopher Zeman, KB9RHA" <zman.SCREW.YOU.SPAMMERS@iwc.net>
Message-ID: <%mHD2.508$Qw5.6123@news14.ispnews.com>
Source record: 72742

I was on a site a few months back. I believe the title was
"Jim's Homemade Duplexers". The gentleman who owns the site constructs 6
meter duplexers out of heliax cable. I would like to find this site again
and can't seem to locate it on the search engines. If you are familiar with
the site I am referring to, please post or e-mail the link to me.

Thank you,
Christopher Zeman, KB9RHA
zman@iwc.net

2501. questions: filament on old #27 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: NOSPAMpfriedr@azstarnet.com
Message-ID: <NOSPAMpfriedr.116.008C5651@azstarnet.com>
Source record: 72743

Hi:

I recently had the good fortune to get my hands on some old, arcturus-type globe tubes. They are blue glass, but unfortunately unmarked. The person I got them from, however, indicated that he was told they were #27's.

Anyhow, I found a pinout and specifications for the #27 in an old book, and wanted to play with a simple radio receiver circuit. The book shows the filament voltage as 2.5 volts.

Yet, when I applied 2.5 volts, the filament was frighteningly bright. In fact, at 1.5 volts, it's a medium yellow color. All I've ever played with before are glass miniatures and common octals, and I don't recall their filaments as ever being more than a bright red (when properly energized).

Anyone have any experience with these old tubes? What should the filament look like when properly lit?

Please copy to email, and thanks in advance (remove NOSPAM to send)

Pete
pfriedr@azstarnet.com

****
To email me, remove NOSPAM from my return address.
Anyone sending unwanted advertising e-mail to this address will be charged $25 for network traffic and computing time. By extracting my address from this message or its header, you agree to these terms.

2502. meter calibration?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: gbowne <gbowne@email.msn.com>
Message-ID: <#bku7YrZ#GA.307@upnetnews03>
Source record: 72744

Can anyone tell me how to calibrate a meter? My meter has a SWR 1 to Inifinity Scale, Watts scale (0 to 300), and PL. Volts scale 0 to 1000v.

Could "PL. Volts" written on the meter scale mean Plate Voltage?

There is a switch on the front panel of my linear amp which changes the meter function, the selectable modes are:

1) Power
2) PL. Volts
3) SWR Fwd
4) SWR Refl.

Thanks,
Gregory Bowne
gbowne@email.msn.com

2503. micor squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Dan Swee <swee@usinternet.com>
Message-ID: <36DF4D32.BB025B49@usinternet.com>
Source record: 72745

Mod to add Motorola "micor" squelch to my GE repeater.
I have heard the m7716 ic chip can be used. Any help out there?
sources, schematics, opinions?
Dan Nï¿½FKM Mpls MN

2504. AM transmitter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36DF7F50.17800502@asu.uswest.net>
Source record: 72746
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I am looking for plans/schematic to build a moderate powered (40-75 *output*) AM transmitter for 75 meters, or even 75/40.There was a project in CQ magazine last year, but that one runs only 10W out on 75, and I really want something that will do closer to 50. Recommendations on old issues of QST/ARRL Handbooks? I've also been thinking of subscribing to Electric Radio; do they run articles on such projects? Thanks a bunch!
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

2505. Re: Impedance of twisted pair ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36DF8042.35FC@pop.removethistomailme.net>
Source record: 72747

Bert Douglas wrote:
>
> Hello expert netfolk,
>
> I am sending a digital differential signal over twisted pair (typical
> interior telephone type wires).
>
> What value resistor should I use to terminate the line at the far end ?
>
> Thanks for the help,
> Bert Douglas

The standard 10BaseT termination value is 100 ohms (although anything
from 50 to 200 seems to work fine in practice). However, you need to
use genuine Category 3 or better UTP cable for runs exceeding a couple
feet. Residential-grade telephone wire is often not twisted pair.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2506. Web Page editor with graphics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be65e3$fbeac040$191e3bcb@default>
Source record: 72816

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Gday all
I am looking for software to construct webpages with converters
for various graphics formats to insert schematics and PCBs
I use the old Protel Autotrax for PCB design. I can output files in
HPGL or maybe PCX (Autocad) format. I would prefer not to have to do lots
of
conversions. Also the ability to crop and rotate/edit the graphics file
would be nice
Preferably freeware/cheap!

Richard

2507. Re: Light Beam Communications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: tv8news@aol.com
Message-ID: <19990303212442.02059.00003171@ng29.aol.com>
Source record: 72817

from the broadcast tv world
http://www.cusa.canon.com/indtech/broadcasteq/canobeamii.html

the canaon canobeam

joe
kb0lqr
****Pursuant to US Code, Title 47, Chapter 5, Subchapter II, ï¿½227,
any and all nonsolicited commercial E-mail sent to this address
is subject to a download and archival fee in the amount of $500
US. E-mailing denotes acceptance of these terms.*****

2508. Re: Wanted: Home Brew DCI Filter (how-to)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: maddog@io.com
Message-ID: <36ddec63.284455@news.io.com>
Source record: 72818

Hi James!

On Wed, 03 Mar 1999 09:59:17 GMT, jpoulin@honk.org wrote:
>> How far away is it? Some years ago we had a police transmitter getting
>> into the input of a local repeater. A friend and I drove around and
>> located the signal, and it turned out to be a spur from a transmitter at
>> a PSAP about 8 miles from the repeater. We notified the Chief of Police
>> and he had it fixed... twice (the repairman didn't get it the first time).
>
>The transmitter in question is 2Km away.

I think his point was, that if the interference is as a result of a
spurious output from the transmitting station, no amount of filtering
is going to remove the interference, because there really *is* energy
at the frequency of interest.

The question, then, becomes: given common tools, how does one
determine whether it is a spurious output from the police transmitter,
or inter-modulation/overload in the receiver? (overload seems
unlikely if the transmitter is 2 Km away)

Putting some attenuation on the front end (say 10 dB) should eliminate
intermodulation / overload as the cause, for the purposes of
troubleshooting. That having been determined, how does one convince
the local police radio engineer that she/he has a problem (assuming
that person will come forward and identify him/herself)?

Good luck! Let us know how it comes out.

monty, n5fc

2509. Re: Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: maddog@io.com
Message-ID: <36ddf0e0.1432907@news.io.com>
Source record: 72819

Hi John!

On Tue, 2 Mar 1999 20:43:20 -0700, "John Kirk, VE6XT"
<jakirk@calcna.ab.ca> wrote:

>[snip]I saw something once in a Plessey catalog that needed only 5 parts to give
>me stable, clean 900 MHz (one of the applications I actually needed!) from
>an hf crystal, but Plessey is not widely available in North America. Is
>there something more mainstream?

If I recall correctly, Plessey was sold to GEC, then sold again to
Harris Semiconductor, about 3 years ago. At any rate, the kind of
chip sets you're interested in might be found there:

http://www.semi.harris.com/

Good luck!

monty, n5fc

2510. Re: I need the ADMS-1D or ADMS-1E programming software for the Yaesu VX-1R?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Watch Dog <watcher@ispyonu.net>
Message-ID: <01be65ee$42d304e0$59c6b8cd@MyComputer.nowhere.net>
Source record: 72820
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Do you suppose you could stop posting this crap to homebrew unless
you want to tell us how to replicate this type of software

clintbrad4d@earthlink.net wrote in article
<7bihhb$995$1@nnrp1.dejanews.com>...
> In article <7bhhoc$h78@dfw-ixnews7.ix.netcom.com>,
> kc5egg@ix.netcom.com(Gerald Schmitt) wrote:
>
> >> Their copy protection is a nightmare...
> >> Since you apparently do not have the computer skills to
determine this
> >> for yourself I'll help you. Every time you defrag the disk you
have to
> >> reinstall the software.
>
> Sorry your system is so instable...I regularly degfragment my
systems, with
> noi such problem with ADMS as you have encountered.
>
> After installation, I file my original diskettes away...no need to
make an
> "archival" copy for any reason.
>
> - Clint Bradford
>
> ----------== Posted via Deja News, The Discussion Network
==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your
Own
>

2511. 4-1000 on 6 meters???????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990303233607.10292.00002704@ng-cf1.aol.com>
Source record: 72821

hey guys
thinking about building a homebrew 6 meter amp
have most all parts i need in the junk box!!!
and have a few 4-1000 and 3-1000 tubes laying around
wondering which would work the best or would work at all
G G at 4000VDC would be the main specs

any input on this two tubes would help
joe kf4toh

2512. Packet Radio Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Jim <nj3t@surfshop.net>
Message-ID: <36DE2287.8AB57E5A@surfshop.net>
Source record: 72822

Hi,

I thought I'd share my short story with you.

Mt. Davis PA. Packet Radio Project. Mt. Davis is the highest elevation
in the state of Pennsylvania.
Check out this short story ....

http://www.surfshop.net/users/nj3t/PacketRadio1.html

73 de NJ3T

2513. * CDial project: custom made dials *

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: eb5agv@my-dejanews.com
Message-ID: <7blbsnnmn1@nnrp1.dejanews.com>
Source record: 72823
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,es.rec.radio.amateur,uk.radio.amateur

Hello!

I have finally done a project which was in my mind for some time... a CDial!

Well, now you will be asking yourself: what is a CDial?. A CDial is, as its name says a 'CD-dial'. Logical, isn't it :-)?. It is not new to use a CD-ROM as a dial but my approach is somewhat different and can give to your homebrew rig an special and unique look.

I have just made one CDial at the moment which is the one I have pictured in my WEB pages at:

http://www.geocities.com/SiliconValley/6992/cdial.htm

Please, I would appreciate if you take a look and let me know what do you think.

Thanks!

Best regards.

JOSE

---
73 EB5AGV / EC5AAU
JOSE V. GAVILA
Benetusser - VALENCIA
SPAIN

** VISIT MY VINTAGE RADIO SITE - updated 2-March-1999 ***
http://www.geocities.com/SiliconValley/6992/
e-mail: eb5agv@ctv.es & eb5agv@amsat.org

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2514. Re: Resistor Color Code Acronym

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: ctmiles@flash.net
Message-ID: <36e12b93.29302198@news.flash.net>
Source record: 72824

On Wed, 03 Mar 1999 16:11:26 -0500, Joseph Mowery
<jmowery@nswc.navy.mil> wrote to :

Heres what we were taught: Bad Beer Rots Our Young Guts But
Vodka Goes Well
>You forgot to add Get Some Now, Gold - 5%, Silver - 10%, None - 20%
>Joe
>KF4YYA
>
>DavidC wrote:
>
>> > Bad Boys Rape Our Young Girls But Violet Gives Willingly
>> > Thats how I learned it!
>> > Chuck (W3FJJ)
>>
>> Perhaps Bill Clinton was a Ham in Hot Springs as a boy?

2515. Re: Web Page editor with graphics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: ctmiles@flash.net
Message-ID: <36e22c08.29418923@news.flash.net>
Source record: 72825

On 4 Mar 1999 02:09:10 GMT, "Richard Hosking"
<richardh@iinet.net.au> wrote to :

Try the shareware program Paintshop Pro, PSP5, 4, or even
three. Supports numerous formats as well as editing
capabilities. Can also do batch, (Whole directories at once
conversions). supports transparent backgrounds, color
conversions etc.

Not affiliated with the company but love their product.

Chuck

2516. EIMAC 4-1000'S LOW HOURS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-04 00:00:00 UTC
From: Marc <blusky@internetcds.com>
Message-ID: <01be660e$59fa3e20$cf841ad0@blusky>
Source record: 72826
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have 5, Eimac 4-1000's with very low hours. These tubes show no ion burns at all on glass, i.e. very clean, 3 come with finned plate caps. $100 ea or best offer.

2517. Reverse printing with Eagle Light

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990304190506.15319.00003482@ng-fv1.aol.com>
Source record: 72748

We would like to make reverse prints of pcb's with a registered Eagle Light CAD program. Making a negative copy on transparency would solve some costly film problems. Any ideas appreciated. George. Millersville University Pa.
G345CDE

2518. qrp homebrew at 3686.4 khz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Bill <whagen@NOREPLY.inreach.com>
Message-ID: <36DF5EFD.1F78@NOREPLY.inreach.com>
Source record: 72749

I just built the Michigan Mighty Mite cw transmitter, putting out 1 watt
on 3686.4 kHz, and am wondering what kind of distance I should expect.
thanks
whagen@inreach.com
--
Please remove the word "NOREPLY" from the email adress. Sorry for the
inconvenience, but it helps keep down the spam.

2519. Impedance of twisted pair ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <lhKD2.890$Nk.1859934@news2.mia>
Source record: 72750

Hello expert netfolk,

I am sending a digital differential signal over twisted pair (typical
interior telephone type wires).

What value resistor should I use to terminate the line at the far end ?

Thanks for the help,
Bert Douglas

2520. Super Xtal Set

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: hharbich@NOSPAMexecpc.com
Message-ID: <7bo4a6$qvo@newsops.execpc.com>
Source record: 72751

Some time ago I (twice) asked for plans for a super crystal set. Well,
for those of you that may have been following the thread, here's a link
that a fellow on another discussion group sent me.

http://hibp.ecse.rpi.edu/~john/xtal.html

This is what I wanted.

--
... Harvey W. Harbicht - hharbich@execpc.com
... Signature file at: http://www.execpc.com/~hharbich/siggy.htm
...
... "D'Oh!" said Troi as Enterprise fell towards the planet.

2521. Re: Homemade Duplexer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: pake@lin.foa.se
Message-ID: <pake-0503991157390001@pake.lin.foa.se>
Source record: 72752

In article <%mHD2.508$Qw5.6123@news14.ispnews.com>, "Christopher Zeman, KB9RHA" <zman.SCREW.YOU.SPAMMERS@iwc.net> wrote:

> I was on a site a few months back. I believe the title was
> "Jim's Homemade Duplexers". The gentleman who owns the site constructs 6
> meter duplexers out of heliax cable. I would like to find this site again
> and can't seem to locate it on the search engines. If you are familiar with
> the site I am referring to, please post or e-mail the link to me.
>
> Thank you,
> Christopher Zeman, KB9RHA
> zman@iwc.net

Try this

http://www.dallas.net/~jvpoll/dup6m/dup6m.html

2522. Re: CB --> 10m or 6m conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "CHRISTOPHER W. (Chris) BOONE" <Cboone@Earthlink.Net>
Message-ID: <36E0712A.12763DB@Earthlink.Net>
Source record: 72753

Since it uses the 02A PLL, moving to 10 is a snap...Just one xtal
change is all you need and then retune...73 Magazine had a lot
of articles on this back in the 70s and 80s.....you can probably
get a reprint from 73 if you write or call them and ask
(they are located in Peterborough, NH I think...unless Wayne's
senility has taken over again)

Moving to 6 is a bit more complicated BUT can be done....the
xtal you change is a high side injection xtal in the 3x Mhz
range (35 or 37 I THINK)...and the 1st IF is 10.7 or 10.695.
its been a while since I did one so this is somewhat from memory!

To go to 6mtrs you merely change the LO relationship to LOWSIDE
injection (so the xtal remains in the same range)....so it would
be become 50-10.7 or 39.3 MHz....BUT this will cause LSB and USB
to FLIP since you have changed injection side....so a relabel of
the front panel would be needed (no biggie!)..plus you would
have to modify all the 27MHz coils to 50 MHz resonance (unwind
some turns and maybe change a cap or two)....BUT getting on 6 SSB
these days will be a blast......personally I dont know WHY
someone like Uniden or Ranger doesnt come out with a 6mtr allmode
25-40watt model like the HR2600 on 10, etc...if they priced it
around 200 or so, it would sell like crazy! I'd BUY ONE!! :)

Hope that helps!

73
Chris
WB5ITT
ARRL North TX Technical Specialist
Chief Engineer, JACOR-Dallas
KDMX MIX 102.9 and KEGL EAGLE 97.1

Walter Wickersham wrote:
>
> I have a GE ssb cb that i would like to convert to either 10 or 6
> meters,
> i dont have the model number off hand, but I know it uses a 02a pll..
>
> any help would be appreciated..
>
> -Walter Wickersham
> KD7AUR

2523. Re: HELP: Do I need a duplexer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "CHRISTOPHER W. (Chris) BOONE" <Cboone@Earthlink.Net>
Message-ID: <36E072DC.805924AC@Earthlink.Net>
Source record: 72754
Cross-posted to:
alt.ham-radio,alt.ham-radio.nocode,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

If you are running split site (which I assume you are?) and
will not be using duplexers to keep the TX out of the RXs..
then you can easily tie the 2 TXs together by using a LP
filter for the 6mtr side with a cutoff of say 70MHz and a HP
filter for 2 with a cutoff of say 140 MHz....the COMET or
DIAMOND diplexers for crossband operation will work just
fine for this...or you CAN easily homebrew...
BTW a DUPLEXER allows you to operate DUPLEX (TX and RX)...a
DIPLEXER allows you to feed multiple TXs into the same feedline.
A CROSSBAND coupler (also called diplexer) allows different
freq band TXs OR RXs to share one feedline......

73
Chris
WB5ITT

"Christopher Zeman, KB9RHA" wrote:
>
> I have two transmitters, one on 6 meters and one on 2 meters, for my
> repeater under construction. I will be using a dual-band repeater antenna
> and need to find out if I need a transmitter combiner or would a duplexer,
> such as the kind used with multi-band transceivers, work?
>
> Thank you,
> Christopher Zeman, KB9RHA
> zman@iwc.net

2524. Re: GE RANGR VHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "CHRISTOPHER W. (Chris) BOONE" <Cboone@Earthlink.Net>
Message-ID: <36E071CC.EFF5F9B4@Earthlink.Net>
Source record: 72755

It could be done but wont be easy Paul....the front end has to
be moded to 220 (take 2-3 turns out of each helical), the VCO
would have to be moded (take some inductance out of that ckt)
and the PA would have to be moded to pass 220....possible but
not easy....(you could likely remove the PA and put a SAV-15
brick in place of it which the PLL would easily drive to 30+
watts....it only needs 100mw drive max)

Chris
WB5ITT

Paul Mierop wrote:
>
> Has anyone done a 222-225 mhz conversion on a GE VHF RANGR. I am using
> Rangrs for 2 meters, 70 cm and 6 meters and sure would like to have one
> on 222-225 mhz.
>
> 73's
> Paul Mierop
> KE2LS

2525. Re: micor squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "CHRISTOPHER W. (Chris) BOONE" <Cboone@Earthlink.Net>
Message-ID: <36E073EE.FC6E877A@Earthlink.Net>
Source record: 72756

Yes it can be added....Just use the schematic on the MICOR
around the 7716 and feed the audio from the VOL/SQ hi of the
GE rcvr (the levels are the same...)....works great! I use that
all the time on my GE EXEC II rptrs

Chris
WB5ITT
Repeater remailer at Repeater(@)onelist.com
to join, send a msg to
repeater-subscribe(@)Onelist.com with NO text or subject required
DONT use the () around the @ above...I did that for SPAMbots
looking for addresses!
Dan Swee wrote:
>
> Mod to add Motorola "micor" squelch to my GE repeater.
> I have heard the m7716 ic chip can be used. Any help out there?
> sources, schematics, opinions?
> Dan Nï¿½FKM Mpls MN

2526. Re: Micor conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "CHRISTOPHER W. (Chris) BOONE" <Cboone@Earthlink.Net>
Message-ID: <36E07575.31B4AEB3@Earthlink.Net>
Source record: 72757

Whats the model number?
The Motorola design on the model numbers are:
1st letter is typically a T meaning Transistorized power system
(used on all models since the MOTRAN solid state models)
The 1st number is power level....7=100 watts, 9=250-330 watts
lower numbers=lower output down to a 2 = 5 watts
The 2nd number is band (actual range depends on TLN number
on RF boards!)...1=30-50 MHz, 2=VHF 144-174, 4=420-512 MHz,
5-800-900 I think....(3 is used for 225-400 MHz military I THINK;
VERY RARE!)...the rest of the model number tells you TX type,
RX type, and other options....soooooooo a typical number like:

T71RTN is a 100watt (7) LOWBAND VHF (1) MICOR (RTN)
T63GGV is a 50-70watt (6) HIGHBAND VHF (3) TUBE type "T power"
(GGV)
Thats a basic rundown....So what is your model numbers?

Chris
WB5ITT
EC Therapy wrote:
>
> I just purchased a bunch of Motorola Micor radios. Does anyone have
> any idea as to what numbers of the model # tells the power out, the
> band, etc???? Also, has anyone converted these to the Ham bands?
> If so, I would be interested in knowing what you did or a source for
> the article. I have no control heads... anyway to bypass this
> problem? Thanks for reading!!!!
>
> Paul,
> N3PEE

2527. Re: Programming info on a uPD861C PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "CHRISTOPHER W. (Chris) BOONE" <Cboone@Earthlink.Net>
Message-ID: <36E07628.8A3717D5@Earthlink.Net>
Source record: 72758
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

To move the CB, DONT touch the PLL chip or its xtal....
find the main LO xtal (a 37 or 39 MHz xtal)...change THAT
by how much you want to change Channel 1 (take the lowest
freq you want on 10 then subtract CB Channel 1 at 26.xxx MHz
and ADD that difference to the xtal freq and order one from
ICM or similar....then retune the rig! And youre on 10!

Chris
WB5ITT

Jeffrey Herman wrote:
>
> Anyone have information on which pins are used for frequency
> programming with a uPD861C PLL chip? I would like to raise
> its output frequency say, one megahertz. (Converting a CB
> for 10m CW.) I believe this is an easier route than replacing
> the PLL's reference crystal.
> 73, Jeff WH6U

2528. 6M/10M Dual-Band Mobile Antenna Ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Paul Knight <paul.knight@prairiecomm.com>
Message-ID: <7boma1$fc8$1@eve.enteract.com>
Source record: 72759
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hello! I would like to build a dual-band 10M/6M antenna for my truck. I was thinking something with a 54" base section (resonant on 6M), with a coil/stinger arrangement on top which decouples the base on 6M and resonates the whoe structure on 10M.

The antenna doesn't have to be a high-gain, high-bandwidth affair. I just need to reduce the number of antennas emanating from the vehicle.

I'm not a physicist, nor antenna guru. This idea may not even be possible. Rather than flame me for being ignorant, I'd appreciate any constructive ideas anyone might have.

Thanks much!

Paul WD8DKY
paul.knight@prairiecomm.com

2529. Re: AM transmitter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Lamb <k7fm@teleport.com>
Message-ID: <WNRD2.10709$hC.4968690@news1.teleport.com>
Source record: 72760
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi Will:

Yes, Electric Radio has projects such as that from time to time, although any old handbook would give you ample infomation to design around the parts you find. It is fun.

Generally a handbook from 1946 through 1960 would be fine. Hit a local swapmeet and you should be able to find one for $5 to $10.

Good luck and 73, Colin K7FM

2530. Want: 88 and 44 mH toroid inductors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Jack Hardin <jhardin@hal-pc.org>
Message-ID: <01be671a$7e5a2480$5581b4ce@jhardin>
Source record: 72761

Wanted: Cheap, old 88 and 44 mH toroid inductors to build an old-style passive audio filter. Need 3 of the 88's and 2 44's. If you have any in your junk box, how much mailed to me in Texas?? Please email me direct...
Jack, KD5EDO
jhardin@hal-pc.org

2531. Help making a PC cable for a Icom

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: kg4bia@aol.comdmx
Message-ID: <19990305104101.13531.00005744@ng-ch1.aol.com>
Source record: 72762

Hi All,

Has anyone fabricated the cable that connects the W32A to the PC to program the radio or does anyone have the diagram for the pin outs? Thanks in advance.

Mark Goods
KG4BIA@aol.com
goods@vaxrb.niehs.nih.gov

2532. Re: Programming info on a uPD861C PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: John Dewey <jdewey@tribune.com>
Message-ID: <7bovlf$2ia5@news.tis-in.trb>
Source record: 72763
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Watch out! many PLL in CB use the same crystal for the inloop mixer, and
the pll reference, and maybe even the IF. In order to change them, you have
to leave the on board crystal as the reference, then add an outboard
oscilator for the inloop mixer only.
KA9CAR

CHRISTOPHER W. (Chris) BOONE wrote in message
<36E07628.8A3717D5@Earthlink.Net>...
>To move the CB, DONT touch the PLL chip or its xtal....
>find the main LO xtal (a 37 or 39 MHz xtal)...change THAT
>by how much you want to change Channel 1 (take the lowest
>freq you want on 10 then subtract CB Channel 1 at 26.xxx MHz
>and ADD that difference to the xtal freq and order one from
>ICM or similar....then retune the rig! And youre on 10!
>
>Chris
>WB5ITT
>
>Jeffrey Herman wrote:
>>
>> Anyone have information on which pins are used for frequency
>> programming with a uPD861C PLL chip? I would like to raise
>> its output frequency say, one megahertz. (Converting a CB
>> for 10m CW.) I believe this is an easier route than replacing
>> the PLL's reference crystal.
>> 73, Jeff WH6U
>

2533. WTB: ARRL Handbooks fm 1940s - 1960s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "Bruce J. Howes KG2IC" <bhowes@buffnet.net>
Message-ID: <36e00875.0@news3.buffnet.net>
Source record: 72764
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap

Looking for ARRL handbooks from the 1940s to the 1960s.

For my own use, I am not a dealer, just a avid reader of older radio.

Complete sets or individuals ok.

Thanks!

--
73,

****
****
Bruce J. Howes KG2IC email:kg2ic@amsat.org
East Amherst, NY 14051 web:http://www.buffnet.net/~bhowes
AMSAT-NA Area Coordinator ARMY MARS AAR2AJ
****
****

begin 666 Bruce J. Howes.vcf
<encoded_portion_removed>

2534. Re: Micor conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: gc@rat.cen.com
Message-ID: <7bp1tb$1qn@rat.cen.com>
Source record: 72765

In article <36DE93D1.F9B83415@sunlink.net>,
EC Therapy <docshok@sunlink.net> wrote:
>I just purchased a bunch of Motorola Micor radios. Does anyone have
>any idea as to what numbers of the model # tells the power out, the
>band, etc???? Also, has anyone converted these to the Ham bands?
>If so, I would be interested in knowing what you did or a source for
>the article. I have no control heads... anyway to bypass this
>problem? Thanks for reading!!!!
>
>Paul,
>N3PEE
>

I have used a few of these for LMR or amateur use, but have so far only
used ones in their design range. Many of them have been converted
to ham bands.

There is information on the web, but it's spotty. Here are a couple of URLs:
http://www.brinkleyelec.com/Radmod.htm
http://www.seits.org
and follow the links.

Here is a brief description of model numbers. The model number on
your Micors will be something like, for example: T73RTN3100

The meaning of these characters is:

T - Trunk mount. Alternatives are D=Dash, U=Universal, H=Hand, P=Portable
and some others, but Micor mobiles are all "T".
I have been assuming you have mobiles. Base stations
could be "B", "C", "L".

7 - 110 watts output power. For Micors this number will be in the
range 4-7 for power out from about 40watts to 110watts.

3 - VHF High band (138-174MHz). Alternatives are: 1 - Low band (25-50MHz),
4 - UHF (406-512MHz), 5 - somewhere around 800MHz.
There might also be a 2 for 70MHz.

No radio will cover the full range. You need to look at the
numbers stamped on the transmitter and receiver. The fourth
digit will be in the range 1-4 and specify the subrange.
On VHF subrange 2 covers 2m, 3 is most common for 150-160MHz LMR.

RTN - These letter designations are for the receiver, transmitter
and power supply. For Micor mobiles I don't think you'll see
anything except "RTN"

3100 - The last four digits give various options such as 3 = PL,
1 = narrow band, this can also tell you the number of channels.

There might be a couple of additional letters (e.g., AK) which would
be a version and packaging indications that I don't know much about.

Let us know what you have and what you want to do.

73,
Gary

2535. 2m to 6m Transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Michael Anderson <michaela@qualitau.com>
Message-ID: <7bp2c1$931@journal.concentric.net>
Source record: 72766

I am exploring the idea of making a home brew 2m to 6m transverter. I understand the concepts and circuitry for the hetrodyne conversion, and I pretty much have that portion designed, it's very similar to an AM modulator.

My question is more of a "lower" tech matter: How do I keep received signals from feeding back to the output converter and transmitted from feeding back to the input converter? By necessity the receive input and the transmit output are connected together, as are the transmit input and the receive output. Obviously I could use a PTT switch, but one is already enough to handle on the 2m rig. If someone knows what is typically done I would very much appreciate an answer.

Thanks,

Michael Anderson
KF6LGN

2536. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7bp8dm$47u$1@nnrp1.dejanews.com>
Source record: 72767

In article <7bmi41$p5o$1@nnrp1.dejanews.com>,
hinermad@my-dejanews.com wrote:

> For the past week, Newark's Web site hasn't been answering my calls. Future
> Active's Web site doesn't seem to have a catalog, at least not that I can
> find. (I called them for a print catalog and got their little flyer thingy -
> looks like it's geared toward TV repair and telephone installers.) Pioneer
> admits to having the chips - now I have to find out if they'll take plastic.

Weird. I've found chips that are in the Newark catalogue, but that
the database has never heard of (e.g. AD607). But I've never had any
difficulty connecting to their web page.

Even Future/Active's main catalogue isn't very big (I have a copy).
I've always had better luck phoning and asking.

> Heh, heh. They'll sample -me-! I'm an electronic design engineer. (Well,
> actually, the title if Sr. Software Engineer, but the reps all know I'm about
> as good with a soldering iron as I am with an editor.) But conscience
> dictates that I not accept samples for what will amount to a personal
> project. My work isn't likely to require a DDS synthesizer.
>
> But DSP chips, that's another matter...

If I invoke the name of my school-cum-employers (I'm an M.A.Sc. student)
in vain they'll sample me, too. I've gotten samples for personal projects
as well, usually by attempting to purchase the item in question and having
the person at the other end decide the paperwork isn't worth the hassle
for one or two chips...

Many companies don't seem to mind sampling to serious experimenters.
The weirder the part, the better. :-)

> > The first DDS VFO I built used a Qualcomm Q2220 chip from an article
> > in 73 (I designed my own Basic Stamp controller board for it). Am I
> > showing my age here? :-)
>
> I'm not familiar with it. What issue (or year) was that published?

The Techno-Whizzy DDS VFO, 73, December 1992. Far Circuits still
offer a PC board for it, but the Q2220 chip may be hard to find now.
The chip is parallel programmed (24 bits worth), lending itself to all
kinds of abuse - I tested mine with a diode matrix and a big bag
of 1N914s before plying it with microcontrollers.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2537. Re: WTB: Beginners book on PLL frequency synthesis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990305125300.8632F-100000@Stratus.CAM.ORG>
Source record: 72768

On 3 Mar 1999, Jeffrey Herman wrote:

> My library doesn't do too well in this area. I have some non-amateur
> radios begging to be converted to the ham bands. Can someone suggest
> or sell me a book on PLL circuitry?
> 73, Jeff WH6U
>
>
The ARRL Handbook seems to have a fair introduction to PLL's in recent editions, maybe for about the past ten years or so.

There's never been much in the way of advanced material on the topic in an inexpensive book. Howard Sam's once had a book "Design of Phase-Locked Loop Circuits, with Experiments" by Howard Berlin which was a reasonable hobby-based coverage of the topic as it was twenty years ago when the book came out.

The other books that I've seen mention made of tend to be expensive and aimed at professionals. Someone mentioned the Rohde book; I imagine it would be nice to have but I've also seen the price. There's a chapter on the topic in his "Communications Receivers" book, which is also expensive but I once got as part of a book club sign up.

F.M. Gardner's "Phaselock Techniques" always shows up in bibliographies about synthesizers, but considering it came out in 1966 (or was there an updated version later) it probably covers more than you want to know about the topic of PLL's but completely misses a lot of changes in implentation that has occurred since then.

There have been plenty of articles on PLL's in the ham magazines, though most have been about construction rather than background or design. Ham Radio magazine probably had the best articles, including an article by Rohde, "Modern Design of Frequency Synthesizers" in the July 1976 issue.

But aside from the older material being more about the theory of PLL's, they also suffer because IC's have become the heart of PLL's and new devices have come along since the articles came out. One of the better sources of material on the subject, once you've dealt with the basics in something like the Handbook, is the manufacturer's data sheets and application notes. They are far cheaper to get than a $90 book on PLL's, and will tell you how to use the device in question. This is especially a consideration when modifying commerical equipment, since you want to know what's in there, not a more generic understanding of the topic.

Motorola has always had good data sheets on their PLL products, like the old MC4044 phase detector (it went on for pages), and presumably for their

all-in-one (or more or less) synthesizer IC's that show up fairly often in commercial equipment. Signetics was always a good source of information on their line of PLL's like the 565 and the 560, which of course weren't really intended for synthesizer use, and one oculd probably find an old databook from them at a ham fest. `The common PLL these days is the CD4046 (and variations that allow for higher speed operation and some I gather provide improved operation). RCA alwaqys had a good data sheet for it, though RCA isn't around anymore. One company has a program tht you run for designing synthesizers using the 4046; I think it was Phillips. I got the program as shareware at a computer show some years ago, but don't have it handy to check for it's name.

If you're modifying equipment, it's worth looking inside and finding the PLL, and then trying to find the datasheet for it. The problem with that being that there are IC's used in commercial equipment that can be hard to track down information on.

As for CB sets, a lot of that area has been covered in 73 years ago.

Michael VE2BVW

2538. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990305132114.8632G-100000@Stratus.CAM.ORG>
Source record: 72769

On Thu, 4 Mar 1999, Eamon Skelton wrote:

> Everyone has their own particular favourite VFO. I have had a
> lot of success with the series tuned Colpitts (Clapp) oscillator.

Over the years I've seen a lot of articles about VFO's and in just about
all of them, the author's said "this is the best". Since they can't all
be "the best" I imagine that no particular oscillator is far
superior than all the rest.

However, the variations in design often have a purpose, because someone
needed to work with existing components.

It seems to me that there are certain things that will make a good VFO,
and it has little to do with the specific oscillator chosen. Things like a
good tuning capacitor, or whatever is used to tune the thing. A good
solid box to build it in. A good inductor that's not going to be bothered
by temperature or movement. Good voltage regulation, which of course has
become easier with the switch to semiconductors. Good isolation between
the actual oscillator and where it leaves the box.

Michael VE2BVW

> I use a JFET Clapp oscillator in my H/B transceiver. It runs
> reliably at various frequencies between 9 and 23 MHz,
> despite the fact that the feedback capacitors are fixed
> at 220pF for all bands. Stability at 9 MHz is quite good,
> about 200Hz per hour, not so good at 23 MHz. I use a
> digital stabilizer (Elektor Feb. 1998) to keep the VFO
> stable on all bands.
>
> The Franklin oscillator also makes a good VFO.
>
> Remember that VFO builders are worse than fishermen
> when it comes to telling tall tales. Don't believe the stories
> about the 30Mhz VFO with less than 10HZ drift. Most
> crystal oscillators are not as good as this.
>
> The AD9850 should make an excellent 7 MHz VFO. You
> can get the data sheet from: www.analog.com
>
> 73, Ed. EI9GQ
>
>
> --
> **********

> Eamon 'Ed' Skelton EI9GQ
> Cork, Ireland
>
> ANTI SPAM RETURN ADDRESS
> Real e-mail address below
>
> ei9gq@nettaxi.com
> www.qsl.net/ei9gq
> www.nettaxi.com/citizens/ei9gq/
>
> **********
>
>
>
>
>
>

2539. RIT Modification for Argonaut 509 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Doug Snowden <dsnowden@dnet.net>
Message-ID: <36E025AD.30AEB16@dnet.net>
Source record: 72770

Mine only has 1/2 khz swing or so. I'd like 5khz. I am fully capable of doing this on my own, but if it has been done before, please save me the time.

Doug N4IJ
dsnowden@ncdc.noaa.gov

2540. P A schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Jonas <jonasm@iname.com>
Message-ID: <7bpimkasu1@trimpas.omnitel.net>
Source record: 72771

Hi all !

I am interested in PA schematics.I have sent email to Ameritron for AL-800 A, but those
assholes didn't replied.Probably because I am a radio amateur from "the third world".
If anybody could send me the AL-800 A schematic, please do so.

73! Jonas LY2OI

2541. FS: AVIONIX TEST PANELS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0503991303070001@murphy1.cts.com>
Source record: 72772
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.aviation.restoration,rec.aviation.marketplace

TEST PANELS, LOADED WITH SWITCHES. LIGITS, PARTS, ECT. GOOD COND.

$45 EA. 3 DIFFERENT STYLES FOR $100

PICT AT:

http://209.239.34.153/murphyjunk/4_MORE_SURPLUS_STUFF

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

2542. Re: Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <2BXD2.1169$Nk.2331583@news2.mia>
Source record: 72773

Dave Hinerman wrote in message
<36dcb82c.4161261@netnews.worldnet.att.net>...
>On Tue, 2 Mar 1999 20:43:20 -0700, "John Kirk, VE6XT"
><jakirk@calcna.ab.ca> wrote:
>
>>I seem to have lots of applications for RF sources up in the high vhf to 1
>>GHz or so region lately. I'm hesitant to use oscillator/multiplier schemes
>>to get there, as I lack the proper test gear to make sure they are clean.
>>Is there some kind of "minimum parts count/minimum engineering" solution?
>>I saw something once in a Plessey catalog that needed only 5 parts to give
>>me stable, clean 900 MHz (one of the applications I actually needed!) from
>>an hf crystal, but Plessey is not widely available in North America. Is
>>there something more mainstream?
>
>National Semiconductor, Philips (was Signetics), and Motorola all make
>PLL chips/chip sets that are rated up to 1.2 or 2.4 GHz. But PLL
>doesn't necessarily guarantee clean - you'd probably want the same
>unavailable equipment to design a PLL for that range.
>
>Besides, I don't have a clue where to buy any of these parts in hobby
>quantities. At work I but Motorola parts from Future Electronics (and
>at my last job from Hamilton Avnet), but they all want to sell a rail
>of chips at a time. I can't afford 18 chips at $20 each.

I am also looking at PLLs in hobby quantities. I looked hard but have been unable to find anyone that will sell me either the Plessey or the Philips parts.

But the National part (LMX2325) is available from Pioneer-Standard
http://www.ied.pios.com/
for $6 in quantity 1 by web page order with credit card. Also National has a lot of support for PLL design. They have software that will design the loop filter for you. And they have software that will load the PLL registers through the parallel port, and show you a picture of the various register contents on screen.

Motorola has a pin compatible second source for the LMX2325. But so far I haven't been able to find a way to buy the motorola part in small quantities. The Motorola part is bipolar and the National part is cmos. National has a way to switch between two different loop filters using an analog switch. Motorola does the same thing by replicating the charge pump, because they can't make an analog switch in bipolar. It is possible design a circuit that will work with both parts, if you know about this quirk. But if you follow the National app notes too closely you will find that the motorola part will not work.

Regards,
Bert Douglas

2543. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <VdA6iFAc9E42EwDj@ifwtech.demon.co.uk>
Source record: 72774

VA3LDH wrote:
>If I invoke the name of my school-cum-employers (I'm an M.A.Sc. student)
>in vain they'll sample me, too. I've gotten samples for personal projects
>as well, usually by attempting to purchase the item in question and having
>the person at the other end decide the paperwork isn't worth the hassle
>for one or two chips...
>
>Many companies don't seem to mind sampling to serious experimenters.
>The weirder the part, the better. :-)

There was an article in CommQuart a few years ago that dealt with precisely this problem. It pointed out that semiconductor manufacturers are like drug companies, in that development costs far outweigh production costs. Once the line has begun to roll, it may be a good investment to sample to anyone who might have a chance of influencing future purchases, so don't be bashful about trying - you may be pushing at an open door.

Another good point the article made was that if you present yourself as a prototype designer and developer, you'll stand far more chance than if you say you're a hobbyist looking for a fun project. The suggestion was not that you lie, of course, but that you present yourself in the best possible way. It's well worth a read.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2544. Re: questions: filament on old #27 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e055e7.463465813@news.online.no>
Source record: 72775

On Thu, 4 Mar 1999 19:49:48 LOCAL, NOSPAMpfriedr@azstarnet.com (H. P. Friedrichs) wrote:

>Hi:
>
>I recently had the good fortune to get my hands on some old, arcturus-type
>globe tubes. They are blue glass, but unfortunately unmarked. The person I
>got them from, however, indicated that he was told they were #27's.
>
>Anyhow, I found a pinout and specifications for the #27 in an old book, and
>wanted to play with a simple radio receiver circuit. The book shows the
>filament voltage as 2.5 volts.
>
>Yet, when I applied 2.5 volts, the filament was frighteningly bright. In fact,
>at 1.5 volts, it's a medium yellow color. All I've ever played with before
>are glass miniatures and common octals, and I don't recall their
>filaments as ever being more than a bright red (when properly energized).
>
Strange. I got a phone call yesterday from an amateur requesting
socket connection for an 3RP1 old oscilloscope tube, it was found in
ARRL 68 handbook, and some years ago I bought some inexpensive 2AP1
tubes for RTTY XY-scope, data was only found in 48 and 49
handbooks....

heater info for '27' is 2.5V 1.75A, but often a rheostat was
connected in series with filament those days around 1930 to reduce the
excitation to the minimum neccessary level for proper operation

73
Jan-Martin LA8AK
LA8AK@ONLINE.no

2545. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e05a83.464645755@news.online.no>
Source record: 72776

On Thu, 4 Mar 1999 21:42:05 -0000, "Eamon Skelton"
<die.all@spammers.org> wrote:

>Everyone has their own particular favourite VFO. I have had a
>lot of success with the series tuned Colpitts (Clapp) oscillator.
>
>I use a JFET Clapp oscillator in my H/B transceiver. It runs
>reliably at various frequencies between 9 and 23 MHz,
>despite the fact that the feedback capacitors are fixed
>at 220pF for all bands. Stability at 9 MHz is quite good,
>about 200Hz per hour, not so good at 23 MHz. I use a
>digital stabilizer (Elektor Feb. 1998) to keep the VFO
>stable on all bands.
>
>The Franklin oscillator also makes a good VFO.
>
>Remember that VFO builders are worse than fishermen
>when it comes to telling tall tales. Don't believe the stories
>about the 30Mhz VFO with less than 10HZ drift. Most
>crystal oscillators are not as good as this.
>
>The AD9850 should make an excellent 7 MHz VFO. You
>can get the data sheet from: www.analog.com
>
>73, Ed. EI9GQ
>
and my favourite VFO type is the 'Seiler' using bipolar transistors
type BC547=2N3904 or 2N2222, W3JHR "Synthetic Rock" shown on pg 145
in Amateur Radio Techniques (G3VA). I've never really understood any
secret in using JFETs in VFO's, JFETs may even produce higher noise,
particularly for XO's

The transistor should be tapped down on the tuned circuit, quite large
capacitors are possible to use at the active ports, it is some
calculations based on forward conductance, a VHF transistor having
small internal capacitances may be better for drift, even a 6K7 valve
may have near 2000pF across anode and grid to ground in an 80m VFO, I
had some theory about it, but it is lost now, was published in Danish
National magazine in 1957.

It is very important not to overdrive the buffer, and input to buffer
should be tapped down on the tuned circuit or an emitter resistor for
lowest possible capacitive feedback, loose-coupled buffers are
misunderstood application

73 Jan-Martin LA8AK
LA8AK@ONLINE.no

2546. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e059d7.464473482@news.online.no>
Source record: 72827

On Fri, 5 Mar 1999 13:29:10 -0500, Michael Black <blackm00@CAM.ORG>
wrote:

>
>
>On Thu, 4 Mar 1999, Eamon Skelton wrote:
>
>> Everyone has their own particular favourite VFO. I have had a
>> lot of success with the series tuned Colpitts (Clapp) oscillator.
>
>Over the years I've seen a lot of articles about VFO's and in just about
>all of them, the author's said "this is the best". Since they can't all
>be "the best" I imagine that no particular oscillator is far
>superior than all the rest.
>
>However, the variations in design often have a purpose, because someone
>needed to work with existing components.
>
>It seems to me that there are certain things that will make a good VFO,
>and it has little to do with the specific oscillator chosen. Things like a
>good tuning capacitor, or whatever is used to tune the thing. A good
>solid box to build it in. A good inductor that's not going to be bothered
>by temperature or movement. Good voltage regulation, which of course has
>become easier with the switch to semiconductors. Good isolation between
>the actual oscillator and where it leaves the box.
>
> Michael VE2BVW
>

very true, but you might forgot one very important argument,
it is important to screen the magnetic fields from the coil to reach
the capacitor. The capacitor may be electrical excellent, while
magnetic unstable for the magnetic fields which need not pass to it

73 Jan-Martin
LA8AK
LA8AK@ONLINE.no

2547. Re: Potentiometers at R.F.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e05bc9.464971728@news.online.no>
Source record: 72828

>>I need a 5k pot that will look reasonably like a resistance up to
>>40 Mhz. Mouser carries a bewildering variety of pots variously
>>called carbon, cermet, conductive plastic, and wire wound. This
>>is for a low power, high rotational life application - lots of
>>fiddling. Will someone tell me the relative merits of these different
>>pots?
>>
>>Thank you,
>>
>> Tom Donaly KA6RUH
>
suggest you try some older type trimpots, but some mechanical work is
needed to attach a shaft

LA8AK@ONLINE.no

2548. Re: Generic PLL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <7bpnr9$dd8$1@news.onr.com>
Source record: 72829

A new 2.5 GHz PLL chip with on-chip oscillator is
available from Silicon Labs (www.silabs.com). It
is a really nice chip!

-W5CDT

--
-->Remove the x's from my email address before using <--

Bert Douglas wrote in message <2BXD2.1169$Nk.2331583@news2.mia>...
>
>Dave Hinerman wrote in message
><36dcb82c.4161261@netnews.worldnet.att.net>...
>>On Tue, 2 Mar 1999 20:43:20 -0700, "John Kirk, VE6XT"
>><jakirk@calcna.ab.ca> wrote:
>>

>>>I saw something once in a Plessey catalog that needed only 5 parts to
give
>>>me stable, clean 900 MHz (one of the applications I actually needed!)
from
>>>an hf crystal, but Plessey is not widely available in North America. Is
>>>there something more mainstream?
>>
>>National Semiconductor, Philips (was Signetics), and Motorola all make
>>PLL chips/chip sets that are rated up to 1.2 or 2.4 GHz. But PLL
>>doesn't necessarily guarantee clean - you'd probably want the same
>>unavailable equipment to design a PLL for that range.
>>
>
>
>I am also looking at PLLs in hobby quantities. I looked hard but have been
>unable to find anyone that will sell me either the Plessey or the Philips
>parts.
>

2549. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: De Guerin <da6bd@herts.ac.uk>
Message-ID: <Pine.SO4.4.02.9903051911060.9279-100000@gemini>
Source record: 72830
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Yeh, but human hair isnt conductive... :)
(unless you replace the C atoms with Cu..)

Andre :)

On 2 Mar 1999, Sam Goldwasser wrote:

> In article <36dc2994.0@news.netwalk.com> "Jim" <jbolinger@lintek.com> writes:
>
> > It comes even smaller than that. I have a spool of #40 around somewhere.
> > Hate to use it, however, because a piece of my hair is stronger!
>
> Heck, that's nothing. The inverter and trigger transformers in disposable
> camera flash units use something like #44 - #46! Talk about being weaker
> than a hair! :) Try to disassemble one of those without breaking the wire!
>
> --- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
> Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
> +Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
> | Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html
>
>

2550. HAMFEST March 7, 1999 - Lindenhurst, LI

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: W2GSB <info@gsbarc.org>
Message-ID: <jPZD2.8232$ur5.22721130@news.optonline.net>
Source record: 72831

HAMFEST March 7, 1999 - Lindenhurst, LI

GREAT SOUTH BAY AMATEUR RADIO CLUB & SUFFOLK COUNTY RADIO CLUB
ARRL APPROVED LONG ISLAND HAMFEST - MARCH 7, 1999

On March 7, 1999 the Great South Bay Amateur Radio Club & Suffolk County Radio Club will again sponsor an indoor Hamfest. The location will be at the:

Knights of Columbus
400 South Broadway
Lindenhurst, Long Island, NY

There will be radio equipment, electronic componets, computers and access-ories, softeware, books, technical manulas, ARRL information, Amateur Radio License Exams, Door Prizes. General admission is $6.00.
Free Admission for spouses and children under 12.

VE - ARRL - 12:00 NOON
For exam candidates please remember to bring your original FCC Amateur Radio license (if licensed), any C.S.C.E. forms that are pending, plus a photocopy of each, pens, calculator, formal form of ID (preferably photo ID), and the examination fee, to the exam session. 1999 ARRL/VEC fee is $ 6.45, exact change is appreciated. Novice exams are free.
The VE team is from ISLIP ARES Group and GSBARC. Thanks guys.

PLEASE NOTE: The VE session will be held at the Babylon Town Town EOC.
200 E Sunrise HWY, North Lindenhurst, NY.

For vendor and additional information pleas contact, Peter Portanova WB2OQQ at(516)541-4886. Email info@gsbarc.org

Talk-in will be via W2GSB Repeater on 146.685 4Z(136.5) PL.

Food Service during the Hamfest will be provided by members of the Knights of Columbus Council.

Information is also available during the GSBARC 2 meter info net every Monday evening at 7:00 pm on the W2GSB repeater, 146.685 -600 4Z(136.5) PL required. You may also write to:

HAMFEST 0399
P.O. Box 1356
West Babylon, NY 11704

Email: info@gsbarc.org

Visit GSBARC online at http://www.gsbarc.org/hamfest.htm or
SCRC at http://www.members.tripod.com/~parasca/index/scrc.html

NEXT HAMFEST - Ocotber 24, 1999
Y2K HAMFEST - March 5, 2000 and October 29, 2000

73,
GSBARC & SCRC

2551. Re: EIMAC 4-1000'S LOW HOURS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-05 00:00:00 UTC
From: Jim Heath <jimheath@foothill.net>
Message-ID: <7bps60$j3s$1@ns2.foothill.net>
Source record: 72832
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hi,

Where are you? I use that tube in my amplifier.

73, Jim KB6SX

Marc wrote in message <01be660e$59fa3e20$cf841ad0@blusky>...
>I have 5, Eimac 4-1000's with very low hours. These tubes show no ion burns
>at all on glass, i.e. very clean, 3 come with finned plate caps. $100 ea or
>best offer.
>

2552. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: rjburden@BigPond.com
Message-ID: <36e0912e.1411461@news.bigpond.com>
Source record: 72833

hinermad@my-dejanews.com wrote:

<snip>
> And since I've found a way to make
>PC boards without shelling out $3 a sheet for toner transfer paper, time
>spent wiring up chips isn't as big a problem.

Do tell. I'm interested.

Regards,
Richard

Regards,
Richard VK6FKB
"Nothing better than home-brew, except perhaps an absence of Spam"

2553. Yaseu Mike Pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: John Siegel <JohnASiegel@worldnet.att.net>
Message-ID: <36E06F1E.4ED28DD7@worldnet.att.net>
Source record: 72834

Does anyone have the pinout for 8 pin Yaseu microphone connectors? Or an
on-line reference to it.
Thanks for any help.
73 John K4BNC

2554. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <7bq4p9$t7o$1@nnrp1.dejanews.com>
Source record: 72835

In article <36dcb5af.3524359@netnews.worldnet.att.net>,
hinermad@woodnet.att.net (Dave Hinerman) wrote:
> On Mon, 01 Mar 1999 14:15:11 -0800, dalien <dalien@pacifier.com>
> wrote:
>
> >Seeing several unassembled Heathkits for sale brought back memories:
> >
> >"It is cold outside, but the house is warm and smells of Christmas
> >decorations. The fireplace crackles; a soldering pencil waits to warm.
> >My cold wet feet slowly thaw in thick socks as the flurries turn to
> >blizzard. Supper is finally over, and it's time to sort the parts. It
> >is 1961, and I am young again..."
>
> Yup. Not -quite- 1961, I built my first in 1976.
>
> Sitting at my desk in July, the window open, a gentle breeze stirring
> the solder smoke about my head as I assembled a HW-16 and wondering if
> my Novice ticket would arrive before I finished it, and how would I
> test the transmitter if it didn't? I knew I could use some light bulbs
> for a dummy load, but I also knew they'd radiate from DC to daylight
> (well, incandescent light), and the FCC was just WAITING for this new
> Novice to screw up so they could yank his license before he even got
> it, so I'd better wait...

Yes that HW16! my first rig too, once I called CQ on 15 meters and I got a
call from the shechele islands. I run for clean underware!!!! CT

>
> Then Mom comes in, wanting to know what kind of trouble I was in NOW
> because there was this letter from the FCC in the day's mail and she
> just KNEW I'd blown up NORAD or something...
>
> All to the tune of "Afternoon Delight."
>
> A child of the 70's? Darned right.
>
> Where's my soldering iron? I gotta build something.
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2555. Re: AM transmitter project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36E0A179.6304D7D5@home.com>
Source record: 72836
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

How seriously do you want to do AM - the who 9 yards with 6L6's and modulation transformers or will double side band be adequate? Reason for the question is that I saw an Analog Devices chip which could, conceivably, be used to generate an AM signal.

Will White wrote:

> I am looking for plans/schematic to build a moderate powered (40-75
> *output*) AM transmitter for 75 meters, or even 75/40.There was a
> project in CQ magazine last year, but that one runs only 10W out on 75,
> and I really want something that will do closer to 50. Recommendations
> on old issues of QST/ARRL Handbooks? I've also been thinking of
> subscribing to Electric Radio; do they run articles on such projects?
> Thanks a bunch!
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

2556. Re: Needed: High Current Power Supply Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <36E0AAB5.54D957C@att.net>
Source record: 72837

FWIW, Many such supplies can be adjusted down a bit with a
trim pot. If not, a minor change in one of the feedback
divider resistors would bring the output down.
Woody

Angel Vilaseca wrote:
>
> Bradley Risk a ï¿½crit:
> >
> > I'm trying to build a 20+Amp 13.8V power supply, but am having a hard
> > time finding a good schematic for one. Anyone have any good plans, or
> > URL
>
> How about taking three surplus PC power supplies (you can have them for
> less than $10 each) and wiring the 5 Volt outputs in series?
>
> Many are rated at the 20+ amp you need on their 5 V outputs.
>
> Sure, you will have 15 V instead of 13.8V. Just add a couple of
> (heatsinked!) high current diodes in series to drop the voltage a bit.
>
> Angel Vilaseca HB9SLV

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

2557. Re: Programming info on a uPD861C PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7bqibu$fag@news.Hawaii.Edu>
Source record: 72838
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

John and Chris: This rig has two xtals in the PLL stage - 10.240 and 10.695 MHz. Also, a cross reference says that the uPD861 is almost identical to the 858, if that helps. I would have thought that adjusting programming of the PLL via its ten programming leads would have been a better approach.

Thanks for your help, guys. Got to get on 10m CW ACAP (as cheaply as possible).
Jeff WH6U

2558. Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Dave Rude <rude@maqs.net>
Message-ID: <wT5E2.95$wB4.8898@homer.alpha.net>
Source record: 72839

Hello,
Just wondering...has anyone had experience building a microwave xmitter from a microwave oven? Would like to hear from you.

Could some one give me an idea as to the voltage off the secondary winding of a microwave xformer, say from a 1K oven? (120 volt primary)
Dave
rude@maqs.net

2559. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: claude@netwoman.rz.unibw-muenchen.de
Message-ID: <36e0f5fd.10255025@news.unibw-muenchen.de>
Source record: 72840

On Wed, 03 Mar 1999 05:11:55 GMT, pje@haystack.mit.edu wrote:

Two things are important here:

stability and compensation.

And note: there is no miracle !

Stability includes mechanical stability of all components involved (inductances, capacitors, wiring, tubes, semiconductors, sockets, gear, scale, etc...), electrical stability of the all values of electrical components. That includes the stability of the operation point given by the supply voltages (including the heater voltage of tubes) and the amount of applied feedback. Note that not all similar components have similar data. E.g. there exist ceramic capacitors with a high stability of the values and other ceramic capacitors with very bad stability. Have a deep look on the data sheets. High stability components are marked as being such ones, with data giving exact values of stability.

Because the temperature is not always the same and because all components having any influence on the frequency do not have the same value at every temperature, you have to make a judicious choice in order the compensate the drift of some components by the drift of some others ones. Most components have a positive temperature coefficient because there is a dilation with increasing temperature, which results in higher values of inductance and capacitance because these are depending on the mechanical dimensions. Fortunately there exist few components having a negative temperature coefficient, there are mainly ceramic capacitors. The art is to combine them. Have a look on a commercial oscillator, you will understand what this is. Have you seen all the parallel capacitors ? They cannot easily be replaced by only one capacitor because they have different data.

The oscillator circuit used is not without any importance, but its importance has been exaggerated in many amateur application areas, while often ignoring important principles. Look at high performance commercial oscillators. You will be surprised to see very simple and common circuits. Not without any reason, of course. In few words, a good oscillator circuit is one allowing to get good stability and compensation (as defined here) in the best and most practical way.

And note again: there is no miracle !

Claude Frantz

2560. Re: Aerovox oil filled caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Ed Price <edprice@pacbell.net>
Message-ID: <36E116D9.213E@pacbell.net>
Source record: 72841
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

zeitler@ibm.net wrote:
>
> 4uF 4kv each. Have two. Sell both for $25.00 plus shipping from San Diego.
>
> Give name, call, and zip when replying.
>
> Lane
> Ku7i
> San Diego 92139

Lane:

Best be carefull about those capacitors. Aerovox has been around a very long time, and, prior to about 1975, oil-impregnated capacitors meant Arochlor, Monsanto's polychlorinated biphenyl. Really good for capacitors (and HV transformers), but now an Officially Nasty chemical ranking right up there with dioxin and DDT. Asbestos fibers are mild compared to PCB's. Should somebody make this into a cause, the guys in bunny-suits will want to de-contaminate your house to about 3 feet below ground level.

Ed

2561. *** ALL TYPES OF TUBES F.S. ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990306083136.29503.00004330@ng139.aol.com>
Source record: 72842

Hello, all, I've taken some time away to update stock, build shelving, and generally get organized for better service. In the meantime, Please send any specific tube needs, NOS and TV-7 tested used, for a prompt quote. There are now so many tubes here, my old "BIG LIST" has gotten MUCH larger ! (although not complete yet, so send wants).
Thanks to all the great folks who have bought from me in the past year!

Warm regards,
Joe Pratt
Tubecntral@aol.com
Clark, New Jersey, USA

2562. Re: Impedance of twisted pair ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6819$217d8d60$a43063c3@default>
Source record: 72843

Twisting makes no difference to characterietic impedance
Ro. Just the same as flat pair of same wire diameter and
same spacing (unless screwed up tight). Twisting reduces
noise pick up from power and other wiring. It also reduces
crosstalk between pairs running alongside each other over
appreciable distances.

Terminating with Ro prevents signal reflections and echos
up and down the line. Reflection of digital signals can be
a serious matter on long lines..

Ro is typically 110 to 160 ohms. A termination of 130 ohms
is as good a value as any.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Bert Douglas <bertdNOSPAM@bellsouth.net> wrote in article
<lhKD2.890$Nk.1859934@news2.mia>...
> Hello expert netfolk,
>
> I am sending a digital differential signal over twisted
pair (typical
> interior telephone type wires).
>
> What value resistor should I use to terminate the line at
the far end ?
>
> Thanks for the help,
> Bert Douglas
>
>
>

2563. ICOM IC-R70--Connect to 13.8VDC??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: F W Mooney <fmooney@sprintmail.com>
Message-ID: <7brcqq$7k$1@oak.prod.itd.earthlink.net>
Source record: 72844
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Greetings.

I have an ICOM IC-R70, which has no external connection for 13.8 volts dc power. However, internally, there is a jack (J1) which when disconnected, opens the circuit between the internal power supply and the 13.8 volt bus which powers the radio. I'm tempted to try wiring from my car's cigarette lighter jack to this connector to go mobile.

Has anyone out there ever done this? I'm a little concerned about damage due to inadequate voltage regulation, coming off the electical system of the car. Are car electrical systems adequate, or should I put a regulator between the car power and the radio?

- Fred M.
KA1DGL

2564. Re: ICOM IC-R70--Connect to 13.8VDC??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be67e3$5ad99a80$44eee6ce@kovar.inav.net>
Source record: 72845
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Fred,

Your idea has merit and sounds fine!
It would be a good idea to install a fuse in the +12VDC line inside the radio,at the point you tap into the +12vdc.
Also a Diode in parallel with the + and - will save the radio if you make the mistake of hooking the +12vcd backwards.
Your comment of regulating the input voltage may not be important.
You should expect 12vdc to 13.8vdc out of a Car's electrical system.
Measure the voltage on the radios 12VDC line and see if it is at 13.8VDC.
If it is you are all set.
If it is right at 12VCD them you should regulate it down.
The next step would be to find out how much current the radio draws on the 12vdc line.
Find 2 diodes like a 1n4002 that handle the current draw.
each will drop the voltage .7volts when installed in series.
13.8 - 1.4 equals 12.4vdc. Close enough?
That is the cheap way.
A regulator takes a bit more work but and Let me know if you need to set one up.

JAck
Jack Kovar
k0var
Iowa

F W Mooney <fmooney@sprintmail.com> wrote in article
<7brcqq$7k$1@oak.prod.itd.earthlink.net>...
> Greetings.
>
> I have an ICOM IC-R70, which has no external connection for 13.8 volts dc
> power. However, internally, there is a jack (J1) which when
disconnected,
> opens the circuit between the internal power supply and the 13.8 volt bus
> which powers the radio. I'm tempted to try wiring from my car's
cigarette
> lighter jack to this connector to go mobile.
>
> Has anyone out there ever done this? I'm a little concerned about damage
> due to inadequate voltage regulation, coming off the electical system of
the
> car. Are car electrical systems adequate, or should I put a regulator
> between the car power and the radio?
>

> - Fred M.
> KA1DGL
>
>
>
>

2565. NSS- Annapolis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: donlewis79@hotmail.com
Message-ID: <xVbE2.1011$Ku1.1002417@newse3.tampabay.rr.com>
Source record: 72846

March 4, 1999 filename: nss0304.txt

Merle Parton,

In case you don't know the latest developments at NSS,
let me update you.

NSS was decommissioned in early 1996. The sole remaining
facility employee is John Schorpp, the antenna man.

The towers and transmitter building are scheduled to be
demolished by September 1999. There has been an
appropriation of $4.2 million to demolish the site and
convert it to a wildlife preserve.

There is a group of people, including John Schorpp, and
now me, who learned of this development only this past
weekend, that want to stop the demolition and convert
the site to a museum of VLF radio technology.

As a member of the Antique Wireless Association, I wrote
a letter to its president last night, citing the few facts I
know, and asking what it might be able to do to aid this
venture to convert to a museum. The AWA operates a
large communications museum in Bloomfield, NY, just
south of Rochester NY. It has ties with the Smithsonian
Institution.

There is a public hearing in Annapolis March 8, 1999. The
time is 6:00 p.m. of the Lowe Office Building. That's all
the address I have. I have handwritten directions to it that
John Schorpp handed out at a hamfest we attended this
past weekend.

John Schorpp has asked me to ask you to consider putting
a notice of this meeting on the NSS Web page. I know
this is short notice, and there isn't even a complete address,
but let me give you my name and phone number: Pete
Sypher, 301-601-2711. I'm going to the meeting. I'm going
to spend time and effort for this cause of converting the
site to a museum, even though the chances of this being
realized are slim, in my estimation.

73, let me know what you think about all this.

Pete Sypher

2566. Motorola RF pwr transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Lennart Nilsson <ln@hagagymnasiet.norrkoping.se>
Message-ID: <36E14DD4.78757E06@hagagymnasiet.norrkoping.se>
Source record: 72847

I have some UHF transistors with housenumbers instead of the common MRF- and 2N-markings. They were removed from Comviq 460 MHz transmitters, probably of Johnson manufacture. Does anyone know the equivalents of 4027, 4026, 4069, 4062, 4063, 4094, 4063, 4061 and 4019?
SM5DFF Len

2567. Re: Help making a PC cable for a Icom

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <36e64f37.1920826@news.cmc.net>
Source record: 72848

On 5 Mar 1999 15:41:01 GMT, kg4bia@aol.comdmx (KG4BIA) wrotf:

>Hi All,
>
>Has anyone fabricated the cable that connects the W32A to the PC to program the
>radio or does anyone have the diagram for the pin outs? Thanks in advance.
>
>
>
>
>Mark Goods
>KG4BIA@aol.com
>goods@vaxrb.niehs.nih.gov

Contact Icom and they will send you a schematic. That cable has a
level shifter built into the DB-9 connector, 13 components, so
direct wiring will not work. You are looking for a schematic of the
OPC-478

Gary Fiber
Copyright 1999
Washington State Resident

2568. FS: 250TH Lewis and Kaufman, brand new

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <36e151d6.882699@news1.telia.com>
Source record: 72849
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.equipment

I have 6 pcs 250TH Lewis and Kaufman - probably made on license from
Eimac - for sale. These are brand new, in original super heavy duty
military boxes. Never been used. A very nice valve, indeed.
E-mail me if you are interested.

Best regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

2569. FS: Russian 6C4C (=6B4G)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <36e1520c.937075@news1.telia.com>
Source record: 72850
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

I have found some of these excellent 6B4G valves. 6C4C in Russia is
equivalent to 6B4G and it looks identical to the old Sylvania 6B4G
with double anode stapped together by a metal plate, not the type with
two separate anodes. The 6C4C valves is very well built and give you
an impression of high quality. It is unlike the new Sovtek 6B4G which
looks like a scaled down Sovtek 300B with a single anode.
E-mail me if you are interested.

Best regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

2570. Need Plate Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <F86LrG.owt@server.nlbbs.com>
Source record: 72851

I just smoked the plate transformer in my 4-1000 amp during the ARRL DX contest, I need at least 4 KVAC at 1.5 amps.
Thanks, Dick NY1E, in Maine

2571. A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: dalien <dalien@pacifier.com>
Message-ID: <36E170D8.4AA8E66F@pacifier.com>
Source record: 72852
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Is there a single modern "generic" silicon diode which can replace all
the early diodes used in Heathkit (and other) power supplies?

2572. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Steve Murphy <k8vo@flyingbeers.org>
Message-ID: <qbfE2.449$wi1.657@news.flash.net>
Source record: 72853
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Check the specs on the 1N400x series (ex:1N4007, etc.) and see if one of them will work in your application. They're cheap and available almost anywhere. About as "generic" a diode as you'll find.
73,
Steve K8VO

dalien wrote in message <36E170D8.4AA8E66F@pacifier.com>...
>Is there a single modern "generic" silicon diode which can replace all
>the early diodes used in Heathkit (and other) power supplies?
>

2573. Re: Need Plate Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36E18E1C.67004E6D@teleport.com>
Source record: 72854

Wow, is your amplifier only 25% efficient? That's pretty poor.

Roy Lewallen, W7EL

Dick McDuffie wrote:
>
> I just smoked the plate transformer in my 4-1000 amp during the ARRL DX
> contest, I need at least 4 KVAC at 1.5 amps.
> Thanks, Dick NY1E, in Maine

2574. PSPICE ver 8 Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: im@home.now
Message-ID: <36e18e7b.1731530@news.atl.mindspring.com>
Source record: 72855

Hi all I have just started using p-spice to simulate some small op-amp based circuits. The circuit is a very simple non-inverting amp with a voltage stimuls of 1 v p to p at 1 khz. The output of the circuit is blocked by a 10uf capacitor and terminated in a 47k resistor... The output also contains a bubble or marker titled v audio out so as to display the wave form in probe after simulation... The circuit is powered by 12vdc.

Now to my problem. After selecting the trace in probe the left axis units are in volts but the problem is that it does not display the Wave form correctly. Its like the simulator is not taking into account the dc blocking cap on the output. Hence there should be no dc present on the output waveform but only the ac component which is what I am interested in seeing.

Any ideas on how to acomplish this.....

tia JD..

2575. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <7bs81v$ic3$1@nnrp1.dejanews.com>
Source record: 72856
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

In article <qbfE2.449$wi1.657@news.flash.net>,
"Steve Murphy" <k8vo@flyingbeers.org> wrote:
> Check the specs on the 1N400x series (ex:1N4007, etc.) and see if one of
> them will work in your application. They're cheap and available almost
> anywhere. About as "generic" a diode as you'll find.

These are certainly very common 1-amp power diodes; try the 1N540x
series for 3-amp diodes.

Dana K6JQ
Dana@Source.Net

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2576. *** EIMAC 8560-AS NOS F.S. ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990306161210.24548.00004473@ng125.aol.com>
Source record: 72857

Hello, I have THREE NOS, original box w/ all papers, packing, etc. Eimac 8560 AS, all perfect shape, boxes are a little worn from all that weight inside them, PLUS three others that are definite NOS , but have lost their boxes, but have *copies* of the original papers. Will accept 65.00 each for the boxed ones,
and 55.00 each for the three others.
Satisfaction is guaranteed, as always, or return for immediate refund in the same condition as recieved. SHIPPING IS 4.00 , CON. USA

73's,
Thank you,
Joe Pratt, Tubecntral@aol.com

2577. *** NOS 3-500-Z tube F.S. ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990306161657.24548.00004476@ng125.aol.com>
Source record: 72858

Hello, I have ONE G.E. 3-500Z, NOS original box, unused. price 99.00.INCLUDES shipping, Con. USA... 73's,
Thank you,
Joe Pratt, Tubecntral@aol.com

2578. Re: Wanted: Home Brew DCI Filter (how-to)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36E185A2.5AC3@megsinet.net>
Source record: 72859

Monty Northrup wrote:
> On Wed, 03 Mar 1999 09:59:17 GMT, jpoulin@honk.org wrote:
> > clifto wrote:
> >> How far away is it? Some years ago we had a police transmitter getting
> >> into the input of a local repeater. A friend and I drove around and
> >> located the signal, and it turned out to be a spur from a transmitter at
> >> a PSAP about 8 miles from the repeater. We notified the Chief of Police
> >> and he had it fixed... twice (the repairman didn't get it the first time).
> > >
> > >The transmitter in question is 2Km away.
> >
> > I think his point was, that if the interference is as a result of a
> > spurious output from the transmitting station, no amount of filtering
> > is going to remove the interference, because there really *is* energy
> > at the frequency of interest.

And the distance makes me think this is the case.

> The question, then, becomes: given common tools, how does one
> determine whether it is a spurious output from the police transmitter,
> or inter-modulation/overload in the receiver? (overload seems
> unlikely if the transmitter is 2 Km away)

We took the simple, logical approach; since we suspected the interference
was on the repeater input, we tuned our receivers (one on 5/8 wave on the
car roof, one on duckie) to the input and drove around tracking signal
strength until we were close enough for the duckie-equipped receiver to
pick it up. We then looked for towers.

It would have been much easier if we had taken the time to cobble up some
sort of direction-finding antenna, but this was a spur-of-the-moment whim
rather than a planned pursuit. :-)

> Putting some attenuation on the front end (say 10 dB) should eliminate
> intermodulation / overload as the cause, for the purposes of
> troubleshooting. That having been determined, how does one convince
> the local police radio engineer that she/he has a problem (assuming
> that person will come forward and identify him/herself)?

We thought about that and went straight for the police chief. He turned
out to be cooperative. I'd bet FCC would be responsive if he hadn't been,
because FCC seems to make lots of money on land-mobile fines.

--
| Cliff Sharp | All relevant people are pertinent. |
| WA9PDM | All rude people are impertinent. |

| | Therefore, no rude people are relevant. |
| | --Solomon W. Golomb |

2579. J-band Magnetrons

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Scott Remington <saremington@imt.net>
Message-ID: <7bs6c9$l1k@news.imt.net>
Source record: 72860

I recently picked up a surplus 90 kW J-band (16 GHz) magnetron and would like to learn more about what's required to make this thing "hum". No, I really don't want to fire this thing up because I still want to have kids! I really want to learn about microwave theory and the engineering required to make equipment like this work. Pointers to reference books, websites, etc. would be greatly appreciated!

Thanks,
Scott KC7MRV

2580. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Servend <Servend@kosovco.edu>
Message-ID: <GthE2.2062$Ek.3604681@news1.mia>
Source record: 72861
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ya gotta admit, when you mention Herb, all the bravado
and boasting about mighty enforcement teams working
"harder & smarter" suddenly ceases. Even if ya don't
agree with Herb, ya kinda gotta admire the guy. He's
frustrated and held the commission at bay for 25 years!
He's beat them so much to a pulp that they won't even
discuss his case.

Wanna bet he's around for another 25 years?

BTW, we could care less one way or another, but
the guy IS unique in the annals of FCC enforcement!

Calvin Gordon wrote in message ...
> VERY impressive credentials and a sweeping
>enforcement statement!
>
> You are more than qualified to enlighten us
>neophytes then as to how, given this massive enforcement
>army, that KV4FZ has managed for over 25 years to
>elude and frustrate the commission? Perhaps he has
>"thought harder and worked smarter" than this mighty
>enforcement army which has mobilized against him?
>
>
>
>Phil Kane > wrote in message ...
>>>
>> Believe me, when the Commission needs to do something, it
>> has a way of finding the troops to do it. "Think harder, work
>> smarter...."
>>
>> I should know - my job there was finding and coordinating
>> troops for special targeted operations (I was chief of
>> enforcement in San Francisco for 18 years). Some involved
>> the amateur service, most involved other services.
>>
>> 73 de Phil Kane - K2ASP
>>
>>
>>
>>
>>
>

>

2581. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: k6hm <k6hm@wenet.net>
Message-ID: <36E1AD47.66C8446B@wenet.net>
Source record: 72862
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Hi,
You can use 1N4007, 1000V PIV, 1A for almost any power supplies. For signal diode, it is different, 1N4148 will do for silicon diode and 1N270/277 will do for germanium diodes.
de K6hm
Young

dalien wrote:

> Is there a single modern "generic" silicon diode which can replace all
> the early diodes used in Heathkit (and other) power supplies?

2582. Re: Need Plate Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36E1C86A.3632FD58@citrus.infi.net>
Source record: 72863

Dick ....

Try going to your local Electric Power Utility and ask them if they
have any older "Pole Pig" XMFR's. Most did away with them when
they no longer use 7.2 KV transmission lines. You won't smoke them!

73 de Jim W4ONO .-.-.
==========

Dick McDuffie wrote:
>
> I just smoked the plate transformer in my 4-1000 amp during the ARRL DX
> contest, I need at least 4 KVAC at 1.5 amps.
> Thanks, Dick NY1E, in Maine

2583. FS: MILITARY PACKET CONTROLLER PRC-6064

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0603991627250001@murphy1.cts.com>
Source record: 72864
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

PRC-6064 PACKET CONTROLLER, FOR USE WITH MILITARY RADIOS.

2 FOR $125

PICT AT:

http://209.239.34.153/murphyjunk

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

2584. Re: PSPICE ver 8 Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36E1D5A8.3225538B@teleport.com>
Source record: 72865

The time constant of your output circuit is 47 ms (47 cycles at 1 kHz). If there's a voltage step happening at turn-on for some reason, it would couple through the capacitor and look like a D.C. offset for quite a while. You could test for this possibility by reducing your R or C by a factor of 10 or more, and extending your analysis to cover several time constants. If that's what's happening, then you have to find the reason for the step.

Roy Lewallen, W7EL

JD wrote:
>
> Hi all I have just started using p-spice to simulate some
> small op-amp based circuits. The circuit is a very simple
> non-inverting amp with a voltage stimuls of 1 v p to p at 1
> khz. The output of the circuit is blocked by a 10uf capacitor
> and terminated in a 47k resistor... The output also contains
> a bubble or marker titled v audio out so as to display the
> wave form in probe after simulation... The circuit is powered
> by 12vdc.
>
> Now to my problem. After selecting the trace in probe the left
> axis units are in volts but the problem is that it does not display
> the Wave form correctly. Its like the simulator is not taking into
> account the dc blocking cap on the output. Hence there should
> be no dc present on the output waveform but only the ac component
> which is what I am interested in seeing.
>
> Any ideas on how to acomplish this.....
>
> tia JD..

2585. Thunderbolt Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: pflautt@freenet.columbus.oh.us
Message-ID: <7bsmq3$onm@login.freenet.columbus.oh.us>
Source record: 72866

Looking for any information on the
Thunderbolt 101 Amp.
I received it through estate of my
father-in-law.Looks like it was made
for 11Meters use.
73's Paul

--
pflautt@freenet.columbus.oh.us
paul.j.flautt@ameritech.com
pflautt@netpluscom.com

2586. Re: WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <36E1E97D.1808CB2B@proaxis.com>
Source record: 72867
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

> Does anyone know of a reasonable but simple to use smith chart program.
> I want to be able to tell it to behave as though I was doing it
> graphically with a ruler and a chart. the purpose is to design some
> matching circuits.
>

Try http://www.tmo.hp.com/tmo/Notes/interactive/an-95-1/classes/imatch.html

- 73 Bob w7ov

2587. FS: Used Sweep Tubes (Tested Strong)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: oldradio@webtv.net
Message-ID: <27190-36E1E390-78@newsd-243.iap.bryant.webtv.net>
Source record: 72868

Hello,

I have the following, tested strong sweep tubes for sale.

2) 6KD6 $12.00 each
2) 6HF5 $ 5.00 each
1) 6LR6 $12.00 each
1) 6JE6C $ 15.00 each

Shipping will be actual US postage charge. Please e-mail direct if interested.

I also have a General Electric GL-5894. I have no way to test, so make offer.

Regards,

Kelly S. Molles

www.angelfire.com/ca2/tubesandradios

2588. Re: Used Sweep Tubes (Tested Strong)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Robert Mozeleski <moz@ncx.com>
Message-ID: <6419E2E4A0CCEA39.40F839F83EFB3112.2082468DCF0FCEAA@library-proxy.airnews.net>
Source record: 72869

these weren't the 6kd6's i sold to you for $2ea untested were they?

Kelly Scott Molles wrote in message
<27190-36E1E390-78@newsd-243.iap.bryant.webtv.net>...
Hello,

I have the following, tested strong sweep tubes for sale.

2) 6KD6 $12.00 each
2) 6HF5 $ 5.00 each
1) 6LR6 $12.00 each
1) 6JE6C $ 15.00 each

Shipping will be actual US postage charge. Please e-mail direct if
interested.

I also have a General Electric GL-5894. I have no way to test, so make
offer.

Regards,

Kelly S. Molles

www.angelfire.com/ca2/tubesandradios

2589. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-06 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <36E16AC7.F27DBD03@starc.org>
Source record: 72870
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I got to build quite a few Heathkits... (mostly test equipment, my dad
bought me a bunch of stuff when I was in High School, so I could set up
a little TV repair business in the basement)... I really wish Heathkit
was still in the kit business, now that I am older and have more $$....
I can't believe they went out of business....

--Tom
KB1CGA

dalien wrote:

> I couldn't afford much then either. Mostly lots of catalog looking.
> Had them memorized. But I did get to built several inexpensive
> transmitters for myself, and some stereo gear, then LOTS of lab
> equipment for schools. It was all lots of fun.
>
> W6OVP
>
>
>
> KD5GEH wrote:
>
>> Oh well.. One of mine was just seeing the new CATALOG.. I was too
>> young to
>> be able to buy any of the stuff (with stingy/strict parents,
>> atleast), but
>> that and Edmond, well.... ;)
>>
>> Al, N2NKB <n2nkb@n2nkb@postoffice.worldnet.att.net> wrote in
>> >
>> >One of the most exciting events from the past for many of us has
>> been
>> >arriving home after school or work, and seeing that UPS has left a
>> package
>> >from Heath on the front porch.
>> >Al, N2NKB
>> >
>> >
>

2590. Re: Heathkit memories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36e211b0.10693148@netnews.worldnet.att.net>
Source record: 72677

On Sat, 06 Mar 1999 02:43:54 GMT, 8877@my-dejanews.com wrote:

>In article <36dcb5af.3524359@netnews.worldnet.att.net>,
> hinermad@woodnet.att.net (Dave Hinerman) wrote:
>> On Mon, 01 Mar 1999 14:15:11 -0800, dalien <dalien@pacifier.com>
>> wrote:
>>
>> >Seeing several unassembled Heathkits for sale brought back memories:
>> >
>> >"It is cold outside, but the house is warm and smells of Christmas
>> >decorations. The fireplace crackles; a soldering pencil waits to warm.
>> >My cold wet feet slowly thaw in thick socks as the flurries turn to
>> >blizzard. Supper is finally over, and it's time to sort the parts. It
>> >is 1961, and I am young again..."
>>
>> Yup. Not -quite- 1961, I built my first in 1976.
>>
>> Sitting at my desk in July, the window open, a gentle breeze stirring
>> the solder smoke about my head as I assembled a HW-16 and wondering if
>> my Novice ticket would arrive before I finished it, and how would I
>> test the transmitter if it didn't? I knew I could use some light bulbs
>> for a dummy load, but I also knew they'd radiate from DC to daylight
>> (well, incandescent light), and the FCC was just WAITING for this new
>> Novice to screw up so they could yank his license before he even got
>> it, so I'd better wait...
>
>Yes that HW16! my first rig too, once I called CQ on 15 meters and I got a
>call from the shechele islands. I run for clean underware!!!! CT

I never did make a contact on the HW-16. Ended up selling it to an electronics teacher at the local tech college. He got some reports that the transmitter was a little wobbly, despite the crystal, so he set out to add a voltage regulator to the oscillator.

He chose to use a pair of neon lamps in series, reasoning that 62V + 62V = 124V, which was pretty close to the oscillator supply voltage anyway. He did a really nice shunt regulator circuit - series resistor, neon bulbs as the clamp element, and a bypass cap. What he forgot was that when a neon bulb turns on, it doesn't clamp at 62 volts - it fires at 62, but then drops to something like 6 volts until the current drops below some holding value. Which it did onece the bypass cap discharged.

What he'd built was a relaxation oscillator that modulated the crystal oscillator. At the time, Novice operators (like him and me) weren't

allowed to use modulated CW.

Oops.

Dave

2591. Re: Programming info on a uPD861C PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7bt536$amm@news.Hawaii.Edu>
Source record: 72678
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

John and Chris,
Here's the latest update. The 861 uses six pins for binary-coded decimal programming, but there is an option to use eight pins. That would give 2^8 - 1 channels spaced 10 kHz apart which would give me a 2.55 MHz frequency span* beginning at Channel One - that would easily get the radio above 28.000 MHz. I tabulated the hi/lo voltages on the programming pins for each channel/frequency which enabled me to determine the BCD frequency scheme. I'll bring the eight leads out to an eight-pin DIP switch which I'll mount on the front panel. I'll have to get proficient at base-two counting to determine the frequency of operation!

The RF stages will need to be aligned - no problem there.

So now I'll have a "new" 10m CW rig for free (other than a few hours of head-scratching and soldering).

Moral of the story: No need to change the crystal in the PLL stage.

73, Jeff WH6U

* Some of the channels have greater than 10 kHz spacing, so the 2.55 MHz range is a conservative figure.

2592. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990307013633.12469.00001999@ngol06.aol.com>
Source record: 72679

In article <36E170D8.4AA8E66F@pacifier.com>, dalien <dalien@pacifier.com>
writes:

>Subject: A Generic diode ???
>From: dalien <dalien@pacifier.com>
>Date: Sat, 06 Mar 1999 10:15:52 -0800
>
>Is there a single modern "generic" silicon diode which can replace all
>the early diodes used in Heathkit (and other) power supplies?
>

Hello,

For most of the tube type Heathkit amateur gear that used solid state
rectifiers (SB series, HW series, DX-60 and HR-10) the 1N4007 (1000 PIV, 1A) is
more than adequate. The only exceptions I can imagine are the linear amplifiers
(SB-200/201, SB-220/221, HA-14). If the amplifiers used strings of diodes,
1N4007s would be a good choice for them as well. If a diode string develops a
problem, it's a good idea to replace all of the components in the string, or
consider a redesign with more modern components. (Diode strings were used
because higher voltage diodes were unavailable or prohibitively expensive).

73 de Jim, N2EY

2593. program mtx2000 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: alon <alon@fnmail.com>
Message-ID: <36E27EE2.E56AE53@fnmail.com>
Source record: 72680

hello there!

i am looking 4 software 2 program mtx2000 (mtx838)
through a rib.
if u have it or know where 2 find it on the net please tell me.
i have some other software like :
maxtrac-all kinds+trunked+rav-gal,
ht1000(?),mt2000,mtx8000,mtx9000,mts2000,spectra,
and few schematic 2 build a rib (transistors or max232).

thanks
alon
mailto:alon@fnmail.com

2594. Re: 3CX1500A7 (8877) Pinout ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <36e229e2.56950469@news.azstarnet.com>
Source record: 72681

On Sun, 07 Mar 1999 01:05:53 GMT, ddoss@i1.net
(DanD) wrote:

>Can someone give me the pinout for this triode? I know all pins except
>1 & 5 are the cathode. Is the larger dia. pin #1 ? TIA, Dan
>
>

Pin four is the big pin (0.125" dia) and yes, pins
1 and 5 are the heater.

2595. PC-DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990307055434.22565.00002363@ng58.aol.com>
Source record: 72682

Looking for a copy of book with this title. ISBN 0136552005, and Author is Alkin.

It is out of print, and the on-line bookstores don't seem to be able to find a copy for me. It comes with a floppy, and need that too.

Thanks

W4ZCB

2596. Re: Thunderbolt Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990307070912.11659.00004762@ng-cd1.aol.com>
Source record: 72683

<<Looking for any information on the
Thunderbolt 101 Amp.
I received it through estate of my
father-in-law.Looks like it was made
for 11Meters use.
73's Paul>>

Yes, it is produced for CB use. Very noisy in operation. Clean it up for 10M &
6M & have fun w/ it.
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

2597. Re: Looking for toroidal cores for winding common-mode chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be68a5$3a782f00$e5864d0c@default>
Source record: 72684

Try a search for
Bytemark,
Amidon,
Elna,
Magnetics,
or look at these
http://www.alltronics.com/toroids.htm
http://www.xtronics.com/stock/toroid.htm
http://www.kregercomponents.com/
http://www.ferronics.com/toroids.htm
http://www.kgmagnetics.com/kgsoftw.htm
http://www.allstarmagnetics.com/
http://www.elitemagnetics.com/
http://www.premmag.com/SPG.htm
http://www.icm1.com/ferrite.html

And to be just a bit tongue in cheek,
When you get a computer and get online, you can do
something called a search to find loads of info on
many subjects.

Shawn Hecker <heckers@mail.suntrix.com> wrote in article
<36e2067c.925703@news.suntrix.com>...
> Anyone know where to find large toroidal ferrite cores for winding
> common-mode chokes? I need to fix a TVI problem I've been having and
> I can see no other way to fix this problem.
>

2598. Re: J-band Magnetrons

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: paul <paul@ct2.nai.net>
Message-ID: <36E2C1BD.6FE3@ct2.nai.net>
Source record: 72685

Scott Remington wrote:
>
> I recently picked up a surplus 90 kW J-band (16 GHz) magnetron and would
> like to learn more about what's required to make this thing "hum". No, I would think that all you really need to do is supply filament voltage at some large amount of amps and a reasonable amount of high voltage and current. This would provide a CW output of quite some power. What makes things tricky is when you want full power out ie 90 KW, then you have to build the various pulse circiuts. Magnetrons are natural oscilators all by themselves. Have fun. Makes a great paper weight.

I
> really don't want to fire this thing up because I still want to have kids!
> I really want to learn about microwave theory and the engineering required
> to make equipment like this work. Pointers to reference books, websites,
> etc. would be greatly appreciated!
>
> Thanks,
> Scott KC7MRV

2599. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <36e2a1e1.4997680@news.magiclink.com>
Source record: 72686

An AD9850 will have tons of spurious outputs down 60 dB for the main output. If the intent is to transmit at anything higher than QRP levels a 9850 is NOT the way to go. And for a receiver you will have tons of spurious responses because signals will tune not only at the desired frequency, but at all those other spurious frequencies.

If you want to use 9850 (or any other DDS at current state of the art) you will have to build a PLL to "track" the main output, and strip off the spurs. At least the ones more than a few hundred cycles from the output frequency.

Bill W7AAZ

On Fri, 05 Mar 1999 22:41:14 GMT, la8ak@online.no (J M Noeding) wrote:

>On Thu, 4 Mar 1999 21:42:05 -0000, "Eamon Skelton"
><die.all@spammers.org> wrote:
>
>>Everyone has their own particular favourite VFO. I have had a
>>lot of success with the series tuned Colpitts (Clapp) oscillator.
>>
>>I use a JFET Clapp oscillator in my H/B transceiver. It runs
>>reliably at various frequencies between 9 and 23 MHz,
>>despite the fact that the feedback capacitors are fixed
>>at 220pF for all bands. Stability at 9 MHz is quite good,
>>about 200Hz per hour, not so good at 23 MHz. I use a
>>digital stabilizer (Elektor Feb. 1998) to keep the VFO
>>stable on all bands.
>>
>>The Franklin oscillator also makes a good VFO.
>>
>>Remember that VFO builders are worse than fishermen
>>when it comes to telling tall tales. Don't believe the stories
>>about the 30Mhz VFO with less than 10HZ drift. Most
>>crystal oscillators are not as good as this.
>>
>>The AD9850 should make an excellent 7 MHz VFO. You
>>can get the data sheet from: www.analog.com
>>
>>73, Ed. EI9GQ
>>
>and my favourite VFO type is the 'Seiler' using bipolar transistors
>type BC547=2N3904 or 2N2222, W3JHR "Synthetic Rock" shown on pg 145
>in Amateur Radio Techniques (G3VA). I've never really understood any
>secret in using JFETs in VFO's, JFETs may even produce higher noise,

>particularly for XO's
>
>The transistor should be tapped down on the tuned circuit, quite large
>capacitors are possible to use at the active ports, it is some
>calculations based on forward conductance, a VHF transistor having
>small internal capacitances may be better for drift, even a 6K7 valve
>may have near 2000pF across anode and grid to ground in an 80m VFO, I
>had some theory about it, but it is lost now, was published in Danish
>National magazine in 1957.
>
>It is very important not to overdrive the buffer, and input to buffer
>should be tapped down on the tuned circuit or an emitter resistor for
>lowest possible capacitive feedback, loose-coupled buffers are
>misunderstood application
>
>73 Jan-Martin LA8AK
>LA8AK@ONLINE.no

2600. Re: 2m to 6m Transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: mojaveplan@aol.com
Message-ID: <19990307113717.00970.00004118@ng-fc1.aol.com>
Source record: 72687

my ten tec transverter (very low $$, too) of almost the same animal as you want to build uses diode steering. or just use some simple rat shack relays like wb8vge used in 73 mag a few years back when he ran an article about setting up hamtronics modules for 2m.

jeff kd7dcy

>I am exploring the idea of making a home brew 2m to 6m transverter. I
>understand the concepts and circuitry for the hetrodyne conversion, and I
>pretty much have that portion designed, it's very similar to an AM
>modulator.
>
>My question is more of a "lower" tech matter: How do I keep received signals
>from feeding back to the output converter and transmitted from feeding back
>to the input converter? By necessity the receive input and the transmit
>output are connected together, as are the transmit input and the receive
>output. Obviously I could use a PTT switch, but one is already enough to
>handle on the 2m rig. If someone knows what is typically done I would very
>much appreciate an answer.
>
>Thanks,
>
>Michael Anderson
>KF6LGN

2601. 11 Meter to 10 Meter Conversion Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: MisterPJP@aol.com
Message-ID: <7buk13$d04$1@nnrp1.dejanews.com>
Source record: 72688

I have an old Royce SSB CB transciver (Model 1-640)that I would like to modify to operate on the 10 meter band. Does anyone know of a web site that would list this modification specifically? Thanks for your help. Paul in Chattanooga..WA4AA

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2602. Re: Used Sweep Tubes (Tested Strong)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: oldradio@webtv.net
Message-ID: <29638-36E2E09E-37@newsd-243.iap.bryant.webtv.net>
Source record: 72689

Hi Robert,

No, not the same tubes. One of the ones you sent was shot.......the other one was good and ended up in a friends linear amp. These two MAY be NOS. They are RCA's in RCA boxes. They don't look like they have been run much, if any, but the lettering is smudged up on them, so I have to assume they are used.

These tubes came in a large lot from a fellow in Oregon (Ed Billecki). There are a lot of NOS sweeps in it, but my friend usually comes by and wipes me out on them, so I am not sure what else will be coming available. (I let him dig through first)

I have no use for sweep tubes. I only tinker with antique radios and tube audio gear. I don't do transmitting equipment.

Regards,

Kelly S. Molles

www.angelfire.com/ca2/tubesandradios

2603. WTB: HP 8565A manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: wgolz@aol.com
Message-ID: <7bur7k$ik4$1@nnrp1.dejanews.com>
Source record: 72690
Cross-posted to: rec.radio.swap,sci.electronics.repair,sci.electronics.equipment,rec.radio.amateur.homebrew

Hello, Looking for set of operator/service manuals for HP 8565A Spectrum analyzer. If you have any for sale, please email with asking price, condition (please be specific) and any other details. If manual is not an original, please be willing to verify contents (particularly schematics)

Thanks

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2604. Re: FS: Used Sweep Tubes (Tested Strong)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: oldradio@webtv.net
Message-ID: <29637-36E2E462-56@newsd-243.iap.bryant.webtv.net>
Source record: 72691

Still have these tubes and no use for them. I use mostly audio tubes,
so if you have something along those lines to trade then great. If not,
no resonable offer will be refused.

Regards,

Kelly S. Molles

www.angelfire.com/ca2/tubesandradios

2605. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e2dc5c.628983554@news.online.no>
Source record: 72692

On Sun, 07 Mar 1999 15:59:37 GMT, bcarver@magiclink.com (Bill Carver)
wrote:

.....blah-blah
>
>Bill W7AAZ
>

maybe, but please don't quote me!

LA8AK@ONLINE.no

2606. IC-3SAT schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: "John Kirk, VE6XT" <jakirk@calcna.ab.ca>
Message-ID: <7buvvg$d5e@ds2.acs.ucalgary.ca>
Source record: 72693

Hi:
Has anyone got a schematic of this beast that could be copied or scanned?
Could probably get by with just the DC management parts of it.
Thanks!
John

2607. Part Number TOP201

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: "John Kirk, VE6XT" <jakirk@calcna.ab.ca>
Message-ID: <7bv03q$7do@ds2.acs.ucalgary.ca>
Source record: 72694

Anybody recognize this? Probably a power FET. Manufacturers logo looks
like a "PI" with the P shaded and the I hollow.
Thanks!
John

2608. FS High Voltage Variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <36E30B41.136D@sympatico.ca>
Source record: 72695
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.ham-radio.swap

I have the following High Voltage Variables for sale, good shape - shipping extra.

Hammond Manufacturing, a pair of 350UFd @ 3000 volts, with 1" Johnson porcelain mounting legs, and a Johnson porcelain inter capacitor connector. Should sell as a set - $40.00.

Hammond Manufacturing, 250 ufd @ 3000 volts, $15.00.

Hammond Manufacturing, 100ufd - 100ufd dual section 6000 volts $40.00

Pair of 100ufd with interconnecting cable from ARC5 transmitter $6.00

New in box Airdux coil, #1604T 2" 4TPI $15.00

2609. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: Andrew Harakal <MERISDIAN@pathway.net>
Message-ID: <7bv2sg$7s1$0@208.231.48.184>
Source record: 72696
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

De Guerin wrote:
>
> Yeh, but human hair isnt conductive... :)
> (unless you replace the C atoms with Cu..)
>
> Andre :)
>
> On 2 Mar 1999, Sam Goldwasser wrote:
>
> > In article <36dc2994.0@news.netwalk.com> "Jim" <jbolinger@lintek.com> writes:
> >
> > > It comes even smaller than that. I have a spool of #40 around somewhere.
> > > Hate to use it, however, because a piece of my hair is stronger!
> >
> > Heck, that's nothing. The inverter and trigger transformers in disposable
> > camera flash units use something like #44 - #46! Talk about being weaker
> > than a hair! :) Try to disassemble one of those without breaking the wire!
> >
> > --- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
> > Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
> > +Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
> > | Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html
> >
> >
Human hair IS conductive is it not?
Andy

2610. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: Ken <tylereng@pacbell.net>
Message-ID: <36E31B93.740A1398@pacbell.net>
Source record: 72697
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Andrew Harakal wrote:
>
> De Guerin wrote:
> >
> > Yeh, but human hair isnt conductive... :)
> > (unless you replace the C atoms with Cu..)

> Human hair IS conductive is it not?
> Andy

In a literal sense yes but not a practicle sense no. You cannot for example use a humam hair to wire a circuit with. It might however, in a very high voltage situation, provide a path of electrical discharge.

--
Ken Tyler

mailto://tylereng@pacbell.net

2611. Re: FS High Voltage Variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <36E32443.59D455F4@seidata.com>
Source record: 72698
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.ham-radio.swap

Shouldn't the rating be pf (pico farad) instead of ufd (micro farad) ?

If it IS ufd, those are some SERIOUS caps!

Randy.

Larry Asp wrote:

> I have the following High Voltage Variables for sale, good shape -
> shipping extra.
>
> Hammond Manufacturing, a pair of 350UFd @ 3000 volts, with 1" Johnson
> porcelain mounting legs, and a Johnson porcelain inter capacitor
> connector. Should sell as a set - $40.00.
>
> Hammond Manufacturing, 250 ufd @ 3000 volts, $15.00.
>
> Hammond Manufacturing, 100ufd - 100ufd dual section 6000 volts $40.00
>
> Pair of 100ufd with interconnecting cable from ARC5 transmitter $6.00
>
> New in box Airdux coil, #1604T 2" 4TPI $15.00

2612. Commercial HF AMP $350 shipped

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <36E32B97.BCE@ix.netcom.com>
Source record: 72699
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Price reduction.......Must sell
I have a beautifully built Sailor HF AMP. This one has two RCA 8122
ceramics tetrodes which checked out full output. 1.8MHz to 30MHz
All the tuning is done with servos and the band settings are set with
brass slugs. Built under high standards, rackmount, very high quality
components including a large cooling fan. It was removed and fully
functional from a cruise ship that went to solid state. This amp puts
out about 800watts with very little input. It has a built on solid
state pre-driver stage which can be bypassed if need to. It's complete
and in excellent condition. It requires a power supply and controls
for the servos. No manual but can be found at marine electronics shops.
Sailor is still the leader in Marine and satelitte communication
networks. I will send jpgs by request to anyone interested. I want
$350+shipped for it. The tubes alone cost that! Roughly 45 lbs
73 Chris VE3NGW/W4 Florida

2613. Need copy of Swan Mk II manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <36e33c34@news1.us.ibm.net>
Source record: 72700
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Subject says it all. if you have a copy of the manual for the Swan mk II amp
i can use it.

Lane Zeitler
2262 Barney St
San Diego CA 92139

73s and God bless

Lane
Ku7i

2614. Re: 3CX1500A7 (8877) Pinout ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <36E35168.8B0F9BDC@iag.net>
Source record: 72701

DAN I WENT THRU THE SAME THING YOU FOUND ON 8877 PIN OUT. HERE IS THE PIN LAY OUT 1 AND 5 FILAMENT, LARGE PIN IS PIN 4, COUNT BACK COUNTERCLOCK WISE FROM LARGE PIN, THAT IS PIN 1 THEN YOU CAN COUNT CLOCKWISE FOR PROPER PIN LAYOUT.I LOOKED ALL OVER MY MANUALS HERE IN MY SHACK AND FOUND IT IN OLD OLD TEXT I HAD FROM YEARS AGO,I SENT PINOUT DIAGRAM TO ARRL BUT GUESS THEY DIDN'T THINK IT WAS GOOD ENUFF FOR HINTS AND KINKS,ANYWAY YOU GOT PINOUT NOW JUST KEEP IN MIND LARGE PIN IS #4 GL 73 HARRY

DanD wrote:

> Can someone give me the pinout for this triode? I know all pins except
> 1 & 5 are the cathode. Is the larger dia. pin #1 ? TIA, Dan

2615. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: "Bill J, Edinburgh" <maestro@cix.co.uk>
Message-ID: <7bufsk$s7u$2@plutonium.compulink.co.uk>
Source record: 72702
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

The 1N4001 rated at 1 kV (I think), 1 A seems to work fine in place of all the rectifiers I've come across.

NOT always OK for thermionic diodes, because they provide built-in surge prevention. Just add a suitable series resistance, say 100 ohm 5 watt to experiment with.

NOT suitable for replacing signal diodes, either.

Bill J., Edinburgh
dalien wrote in message <36E170D8.4AA8E66F@pacifier.com>...
>Is there a single modern "generic" silicon diode which can replace all
>the early diodes used in Heathkit (and other) power supplies?
>

2616. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF8AGtI.Jq@netcom.com>
Source record: 72703
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

In article <36E1F770.3B655DB6@worldnet.att.net>,
Rocci <rocci@worldnet.att.net> wrote:
>There are 3 kinds of diodes you're likely to find in you Heathkit:
>1) Rectifier diodes
>2) Silicon small signal diodes
>3) Germanium small signal diodes.

They also used some schottky small signal diodes. (In their
last dip meter, as I remember).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

2617. 3CX1500A7 (8877) Pinout ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: ddoss@i1.net
Message-ID: <0dkE2.87$r5.2419567@news1.i1.net>
Source record: 72871

Can someone give me the pinout for this triode? I know all pins except
1 & 5 are the cathode. Is the larger dia. pin #1 ? TIA, Dan

2618. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36E1F770.3B655DB6@worldnet.att.net>
Source record: 72872
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

There are 3 kinds of diodes you're likely to find in you Heathkit:
1) Rectifier diodes
2) Silicon small signal diodes
3) Germanium small signal diodes.
For most power supply and rectifier applifations, the 1n400x series are a good generic substitute, as long as you observe the breakdown voltage ratings. For most common small signal applications (detectors, low level switching, etc), the 1n4148 silicon diode is a good choice. For some low level RF detectors, it was common to use a germanium diode such as a 1n34. If the detector was designed for a germanium diode and you sub a silicon diode, you might find that the sensitivity is not as good.

dalien wrote:

> Is there a single modern "generic" silicon diode which can replace all
> the early diodes used in Heathkit (and other) power supplies?

2619. EBAY- UNBUILT Heath HP-23B, One Day Left!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990306231806.14111.00004478@ng-ca1.aol.com>
Source record: 72873

Hi Guys;
Only one(1) day left on this UNBUILT heathkit HP-23B supply, Dont let it slip by, its only at $130 now! You pay $75-90 for a used one these days! Heres the Link>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=72644977
Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

2620. Heathkit Scope Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: "Werner S. Zielke (DJ2HZ)" <unisoft@ginko.de>
Message-ID: <36E1F851.4484F0D0@ginko.de>
Source record: 72874

Hi,

I'm looking for a schematic diagram for the old Heathkit
Scope
or an other unit. I would like to display the linearity
trapez
on the scope display when I'm using my power amp.
Homebrew projects are welcome.
Who can help?

73, Werner, DJ2HZ (VE7HBI)

--

Indepentend (forwarding) email address:
dj2hz@usa.net

2621. Looking for toroidal cores for winding common-mode chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: heckers@mail.suntrix.com
Message-ID: <36e2067c.925703@news.suntrix.com>
Source record: 72875

Anyone know where to find large toroidal ferrite cores for winding
common-mode chokes? I need to fix a TVI problem I've been having and
I can see no other way to fix this problem.

2622. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-07 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36e20de7.9723718@netnews.worldnet.att.net>
Source record: 72876

>> And since I've found a way to make
>>PC boards without shelling out $3 a sheet for toner transfer paper, time
>>spent wiring up chips isn't as big a problem.
>
>Do tell. I'm interested.

Well, DynaArt (http://www.dynaart.com) makes a version of the
toner-transfer product, and I suspect they're a great bunch of
engineers that don't know when to stay quiet.

I saw their product in the Digi-Key catalog, and thought it was
probably better than the toner transfer film sold by Meadowlake
(which I had tried with limited success) becuse it used a paper with a
water-souble coating.

I sniffed around their Web site, and they had made the mistake of
saying what the magic coating is. I found a locally available source,
and managed to make my own version of coated paper. I laser-printed a
PCB layout for a 40M CW transceiver on it, ironed it onto a piece of
copper-clad board, and etched it. Worked quite well, although a few
really fine traces and tiny donut pads broke. Easily repaired before
etch with a resist pen, or afterwards with a bit of wire and solder.

Much as I hate to undercut somebody's product ('cause I hate having it
done to me), $3 a sheet seems a bit much. However, I offer these
rationalizations for giving up the info:

1) I got the key info from DynaArt's own Web page.
2) DynaArt sells a much more uniform product, so if qualuty means a
lot to you, then go buy their product.
3) DynaArt sells additional equipment that improves the quality and
reproducibility of your boards even more.
4) Nobody ever got rich selling products to hobbyists, except maybe
George Eastmen.

I've found that mucilage make a usable, water-solube coating for
toner-transfer paper.

I'll leave the details of how to get it on the paper in a usable form
as an exercise for the reader. And if you try to market it, you're on
your own.

>"Nothing better than home-brew, except perhaps an absence of Spam"

Hmmm... my home brew (well, homemade wine, anyway) seems to make Spam
more tolerable. Cheers!

Dave

2623. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36e40abb.0@news.netwalk.com>
Source record: 72628

gbowne wrote in message <#w18$6QZ#GA.220@upnetnews05>...
>
>NG,
>
>I certainly will, Monty. It's taken a year and a half or more to get where
>I am in the design process, and the procurement of parts which I may need.
>
>The book has been a great help! I wish there was a web site based on the
>book, but there isn't. I was thinking about making one for my rig once I
>get it done.
>
>Anyone else read that book by Randy L. Henderson?
>
>
>

Interesting thread, but.....

How come no one has talked about how to achieve a 150+ dB dynamic range with third order intercept of +30 dBm? _That_ is what makes a good HF rig, not how many MB you have in the processor!!!

Also, in my humble experience (ham for 30 years, engineer for 23 years, masters degree for 10 years) Tab books are traditionally full of mistakes and bad designs, although I haven't looked at any since McGraw-Hill bought them out.

Jim
N8EE

2624. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36e40bd8.0@news.netwalk.com>
Source record: 72629

itzack@hotmail.com wrote in message <7bvaad$ut1$1@nnrp1.dejanews.com>...
>Hello,
>
> I am looking for an way to reduce the power out of the hw-101...
>I am looking to get <25 watts out maybe even <10. I you have any
>Ideas on how to do this please e-mail me... Itzack@hotmail.com
>Also if I remove the 6141's what is the power out from just the radio
>before it reaches the finals?

Doesn't the HW-101 have a drive level control?

I used to run the Heath twins (SB series) and they had a drive level
control.
Believe the HW series worked the same.

Just back the thing off to get whatever power level you want.

Jim

2625. Re: PC-DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36e40c55.0@news.netwalk.com>
Source record: 72630

JohnsonHE wrote in message <19990307055434.22565.00002363@ng58.aol.com>...
>Looking for a copy of book with this title. ISBN 0136552005, and Author is
>Alkin.
>
>It is out of print, and the on-line bookstores don't seem to be able to
find a
>copy for me. It comes with a floppy, and need that too.
>
>Thanks
>
>W4ZCB

Don't know about the floppy, but any public library worthy of the name will be able to do a interlibrary loan. If any library in the country has a copy (and is willing to remote-loan it) they will be able to get it for you.

Jim
N8EE

2626. Re: Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36e40fa5.0@news.netwalk.com>
Source record: 72631

Dave Rude wrote in message ...
>Hello,
>Just wondering...has anyone had experience building a microwave xmitter
from
>a microwave oven? Would like to hear from you.
>
>Could some one give me an idea as to the voltage off the secondary winding
>of a microwave xformer, say from a 1K oven? (120 volt primary)
>Dave
>rude@maqs.net
>
>
>

This has been done.

There was an article several years ago in one of the ham magazines (QEX or Communications Quarterly?????) showing how to do this.

The basic idea was that the frequency of the magnetron was dependent on the load impedance mismatch. By injecting the harmonic of a crystal oscillator, by means of a directional coupler, (thereby appearing as if there was a reflected signal from a load mismatch) it is possible to ''phase lock" the magnetron.

As the other posters have said, I would urge extreme caution.

As far as the high voltage is concerned, is it any more dangerous than an HF amplifier?

Jim
N8Ee

2627. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990308124559.12621A-100000@Stratus.CAM.ORG>
Source record: 72632
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

On 8 Mar 1999, Brian Bailey wrote:

>
> Bill J, Edinburgh wrote in message
> <7bufsk$s7u$2@plutonium.compulink.co.uk>...
> >The 1N4001 rated at 1 kV (I think), 1 A seems to work fine in place of all
> >the rectifiers I've come across.
> >
>
>
> WARNING -- The 1N4001 is only rated at 600 PRV according to the ECG xref. A
> larger one is the 1N4011 which is rated at 1000 PRV / 2.5A (ECG-125)
> --- Brian, W4OLF
>
Actually, the 1N4001 has a PRV of 50volts. I just checked, and the ECG
replacement guide uses 1 diode as a subsitute for the lower half of the
1N400X sereis, and then a different diode for the upper half. They are
substituting a higher PRV diode for the low numbered ones.

But your point is good. The 1N400X sereis are all 1amp diodes, but
as the final number goes up, the PRV goes up.

Michael VE2BVW

2628. Re: A Generic diode ??? Warning!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <36E3D090.7D79@ns.atl.org>
Source record: 72633
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

The 1N4007 is the 1amp 1000PIV part.
It's a good GP rectifier and I keep
a bunch in the parts bin.
-bob

2629. WTB. Drake AL-4 antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <36E3D557.273@ns.atl.org>
Source record: 72634
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Anyone got an old Drake AL-4 BCB loop antenna
kicking around?

-bob

2630. Re: Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37a12501.1759090590@news.atl.bellsouth.net>
Source record: 72635

On Mon, 8 Mar 1999 12:58:13 -0500, "Jim" <jbolinger@lintek.com> wrote:
>This has been done.
>
>There was an article several years ago in one of the ham magazines (QEX or
>Communications Quarterly?????) showing how to do this.

It was in 73 Magazine, though the original idea came from RF Design
magazine.

>The basic idea was that the frequency of the magnetron was dependent on the
>load impedance mismatch. By injecting the harmonic of a crystal oscillator,
>by means of a directional coupler, (thereby appearing as if there was a
>reflected signal from a load mismatch) it is possible to ''phase lock" the
>magnetron.

It is called injection locking.

>As the other posters have said, I would urge extreme caution.

In the 73 Magazine article, a waveguide to coax transition was
used to couple the maggie to the feedline and hence to the antenna.
The oven compartment remained "cold" and housed the injection lock
oscillator and modulator (FM). So the HV was as protected as
when the oven was in normal operation, and the only RF exposure
risk was at the antenna (though that could be substantial).

>As far as the high voltage is concerned, is it any more dangerous than an HF
>amplifier?

No. A tube kW amp is a tube kW amp. The voltages and currents have to be
similar in either one.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

2631. Re: Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7c1cejndl1@nnrp1.dejanews.com>
Source record: 72636

Ouch. I'd start small, like a no-tune transverter for 2.4 GHz,
or some Gunn diodes on 10 GHz.

Microwave ovens have serious power transformers - as anybody who
has ever lifted one will know. The connections and insulation are
odd by amateur standards. Most have half-wave rectifiers, since
transmitter cleanliness isn't an issue, but cost is.

"All the usual references..."

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2632. Re: Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7c192gpmf1@winter.news.rcn.net>
Source record: 72637

It was in the second issue of Communications Quarterly Magazine
(counting the special primier edition) .

High Power 13-cm Magnetron Transmitter, by Chuck Swedblom WA6EXV.
Vol. 1 Numer 1 Winter 1991 Communications Quarterly Magazine.
Starts on page 9.

Pete

Gary Coffman wrote in message
<37a12501.1759090590@news.atl.bellsouth.net>...
>>There was an article several years ago in one of the ham magazines (QEX or
>>Communications Quarterly?????) showing how to do this.
>
>It was in 73 Magazine, though the original idea came from RF Design
>magazine.
>

2633. Re: Need copy of Swan Mk II manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: J Peitsch <peitsch@concentric.net>
Message-ID: <7c1abf$k3h@journal.concentric.net>
Source record: 72638
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Go to Http://www.6mt.com/swan.htm and down load it free.

Butch

zeitler@ibm.net wrote in message <36e33c34@news1.us.ibm.net>...
>Subject says it all. if you have a copy of the manual for the Swan mk II
amp
>i can use it.
>
>Lane Zeitler
>2262 Barney St
>San Diego CA 92139
>
>73s and God bless
>
>Lane
>Ku7i
>
>

2634. Tab Books (was Re: Homebrew HF Transciver)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990308163256.21727A-100000@Stratus.CAM.ORG>
Source record: 72639

On Mon, 8 Mar 1999, Jim wrote:

>[stuff deleted]
>
> Also, in my humble experience (ham for 30 years, engineer for 23 years,
> masters degree for 10 years) Tab books are traditionally full of mistakes
> and bad designs, although I haven't looked at any since McGraw-Hill bought
> them out.
>
One time, an author of a Tab Book, I think it was called "The 6809 CookBook", actually said in a magazine that he didn't suggest people buy the book. Because whatever he had started out with was terribly mangled by the time it made it into book form.

Is Tab even around anymore? I've seen books of recent years from McGraw-Hill that sure look like Tab books, but don't carry the Tab imprint. A couple of books that don't seem clear about who they are meant for, so cover things badly. Photos that are there only as filler. Material that seems to repeat in two places (and I'm not talking about some layout problem). Generic material that just seems to be pasted in. I'm sure I've seen instances of misleading or erroneous material. I can't remember if I've noticed bad layout where photos and diagrams referred to in the text are far from that text. But all of these things are what I'd come to expect with Tab Books.

Interestingly, these books I'm thinking of were at the library. I'm glad I didn't pay for them, but it seems like they could have found better choices from other publishers.

Michael VE2BVW

2635. Re: PC-DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990308171357.22082.00000029@ng50.aol.com>
Source record: 72640

>
>Jim
>N8EE
>
Thanks Jim, been there, done that.

W4ZCB

2636. Help with antenna construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Charles Dumont <francis.dumont@jhuapl.edu>
Message-ID: <36E4498E.CB529CE3@jhuapl.edu>
Source record: 72641
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I'm trying to build a small antenna for a hand-held to be resonant at two frequencies and I want it to be short. I have read that you can put two helices one within the other to achieve this. Does anyone have any experience with this? Also, where can I get info on how rubber duckies are constructed. I think that they use a similar approach to what I want to do, and if not then I'd like to see what they do because that's the basic concept I'm after. Any help would be greatly appreciated.

Charles Dumont
francis.dumont@jhuapl.edu

2637. Wtd: Heavy Duty Knife Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: protect@bright.net
Message-ID: <protect-ya023180000803991747480001@news.bright.net>
Source record: 72642

I am looking for a heavy duty double pole double throw knife switch to carry 50 amp at 13 volt. This is to switch from my Astron power supply to my backup golf cart batteries during power outages. Thanks.
Charles, KB8WSG

2638. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e447bb.722020632@news.online.no>
Source record: 72643

On Mon, 08 Mar 1999 00:13:54 -0500, Smith-Gaspard
<w4ono@citrus.infi.net> wrote:

>Try using more bias voltage on the finals.
>73 de Jim W4ONO .-.-.

probably a good idea for an FM transceiver, but the most common way
for CW/SSB transmitter is to increase cathode resistor in ALC-
controlled IF amplifier. Unfortunately the drive levels may differ
between SSB and CW, so you may have to reduce gain further for cw
compared to ssb.

LA8AK@ONLINE.no

2639. xtals for 14MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7c1o0l$kqi@eldborg.rhi.hi.is>
Source record: 72644

Hi

Could anyone point me to a company (with a webpage :)
that sells xtals for use on the 20m band. I'd like to find someone
to sell me a 14.1MHz xtal or a 14.0MHz. I'll be using them to build
a VXO.

TIA
Hrafnkell
--
//-----------------------//---
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

2640. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36E47265.55AA@pop.removethistomailme.net>
Source record: 72645

Rocci wrote:
>
> All naysayers not withstanding, I believe the DDS approach is nearly
> foolproof and very adequate for all but the elitest contester types who
> wouldn't have anything less than perfection. At -60 dB spurious response, the
> performance of the receiver using DDS approaches the published specs of many
> commercial pieces of equipment.

It all depends. If you are working at VHF/UHF, and live way out in the
boondocks with no other high-power RF sources around, then -60 dBc spurs
from your LO may not be a problem at all. But move down to 40 meters,
with a decent antenna hooked up to your receiver, and you may change
your mind.

An LO spur at -60 dBc will convert an unwanted 30-over-S9 signal to
about S4, still perfectly readable. This may not be such a big problem
if you use a sharp preselector on the lower HF bands, but combined with
the modern trend toward untuned front ends, you're headed for some
serious grief at -60 dBc.

> For anyone
> looking to build a homebrew receiver with pretty damn good performance and
> with minimal effort, this technology is the way to go. I do this stuff for a
> living, so when I do a homebrew project, I want immediate gratification.
> Perfection can come incrementally after it's working.

That's the right attitude. Just don't fall into the trap of thinking
that just because the commercial guys get away with it, it's good enough
for you! Ask any Icom R-1 user what they think about that....

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

2641. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <7c1ui7$r63@apple.telalink.net>
Source record: 72646

J M Noeding wrote in message <36e447bb.722020632@news.online.no>...
>>Try using more bias voltage on the finals.
>
>probably a good idea for an FM transceiver, but the most common way
>for CW/SSB transmitter is to increase cathode resistor in ALC-
>controlled IF amplifier. Unfortunately the drive levels may differ
>between SSB and CW, so you may have to reduce gain further for cw
>compared to ssb.

Besides, I think this radio uses the same IF amplifier in receive and
transmit. Decreasing IF gain would have undesirable effects on the
receiver...

73 DOug

2642. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <u60F2.116$25.6943@news.goodnet.com>
Source record: 72647
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Colin Caulkins wrote

>But you're assuming that anyone has the right to own frequencies. I'm
>saying that the radio spectrum should be public property with minimal
>regulation.

It is public property, administered by professional civil servants, who
enforce every law enacted by elected representatives.

>> Before the FCC and regulations, radio operators just
>> set up shop and jammed each other. The Government was needed to
>> regulate and impose standards.
>
>Why couldn't the government simply outlaw jamming, but otherwise take a
>laissez-faire approach?

OK, go look at 27 MHz and report back. Outlawing Jamming would be a "law"
and thus "anti-libertarian."

>> You can turn Ham radio into a big internet and telephone company, but it
>> will cost just as much as if you just paid for what is available now.
>
>I don't want to turn it into a company at all. I want it to be a
>deregulated resource

Well, let me advise you what you really want. You want to use the public
property for your own use. Well, suppose someone put up a tar-paper
shack on the right-of-way in front of your home. Then started selling
Tacos.
Hey, he could sell Tacos in a properly zoned area you say! Well, no, this
is public property and he is a libertarian, and believes in less laws means
good laws. Zoning is unfair.

Steve

2643. Re: J-band Magnetrons

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: erich@ridgecrest.ca.us
Message-ID: <MPG.114e5942c48ba44e9896ae@news.ridgecrest.ca.us>
Source record: 72648

In article <7bs6c9$l1k@news.imt.net>, saremington@imt.net says...
> I recently picked up a surplus 90 kW J-band (16 GHz) magnetron and would
> like to learn more about what's required to make this thing "hum". No, I
> really don't want to fire this thing up because I still want to have kids!
> I really want to learn about microwave theory and the engineering required
> to make equipment like this work. Pointers to reference books, websites,
> etc. would be greatly appreciated!
>
> Thanks,
> Scott KC7MRV
>
>
>
Usually such items are designed as low duty cycle radar sources. The
power required is likely to be 10-20 kV at nearly 1 amp. It probably
won't run CW without overheating. Usually the duty cycle is less than
1%. It has to do with the way magnetrons are built, especially the ones
for higher frequencies (like 16 GHz). To switch the power for the tube
usually requires another tube about the size of a table lamp. Be very
careful because the voltages and currents involved are LETHAL!

All my reference books are at work, but you might try the Artech House,
Wiley or Crestone publishing sites for books on the subject.

Erich KA6AMD
Will do radar for food.

2644. Dream Homebrew Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Craig <bearl@ozemail.com.au>
Message-ID: <7buv4m$1lm$1@reader1.reader.news.ozemail.net>
Source record: 72704

I would like my homebrew transceiver to be a single band unit, with a receiver thats got a 3rd order intercept point of greater than +30dbm, a high 2nd order intercept point, very low phase, lower than most tube radios, and the transmiiter third order imd products to below -50db below pep. Has anybody designed or built such a beast.

Yes i know its a dream, that might be fulfilled in 60 years by the current crop of manufacturers.

Good Builiding!

2645. Re: Source of small quantities of the Siliconex U310 JFET in the UK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: wildbear@bigfoot.com
Message-ID: <36f8f0df.20761082@news.easynet.co.uk>
Source record: 72705

On Wed, 3 Mar 1999 21:33:35 -0000, "Chris Price"
<chris@peterprice.freeserve.co.uk> wrote:

>I am looking for a source to purchase about six U310 Junction FETs in the
>UK. Can anybody help.

Hi Chris

Farnell Electronic Components Ltd.
Canal Road, Leeds, LS12 2TU, UK
Tel: +44 (0)113 263 6311 Fax: +44 (0)113 263 3411
Email: sales@farnell.com Web: http://www.farnell.com ...

...sell the U310 Order Code: 352-251 @UKP1.80+VAT.
No minimum order or postage charges.

--
Michael Slattery G8PNX
wildbear@bigfoot.com

2646. Re: FS High Voltage Variables

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <36E32A2D.491A@sympatico.ca>
Source record: 72706
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.ham-radio.swap

Larry Asp wrote:
>
> I have the following High Voltage Variables for sale, good shape -
> shipping extra.
>
> Hammond Manufacturing, a pair of 350UFd @ 3000 volts, with 1" Johnson
> porcelain mounting legs, and a Johnson porcelain inter capacitor
> connector. Should sell as a set - $40.00.
>
> Hammond Manufacturing, 250 ufd @ 3000 volts, $15.00.
>
> Hammond Manufacturing, 100ufd - 100ufd dual section 6000 volts $40.00
>
> Pair of 100ufd with interconnecting cable from ARC5 transmitter $6.00
>
> New in box Airdux coil, #1604T 2" 4TPI $15.00

Values are PF not UF - Thanks to all who noticed - Lots of folks must
have read my ad . Hi!

2647. How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: itzack@hotmail.com
Message-ID: <7bvaad$ut1$1@nnrp1.dejanews.com>
Source record: 72707

Hello,

I am looking for an way to reduce the power out of the hw-101...
I am looking to get <25 watts out maybe even <10. I you have any
Ideas on how to do this please e-mail me... Itzack@hotmail.com
Also if I remove the 6141's what is the power out from just the radio
before it reaches the finals?

TNX
John
Kc4npd

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2648. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.99Mar7212644@colossus.stdavids.picker.com>
Source record: 72708
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

In article <7bv2sg$7s1$0@208.231.48.184> Andrew Harakal <MERISDIAN@pathway.net> writes:

> Human hair IS conductive is it not?
> Andy

Maybe when you dye it with that stuff that contains lead. :)

--- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
+Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
| Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html

2649. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: xkmillerx@flash.net
Message-ID: <36e53817.168712929@news.flash.net>
Source record: 72709

I've never tried it (and my 101 has been in the attic for a LONG
time...) but you could probably run it with just 1 of the final tubes.
Some of the old rigs got down to the old novice power limit like that.
Try very low drive and see if it will tune. If you have to max out
the tune or load capacitor, stop.

An easier way might be to use the alc jack and put a variable voltage
on it. Control the voltage on the alc jack and you control the power.
The front panel control doesn't do a very good job of it as you've
probably already found...
73,
Kerry, WD5ABC

On Mon, 08 Mar 1999 01:49:03 GMT, itzack@hotmail.com wrote:

>Hello,
>
> I am looking for an way to reduce the power out of the hw-101...
>I am looking to get <25 watts out maybe even <10. I you have any
>Ideas on how to do this please e-mail me... Itzack@hotmail.com
>Also if I remove the 6141's what is the power out from just the radio
>before it reaches the finals?
>
>TNX
>John
>Kc4npd
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2650. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <7bvdoe$t3d$1@208.207.71.174>
Source record: 72710
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Servend wrote:
>
> Ya gotta admit, when you mention Herb, all the bravado
> and boasting about mighty enforcement teams working
> "harder & smarter" suddenly ceases.

Yep. They don't talk much about cases that are in the appeal
process, but from reading, that has just ended. Herb lost.

Even if ya don't
> agree with Herb, ya kinda gotta admire the guy. He's
> frustrated and held the commission at bay for 25 years!
> He's beat them so much to a pulp that they won't even
> discuss his case.
>

Shows what you know. Herb just knows his way around the
legal sysgtem and is spending the bucks to take it the full
route. You can bet it's costing him plenty.

> Wanna bet he's around for another 25 years?

Today anything's possible but I don't expect he'll be on the
air as KV4FZ.

> BTW, we could care less one way or another, but
> the guy IS unique in the annals of FCC enforcement!

Not really. Evidently you never heard of W4EBG back in the
50's-60's

Dick C

>
> Calvin Gordon wrote in message ...
> > VERY impressive credentials and a sweeping
> >enforcement statement!
> >
> > You are more than qualified to enlighten us
> >neophytes then as to how, given this massive enforcement
> >army, that KV4FZ has managed for over 25 years to
> >elude and frustrate the commission? Perhaps he has
> >"thought harder and worked smarter" than this mighty
> >enforcement army which has mobilized against him?
> >
> >

> >
> >Phil Kane > wrote in message ...
> >>>
> >> Believe me, when the Commission needs to do something, it
> >> has a way of finding the troops to do it. "Think harder, work
> >> smarter...."
> >>
> >> I should know - my job there was finding and coordinating
> >> troops for special targeted operations (I was chief of
> >> enforcement in San Francisco for 18 years). Some involved
> >> the amateur service, most involved other services.
> >>
> >> 73 de Phil Kane - K2ASP
> >>
> >>
> >>
> >>
> >>
> >
> >

2651. Re: Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: PsyTech@massey.ac.nz
Message-ID: <h0HE2.526$Ch2.50769@news.clear.net.nz>
Source record: 72711

In article <wT5E2.95$wB4.8898@homer.alpha.net>, rude@maqs.net says...
>
>Hello,
>Just wondering...has anyone had experience building a microwave xmitter from
>a microwave oven? Would like to hear from you.

The magnetron of a domestic microwave oven generates RF at a nominal 2.45GHz.
The magnetron along with a HV diode + (approx) 1uF cap form a voltage doubler
(the magnetron is a diode as well). Hence the microwaves are *pulsed* according
to your line frequency. The RF output is therefore full of hash.

>
>Could some one give me an idea as to the voltage off the secondary winding
>of a microwave xformer, say from a 1K oven? (120 volt primary)
>Dave
>rude@maqs.net
>

The transformer delivers around 2kV and is doubled to around 4kV across the
magnetron. This is *extremely* dangerous as it is a low impedance supply. I can
think of no domestic apparatus with a power supply anywhere near as potent.
Treat with the utmost respect - it will show no mercy! To use a microwave as an
RF source you will need to modify the supply to provide a constant voltage and
provide the magnetron with a resonant cavity tuned to 2.45GHz. This will clean
up the RF somewhat although magnetrons are somewhat broad band. Of course such
a transmitter is an accident waiting to happen and should not be built! Apart
from the powersupply hazards anyone straying into the beam is in trouble.
Microwave ovens have safety interlocks for good reason.

If you want to muck around with a microwave source try a (small!) reflex
klystron (100mW @ 10GHz easy) or a power oscillator using a wideband BJT
(10mW->10W @ 1 or 2GHz depending on your BJT).
IMHO big magnetrons are just too dangerous for casual microwave experiments...

Malcolm

>
>

2652. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: pje@haystack.mit.edu
Message-ID: <7bvias$5fa$1@nnrp1.dejanews.com>
Source record: 72712

Hi there,
I started this thread a few days ago, and thanks to all those who have replied. Later, I'll try to summarize.

In article <36e2a1e1.4997680@news.magiclink.com>,
bcarver@magiclink.com (Bill Carver) wrote:
> An AD9850 will have tons of spurious outputs down 60 dB for the main
> output. If the intent is to transmit at anything higher than QRP
> levels a 9850 is NOT the way to go. And for a receiver you will have
> tons of spurious responses because signals will tune not only at the
> desired frequency, but at all those other spurious frequencies.
>
> If you want to use 9850 (or any other DDS at current state of the art)
> you will have to build a PLL to "track" the main output, and strip off
> the spurs. At least the ones more than a few hundred cycles from the
> output frequency.
>
> Bill W7AAZ
>

Two questions now:

1) So if 60 dB below the main output is bad, what is good? I.e. what should I be shooting for to have a clean transceive-ready LO?

2) And if one wanted the digital convenience of a 9850 w/out the spurs, anyone have any pointers to a reference for a tracking PLL implementation to clean the spurs up, as Bill suggests? Or is this so non-trivial that we're out of the hobbyist zone, and one should go back to a traditional limited-tuning VFO with a digital stabilizer?

Phil Erickson
pje@haystack.mit.edu

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2653. Logical Devices Prompro 8x m010 module information needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: wa6ylb@remove.this.theworks.com
Message-ID: <36e34896.10287189@news.theworks.com>
Source record: 72713
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a working prompro 8x programmer that I am trying to find either
a M010 module or schematic (even a hand drawn one is great) for.

The M010 does the 27C010 or 27C1001 eproms.

I have the manuals and schematics books for this one here, but this
module isnt shown in them. It only tells how to use the module.

Also if you have a remote keypad for one of these, I'd be interested.

remove the REMOVE.THIS from email addr...
WA6YLB Byron Smith
http://www.theworks.com/~wa6ylb

2654. FS: National R-175 R-F Plate Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36E35B78.161713F6@citrus.infi.net>
Source record: 72714
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.boatanchors

Greetings ....

I have the following for sale:

NATIONAL R-175 R-F PLATE CHOKE. NOS Still in original box.

Specifications: The R-175 transmitting R-F Choke is suitable for
parallel feed as well as series-feed circuits in transmitters of
up to 3000 volts plate supply. If plate modulation is not
employed, the chokes may be applied to transmitters operating at
voltages up to 4000.

The characteristics of the R-175 choke are:

Voltage breakdown to metal base 12,500 volts.
D.C. Resistance 6 ohms.
D.C. Current Rating 800 ma.
Inductance 225 microhenries
Distributed Capacity 0.6 micromicrofarad.

Note: I use two of the R-175's in my Pair 4-1000-A homebrew
Class "B" GG Linear Amplifier. One for each tube.
Works great!

Cost: $18.00 U.S.D. plus $2.00 shipping. M.O./Personal Check.

Quantity: two (2)

If you are interested, please reply via EMail
at: w4ono@citrus.infi.net

Thank you,

73 de Jim W4ONO .-.-.

Homosassa Springs FL

w4ono@citrus.infi.net

2655. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36E35C92.1556367@citrus.infi.net>
Source record: 72715

Try using more bias voltage on the finals.
73 de Jim W4ONO .-.-.
==========

itzack@hotmail.com wrote:
>
> Hello,
>
> I am looking for an way to reduce the power out of the hw-101...
> I am looking to get <25 watts out maybe even <10. I you have any
> Ideas on how to do this please e-mail me... Itzack@hotmail.com
> Also if I remove the 6141's what is the power out from just the radio
> before it reaches the finals?
>
> TNX
> John
> Kc4npd
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2656. Re: Point Contact Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <920887889.29574.0.nnrp-03.d4f06601@news.demon.co.uk>
Source record: 72716

Bill Meara wrote in message <36d1878e.7416303@news.erols.com>...
>We were talking a while bak about homebrew transistors. I came across
>an interesting description of them in an old Navy publication (NAVPERS
>10087-B) on Basic electronics. "During the manufacturing process of
>the point contact diode, a relatively large current is passed from the
>catwhisker (beryllium copper, phosphor bronze or tungsten wire) to the
>(n-type) germanium crystal. The result of this large current is the
>formation of a small P type region in the vicinity of the point
>contact."
>
>Does anybody know HOW the current causes the N- type material to "go
>P"? Also, how is the junction formed in ordinary galena, catwhisker
>detectors (where no large current was employed)?
>
>Thanks, 73 Bill N2CQR

I think that the current pulse used to "form" the device results in
impurities in the whisker forming a P-type alloy with the bulk semiconductor
material.

Leon

2657. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: De Guerin <da6bd@herts.ac.uk>
Message-ID: <Pine.SO4.4.02.9903081338280.9769-100000@gemini>
Source record: 72717
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Depends whether you apply enough voltage.. (like 10000kV @ 3000 Amps)
Hehe :)

Andre :)

On Sun, 28 Feb 1999, Andrew Harakal wrote:

> De Guerin wrote:
> >
> > Yeh, but human hair isnt conductive... :)
> > (unless you replace the C atoms with Cu..)
> >
> > Andre :)
> >
> > On 2 Mar 1999, Sam Goldwasser wrote:
> >
> > > In article <36dc2994.0@news.netwalk.com> "Jim" <jbolinger@lintek.com> writes:
> > >
> > > > It comes even smaller than that. I have a spool of #40 around somewhere.
> > > > Hate to use it, however, because a piece of my hair is stronger!
> > >
> > > Heck, that's nothing. The inverter and trigger transformers in disposable
> > > camera flash units use something like #44 - #46! Talk about being weaker
> > > than a hair! :) Try to disassemble one of those without breaking the wire!
> > >
> > > --- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
> > > Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
> > > +Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
> > > | Sam's Laser FAQ: http://www.misty.com/~don/lasersam.html
> > >
> > >
> > Human hair IS conductive is it not?
> > Andy
> >

2658. Re: Heathkit Scope Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <36E3D5AA.794BDF32@my-dejanews.com>
Source record: 72718

Werner S. Zielke (DJ2HZ) wrote:
>
> Hi,
>
> I'm looking for a schematic diagram for the old Heathkit Scope
> or an other unit. I would like to display the linearity trapez
> on the scope display when I'm using my power amp.
> Homebrew projects are welcome.
> Who can help?
>
> 73, Werner, DJ2HZ (VE7HBI)

Try the Heathkit Ham Radio Pages of KB9JJA

"http://members.accessus.net/~dwentz/kb9jja/heathkit/"

There is a section that has schematics. I don't know which one
you are looking for but there is at least a schematic for the HO-10
Monitor Scope. I have one of these at home.

Martin

--
Martin E. Meserve martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2659. Re: A Generic diode ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Brian Bailey <Trillian@worldnet.att.net>
Message-ID: <7c0luc$10v@bgtnsc02.worldnet.att.net>
Source record: 72719
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Bill J, Edinburgh wrote in message
<7bufsk$s7u$2@plutonium.compulink.co.uk>...
>The 1N4001 rated at 1 kV (I think), 1 A seems to work fine in place of all
>the rectifiers I've come across.
>

WARNING -- The 1N4001 is only rated at 600 PRV according to the ECG xref. A larger one is the 1N4011 which is rated at 1000 PRV / 2.5A (ECG-125)
--- Brian, W4OLF

2660. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36E3CFCB.6CB68891@mwci.net>
Source record: 72720

pje@haystack.mit.edu wrote: In article <36e2a1e1.4997680@news.magiclink.com>,

> 1) So if 60 dB below the main output is bad, what is good? I.e. what
> should I be shooting for to have a clean transceive-ready LO?

If the ratio of the simultaneous strongest off-channel rcv sig to the weakest on-channel rcv sig is X dB, the ratio of the LO to the strongest spur should also be at least X dB. For a "good" (define good) ham receiver and for "most" of the time, but not "all" of the time, X is about 80 to 90 dB.

This is not an ironclad rule, because occasionally the signal ratio can be much greater than that. However, in the real world we accept something less than perfection, which would be perhaps 130 dB, and we accept an occasional spurious response. And most of the time the interference is minor.

Also, synthesizer spurs & noise and front-end intercept points (second- and third-order) should be considered as parallel design specs of equal importance.

It's a matter of statistics (how often can you tolerate a spurious response?). With an 80 to 90 dB ratio, the interference is not "serious" (define serious), at least here in Iowa. In Europe or Megalopolis it could be more bothersome.

The tradeoff between cost and performance always raises its ugly head, but nowadays 80-90 dB LO performance at modest cost is not difficult or expensive.

Bill W0IYH

2661. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36E3999B.216FDDD6@bellsouth.net>
Source record: 72721
Cross-posted to: rec.radio.amateur.homebrew,itzack@hotmail.com

itzack@hotmail.com wrote:
> Also if I remove the 6141's what is the power out from just the radio
> before it reaches the finals?

Zero<g>..

Seriously, you can't just remove both 6146s. (though the suggestion that you remove *one* of them will probably work. Do be sure the loose plate cap from the missing tube can't short to anything!) By simply removing the tubes, you open the circuit between the driver and the antenna. A little power will probably leak through stray capacitances & inductances, but if there's enough to work more than a mile, I'd be surprised..

I suppose you could redesign the driver plate tank circuit to drive a 50-ohm load, and probably get something on the order of 5 watts. It wouldn't be a trivial job though. Reducing drive is much easier.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

2662. ARRL "Radio Designer" from CAD schematics!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: harp@pell.net
Message-ID: <7c0u1v$9k2$1@nnrp1.dejanews.com>
Source record: 72722

I'm sure this must have been done before, but I haven't found any reference
in DejaNews or elsewhere, so here goes:

(1)
ARRL "Radio Designer" [ARD], a useful tool for simulation and analysis,
won't draw or read schematics. ARD works from a NETLIST written in a
format called "*.ckt".

(2)
Matt Pyne wrote "TinyCAD", modestly described as an "entry-level" ECAD
for W95. It's powerful, easy to learn, and < almost > free. Draw and print
schematics, make PCB art, etc. TinyCAD is GOOD! And, TinyCAD will produce
a NETLIST in its own format (*.net).

(3) Wherefore,
I have written a W95 utility, "Tiny2ARD", which translates TinyCAD
netlists to ARD netlists.

A TinyCAD schematic, drawn with the "ARD" SYMBOL LIBRARY provided with
Tiny2ARD, translates to an operable ARD circuit-description (BLK-END) block.
Tiny2ARD will APPEND individual TinyCAD circuits into BLKs in a single
*.ckt file, or the user can cut & paste at will. Add your own FREQ block
and any other [STAT OPT OUTPUT] blocks and ARD's happy.

(4)
Now I can:
* [TinyCAD] draw a schematic; create a NETLIST (mouseclick!),
* [Tiny2ARD] translate the netlist for ARD with a cupple mouseclicks,
* [ARD] analyze, optimize and tune the circuit.

It's not quite as good as a kilobucks design suite, but it's pretty good!
...and it's CHEEP:

-- ARRL wants USD 150.00 for ARD. (Everybody's already got it anyway.)
-- Pyne would like UKP 10.00 (USD 16.08, today) for TinyCAD, shareware.
(it's the full version, WELL worth it! websearch InfoSeek: +TinyCAD)
-- I ask USD 10.00 for Tiny2ARD by email (~ 100kb.) or $14.00 on disk.

This amounts to a $27.00 add-on to ARD for working directly from
schematics with great ease. SUCH a deal!

Anybody interested in "Tiny2ARD", email: harp<USUAL SYMBOL>pell.net
I can provide TinyCAD, but you'll have to pay Matt yourself.

ben / aa7hk

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2663. WTD squirrel cage blower...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Dee Almquist <w4pnt@rica.net>
Message-ID: <anSE2.3525$wS.63401@newsfeed.slurp.net>
Source record: 72723
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.swap

Hello Fellow Anchorites
I am looking for a sqirrel cage blower & motor (110v)suitable for a 3-500 or 8877 tube. Trade for something or cash.
Thanks
Dee
w4pnt@rica.net

2664. Re: Programming info on a uPD861C PLL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: John Dewey <jdewey@tribune.com>
Message-ID: <7c0on1$2ia16@news.tis-in.trb>
Source record: 72724
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Sounds like the 858.

I have a complete set of directions from a "CB" newsletter on moving that
rig. I succesfully put 2 on 10m with the pll and a retune.
KA9CAR

Jeffrey Herman wrote in message <7bt536$amm@news.Hawaii.Edu>...
>John and Chris,
>Here's the latest update. The 861 uses six pins for binary-coded
>decimal programming, but there is an option to use eight pins.
>That would give 2^8 - 1 channels spaced 10 kHz apart which would
>give me a 2.55 MHz frequency span* beginning at Channel One - that
>would easily get the radio above 28.000 MHz. I tabulated the hi/lo
>voltages on the programming pins for each channel/frequency which
>enabled me to determine the BCD frequency scheme. I'll bring the
>eight leads out to an eight-pin DIP switch which I'll mount on the
>front panel. I'll have to get proficient at base-two counting to
>determine the frequency of operation!
>
>The RF stages will need to be aligned - no problem there.
>
>So now I'll have a "new" 10m CW rig for free (other than a few hours
>of head-scratching and soldering).
>
>Moral of the story: No need to change the crystal in the PLL stage.
>
>73, Jeff WH6U
>
>* Some of the channels have greater than 10 kHz spacing, so the
>2.55 MHz range is a conservative figure.
>
>

2665. Re: Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <36e3fd3c.523929@news1.telia.com>
Source record: 72725

On Mon, 08 Mar 1999 02:57:17 GMT, PsyTech@massey.ac.nz (Michael
Hughes) wrote:

>If you want to muck around with a microwave source try a (small!) reflex
>klystron (100mW @ 10GHz easy) or a power oscillator using a wideband BJT
>(10mW->10W @ 1 or 2GHz depending on your BJT).
>IMHO big magnetrons are just too dangerous for casual microwave experiments...
>
>Malcolm

Yes, I fully agree. Magnetrons are both dangerous and unsuitable if
you want a clean signal. If you want to live dangerous and have fun,
I have this 5J30 in stock. It is capable of an continous output of
some 150 - 500 Watt at 350 - 750 Mhz. It is water cooled!!!

Klystrons are much easier. Try a 2K25, about 50 - 100 mW at 10Ghz. I
have various other types in stock. Also a TWT (Travelling Wave Tube)
2 - 4 Ghz 36dB gain.
Please inquire for all kind of micowave valves.

Regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

2666. Re: A Generic diode ??? Warning!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-08 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36E3F5E4.4348@pop.valley.net>
Source record: 72726
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Brian Bailey wrote:
>
> Bill J, Edinburgh wrote in message
> <7bufsk$s7u$2@plutonium.compulink.co.uk>...
> >The 1N4001 rated at 1 kV (I think), 1 A seems to work fine in place of all
> >the rectifiers I've come across.
> >
>
> WARNING -- The 1N4001 is only rated at 600 PRV according to the ECG xref. A
> larger one is the 1N4011 which is rated at 1000 PRV / 2.5A (ECG-125)
> --- Brian, W4OLF

Hello--

While the ECG replacement you mentioned may carry a 600-volt rating,
the 1N4001 is speced at 50 volts PIV.

Back in the early days of silicon rectifier diode production, low
yields of high-voltage diodes probably made it economical to sell
the low-voltage diodes (1N4001s and 1N4002s) at lower cost.

73,
Brad AA1IP

2667. FT-470 convertion to 9600bps packet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Daniel Lavoie <LavoieDNOSPAM@iSTAR.CA>
Message-ID: <zCgF2.68$pb.380212@NewsRead.Toronto.iSTAR.net>
Source record: 72578
Cross-posted to: alt.ham-radio.packet,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.space

Anyone has any information on converting a Yeasu FT-470 dual band HT to
9600bps packet?

Thanks

Daniel
VE3DCL

--

<< Take out NOSPAM to reply by e-mail >>

2668. 3CX3000A7 +

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990309172731.23922.00000206@ng-ce1.aol.com>
Source record: 72579

I have a 3CX3000A7 tube, Socket, Fillament transformer,
Plate transformer 2.7 Amps @
5,000 Volts DC
HV Caps, Cabinet to build a large amplifier.
Blower, Meters, other parts
I will sale all parts for $2,000.00 plus shipping.
e-mail kb5mer@aol.com

2669. Re: PC-DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Charles Brain <chbrain@no_spam_dircon.co.uk>
Message-ID: <36E59E8F.432488B9@no_spam_dircon.co.uk>
Source record: 72580

JohnsonHE wrote:
>
> Looking for a copy of book with this title. ISBN 0136552005, and Author is
> Alkin.
>
> It is out of print, and the on-line bookstores don't seem to be able to find a
> copy for me. It comes with a floppy, and need that too.
>
> Thanks
>
> W4ZCB

This probably won't help but the URL of the company thats does the full blown version of PC-DSP is

http://www.dspsolutions.com/

I had a copy of the student edition as well, but seem to have lost it!

- Charles G4GUO

2670. FS Precision RF Generator, Motorola T1601 Desk Remote

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Steve Lenaghan VE4LR <swtel@prairie.ca>
Message-ID: <36E5AB6B.2994C344@prairie.ca>
Source record: 72581
Cross-posted to: alt.ham-radio.fm,alt.ham-radio.hf,alt.ham-radio.marketplace,alt.ham-radio.ssb,alt.ham-radio.vhf-uhf,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Marconi 2018 Generator (520 MHz)
Bidding starts at: $500.00
Auction ends on: 03/13/99 10:27:52 PST
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=74745882

75225524: Motorola DC Remote Control T1601
Bidding starts at: $25.00
Auction ends on: 03/14/99 11:45:28 PST
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=75225524

Steve VE4LR

2671. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Phil Kane <philkane>
Message-ID: <cuvyxnarpbzzynjpragrepbz.f8chm31.pminews@nntp1.ba.best.com>
Source record: 72582
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Tue, 09 Mar 1999 16:49:01 GMT, Colin Caulkins wrote:

> In rec.radio.amateur.misc Steve Sampson <ssampson@usa-site.net> wrote:
>
> > It is public property, administered by professional civil servants, who
> > enforce every law enacted by elected representatives.
>
> Who have regulated it to pieces.

As it should be.

> All I'm saying is that the regulations
> should be much less than they currently are, but not completely
> non-existant.

How much more of a sewer and "Alice-in-Wonderland" do you want
both the commercial and the amateur spectrum to become?

> This isn't a very good analogy, because the
> radio spectrum is not comparable to land. Whereas land can and should be
> privately owned, the radio spectrum is and should be public property.

Then why are you applying land ownership/use concepts such as
"private" or "public" "property" to the regulation of its use?

I know that it must inflame the non-professionals for me to say
this, but the professionals have been charged to be the manager
of the resource by the government, which bottom=line is the
representative of our society, and to get a professional job
done. Get out of the way and let them do it.

73 de Phil Kane - K2ASP

2672. QSYer frequency control

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Bill Clarke <W2BLC599@bigfoot.com>
Message-ID: <7c4f6f$8q9$1@paxfeed.eni.net>
Source record: 72583

I am looking for information on a device called a QSYer. It output a serial string to a transceiver, controlling the operating frequency.

Any how-to articles seen about building something like this?

Thanks,
--
Bill Clarke W2BLC
W2BLC@bigfoot.com

2673. Looking for spare parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7cdbe5$k34$1@news.netcologne.de>
Source record: 72584

Hi,

I'm looking for vendors selling spare parts for older/vintage measurement devices.

Peter

2674. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36E47115.B90332A4@worldnet.att.net>
Source record: 72649

All naysayers not withstanding, I believe the DDS approach is nearly foolproof and very adequate for all but the elitest contester types who wouldn't have anything less than perfection. At -60 dB spurious response, the performance of the receiver using DDS approaches the published specs of many commercial pieces of equipment. Further, DDS technology is improving very quickly and will soon rival most PLL designs. This Spring Analog Devices will start sampling a new DDS that has quadrature sine wave outputs (great for phasing receiver buffs!) and spurious outputs better than -80dB! For anyone looking to build a homebrew receiver with pretty damn good performance and with minimal effort, this technology is the way to go. I do this stuff for a living, so when I do a homebrew project, I want immediate gratification. Perfection can come incrementally after it's working. DDS is just the ticket to avoid the frustration that inevitably comes with free running oscillators. Don't sell it short.

pje@haystack.mit.edu wrote:

> Hi there,
> I started this thread a few days ago, and thanks to all those who have
> replied. Later, I'll try to summarize.
>
> In article <36e2a1e1.4997680@news.magiclink.com>,
> bcarver@magiclink.com (Bill Carver) wrote:
> > An AD9850 will have tons of spurious outputs down 60 dB for the main
> > output. If the intent is to transmit at anything higher than QRP
> > levels a 9850 is NOT the way to go. And for a receiver you will have
> > tons of spurious responses because signals will tune not only at the
> > desired frequency, but at all those other spurious frequencies.
> >
> > If you want to use 9850 (or any other DDS at current state of the art)
> > you will have to build a PLL to "track" the main output, and strip off
> > the spurs. At least the ones more than a few hundred cycles from the
> > output frequency.
> >
> > Bill W7AAZ
> >
>
> Two questions now:
>
> 1) So if 60 dB below the main output is bad, what is good? I.e. what
> should I be shooting for to have a clean transceive-ready LO?
>
> 2) And if one wanted the digital convenience of a 9850 w/out the spurs,
> anyone have any pointers to a reference for a tracking PLL implementation
> to clean the spurs up, as Bill suggests? Or is this so non-trivial

> that we're out of the hobbyist zone, and one should go back to a
> traditional limited-tuning VFO with a digital stabilizer?
>
> ----
> Phil Erickson
> pje@haystack.mit.edu
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2675. Homebrew duplexer uhf?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: fxbuilder@aol.com
Message-ID: <19990308203358.11132.00005109@ng-cb1.aol.com>
Source record: 72650

Has anyone made a homebrew uhf duplexer? I could use some drawings etc if possible. I'm trying to build my repeater on a very limited budget. Thanks.
Craig fxbuilder@aol.com

2676. Re: FS - Socket for 4-1000/3-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19990308211806.10299.00004926@ng-cf1.aol.com>
Source record: 72651

>FS -SK 510 socket $25.00

I'm interested. Is the socket in good shape? Used / new ?

Thanks and 73

John... WB4LNM

WB4LNM@aol.com
John H. Klingelhoeffer
WB4LNMxx@aol.com (remove xx for real address)

2677. Re: Source of small quantities of the Siliconex U310 JFET in the UK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19990308212532.10299.00004929@ng-cf1.aol.com>
Source record: 72652

>I am looking for a source to purchase about six U310 Junction FETs in the
>UK. Can anybody help.
>
>Chris
>G4AGJ

It is true that the J310 is less expensive than the U310.

However, the U310 can give higher gain, since the metal case allows it to be grounded in a better fashion. I use the U310 in all critical applications, and the J310 otherwise.

John...
WB4LNM

2678. Re: Tab Books (was Re: Homebrew HF Transciver)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36e485f5.1793107@netnews.worldnet.att.net>
Source record: 72653

On Mon, 8 Mar 1999 16:41:22 -0500, Michael Black <blackm00@CAM.ORG>
wrote:

>> Also, in my humble experience (ham for 30 years, engineer for 23 years,
>> masters degree for 10 years) Tab books are traditionally full of mistakes
>> and bad designs, although I haven't looked at any since McGraw-Hill bought
>> them out.

>Interestingly, these books I'm thinking of were at the library. I'm glad
>I didn't pay for them, but it seems like they could have found better
>choices from other publishers.

Michael,

You bring up a very good point. Somebody who takes an interest in
radio, or electronics, or some other technical hobby is likely to go
to the public library for information first. Poor information there
will likely turn them off.

The quality of technical books at the average library is highly
variable, too, when you figure that many libraries use volunteer help.
And even the paid employees are likely to be trained in library
science, education, or some other field - hardly qualified to judge
technology literature!

But a local radio club can help a LOT by purchasing and donating
-good- books on the subject. That's how I found the radio club that I
eventually became president of - I was new in town, and went to the
library to find a book on ham radio. (I was already licensed, but
working on a construction project.) The local club had purchased a
bunch of ARRL books, added a label in the front with the club name and
contact info, and donated them to the library.

It's an excellent form of PR for the club, it helps improve the
quality of the collection, and it's a darned sight cheaper than a
hamfest!

Dave

2679. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Randy L Henderson <randylh@flash.net>
Message-ID: <36E46B49.E46@flash.net>
Source record: 72654

Jim wrote:
>
> gbowne wrote in message <#w18$6QZ#GA.220@upnetnews05>...
> >
> >NG,
> >
> >I certainly will, Monty. It's taken a year and a half or more to get where
> >I am in the design process, and the procurement of parts which I may need.
> >
> >The book has been a great help! I wish there was a web site based on the
> >book, but there isn't. I was thinking about making one for my rig once I
> >get it done.
> >
> >Anyone else read that book by Randy L. Henderson?
> >
> >
> >
>
> Interesting thread, but.....
>
> How come no one has talked about how to achieve a 150+ dB dynamic range with
> third order intercept of +30 dBm? _That_ is what makes a good HF rig, not
> how many MB you have in the processor!!!
>
> Also, in my humble experience (ham for 30 years, engineer for 23 years,
> masters degree for 10 years) Tab books are traditionally full of mistakes
> and bad designs, although I haven't looked at any since McGraw-Hill bought
> them out.
>
> Jim
> N8EE

My (somewhat small) website contains updates, transceiver improvements and corrections to the book, Build Your Own Intelligent Amateur Radio Transceiver, ISBN 0-07-028264-1. It's http://www.flash.net/~randylh/

I agree that the "radio" circuits are the most important part of the design. The transceiver project uses high-level dual-bridge diode mixers and fairly robust intermediate frequency circuitry. The synthesizer has a clean low-noise output.

I am for the most part, satisfied with the job that McGraw-Hill did in preparing the book. I've received many compliments on its style from people who liked the presentation of basic concepts. It is not a heavyweight on radio theory, or even digital theory. There is however,

enough information in the book and web page for intermediate to advanced experimenters to build a nice multiband, multimode HF transceiver.

I use this rig on several bands on a fairly regular basis (uaually weekends). Lately, I've used SSB more often than CW. I'm most frequently on 40 and 17 meters, Usually with the homebrew 800-watt amp on SSB, barefoot on CW, into an 80-M full-wavelength loop. Feedback on the book or project is welcome. 73
Randy L. Henderson, WI5W

2680. Source for LQ magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: stereodoc1@aol.com
Message-ID: <19990309003516.13523.00008253@ng-ch1.aol.com>
Source record: 72655

Anyone know of a good source for large quantities of magnet wire? I want to rewind a couple of transformers. tnx

2681. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990309005842.00288.00005840@ng-fd1.aol.com>
Source record: 72656

>Doesn't the HW-101 have a drive level control?

Mine does. Maybe the original poster is novice, but it's not hard to miss.

Then again, he could be trolling.

In any case, HW101 manuals are pretty common, I'd be glad to fax or send this
to the poster etc...
"what good is it?"
.....it's coming from out there...
"out where?"
.....space....
"just space? You've spent thousands of dollars on
transistors..and..and..circuits
and cathode ray...what good is it?"
.....well........it's interesting.....

2682. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e4c971.2088707@news.io.com>
Source record: 72657

On Mon, 8 Mar 1999 12:37:23 -0500, "Jim" <jbolinger@lintek.com> wrote:

>How come no one has talked about how to achieve a 150+ dB dynamic range with
>third order intercept of +30 dBm? _That_ is what makes a good HF rig, not
>how many MB you have in the processor!!!

Hi Jim!

Well, homebrewing is all in the eyes of the beholder, isn't it?...
Remember that 1/2 W QRP transmitter with one 74HC240, a crystal, and
about half a dozen passive components?. Absolute simplicity. Pure
cunning. Challenge to operate. Good HF rig? Maybe not by your
standards, but from my vantage point, yes indeed!

150dB Dynamic Range? What a project... if you can do it at all it's a
great HF rig; if you can do it for $50 and a handful of parts, even
better !

73!

monty N5FC

2683. Re: PC-DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e4cc86.2878234@news.io.com>
Source record: 72658

On Mon, 8 Mar 1999 12:44:11 -0500, "Jim" <jbolinger@lintek.com> wrote:

>
>JohnsonHE wrote in message <19990307055434.22565.00002363@ng58.aol.com>...
>>Looking for a copy of book with this title. ISBN 0136552005, and Author is
>>Alkin.

Hey Jim!

The ISBN is different, but I wonder if the book you want is:

"Digital Signal Processing : A Laboratory Approach Using Pc-Dsp/Book
and Disk (3 1/2 Version)" (Oktay Alkin)

or maybe:

"Pc-Dsp : 5 1/4 IBM Version (Book and Disk)" (Oktay Alkin)

Both are listed on:

http://www.amazon.com/

Also, just as a tip, I find that I can find nearly any book, new or
out of print, using bookfinder:

http://www.bookfinder.com/

Good luck!

monty, N5FC

2684. Re: PC-DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990309061401.21476.00000001@ng57.aol.com>
Source record: 72659

>
>Hey Jim!
>
>Both are listed on:
>
>http://www.amazon.com/

Thanks. It's Harold, Jim is someone else that wrote a reply. Yes, Amazon lists it, and doesn't have any. I use and like MXBookfinder, they found the copies that Amazon doesn't have. And, yes, I use the Inter-Library Loan system, that's how I found out that I want this book in my personal library. (Their copy didn't have the floppy either)

Thanks again

W4ZCB
>

2685. Re: Source for LQ magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990309061533.21476.00000002@ng57.aol.com>
Source record: 72660

Essex Wire and Cable, they sell 10 pound spools down to #14, for 13 and larger, it's 100 pound pails.

W4ZCB

2686. SOLD R-175 Plate Chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36E51573.1D7FB1A8@citrus.infi.net>
Source record: 72661
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.boatanchors

The National R-175 R-F Plate Chokes posted on monday
have been sold.

Thank you for the many replies.

73 de Jim W4ONO .-.-. ...-.-

2687. Re: Homebrew duplexer uhf?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: dinoal7lz@aol.com
Message-ID: <19990309072928.12461.00000013@ng-fi1.aol.com>
Source record: 72662

Here's some info about using heliax for 6m operation; don't know if you can adapt it for UHF, but worth looking at.

http://www.dallas.net/~jvpoll/dup6m/dup6m.html

GL -- Dino KL0S/4

2688. Re: Source for LQ magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be6a2b$d8a543c0$d8864d0c@default>
Source record: 72663

Make a visit to your local electric motor repair/rewind shop,
that's where I but my wire.
Mike

StereoDoc1 <stereodoc1@aol.com> wrote in article
<19990309003516.13523.00008253@ng-ch1.aol.com>...
> Anyone know of a good source for large quantities of magnet wire? I want
to
> rewind a couple of transformers. tnx
>

2689. Re: magnet wire?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <7c3933$p9u$1@nnrp02.primenet.com>
Source record: 72664
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

I've got a spool of #50. Now THAT'S small.

Jim <jbolinger@lintek.com> wrote:

: Bob Lewis wrote in message <36D87690.BA997908@erols.com>...
: >Mouser Electronics has magnet wire (#16) but I don't see anyone with #35.
: >That's pretty small wire. Mouser has #28 if that helps.

: It comes even smaller than that. I have a spool of #40 around somewhere.
: Hate to use it, however, because a piece of my hair is stronger!

: Jim
: N8EE

--

,----------------------. Circuit Design for the
/ What's all this \ RF Impaired
/ extinct stuff, anyhow? /
\ _______,--------------' Chris Trask / N7ZWY
_ |/ Principal Engineer
oo\ ATG Design Services
(__)\ _ P.O. Box 25240
\ \ .' `. Tempe, Arizona 85285-5240
\ \ / \
\ '" \ Technical Editor,
. ( ) \ QRP Quarterly
'-|)__| :. \ QRP ARCI 9464
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com
http://www.primenet.com/~ctrask

Graphics by Loek Frederiks

2690. Re: locating books

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36E52F36.5F77@pop.valley.net>
Source record: 72665

Monty Northrup wrote:
>
>Looking for a copy of book<snip>

> "Digital Signal Processing : A Laboratory Approach Using Pc-Dsp/Book
> and Disk (3 1/2 Version)" (Oktay Alkin)
>
> or maybe:
>
> "Pc-Dsp : 5 1/4 IBM Version (Book and Disk)" (Oktay Alkin)
>
> Both are listed on:
>
> http://www.amazon.com/
>
> Also, just as a tip, I find that I can find nearly any book, new or
> out of print, using bookfinder:
>
> http://www.bookfinder.com/

Hello--

Also, try

www.abebooks.com

www.bibliofind.com

www.bibliocity.com

Note that Bookfinder doesn't search all available online book
databases-- in fact, it misses several services listing millions of
books! And, due to search limitations not all copies of a given
book may get listed.

Also, note that in many cases you can save considerable money if you buy
out-of-print books directly from smaller book dealers.

73,
Brad AA1IP

2691. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be6a3e$163a7900$621e3bcb@default>
Source record: 72666

```
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Eamon Skelton <die.all@spammers.org> wrote in article
<7bn472$ppb$1@scotty.tinet.ie>...
> Everyone has their own particular favourite VFO. I have had a
> lot of success with the series tuned Colpitts (Clapp) oscillator.
>
> I use a JFET Clapp oscillator in my H/B transceiver. It runs
> reliably at various frequencies between 9 and 23 MHz,
> despite the fact that the feedback capacitors are fixed
> at 220pF for all bands. Stability at 9 MHz is quite good,
> about 200Hz per hour, not so good at 23 MHz. I use a
> digital stabilizer (Elektor Feb. 1998) to keep the VFO
> stable on all bands.
>
Gday Eamon
I have got the AVR stabilizer circuit going
It seems to work reliably with a 5 MHz VFO. I am working on the user
definable offsets etc software at present. Will get back to you when it is
up and running.

Richard
```

2692. Re: FS - Socket for 4-1000/3-1000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990309111808.00510.00000106@ng-ca1.aol.com>
Source record: 72667

Socket Sold / Thanks
<<>>

Subject: Re: FS - Socket for 4-1000/3-1000
From: wb4lnm@aol.com (WB4LNM)
Date: Mon, Mar 8, 1999 9:18 PM
Message-id: <19990308211806.10299.00004926@ng-cf1.aol.com>

>FS -SK 510 socket $25.00

I'm interested. Is the socket in good shape? Used / new ?

2693. Re: J-band Magnetrons

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36E5513D.7602DE9@teleport.com>
Source record: 72668

In a previous life (mid-60's), I repaired long-range search radars including the ones on the DEW line in Alaska. One, the FPS-6 and derivatives, used a magnetron. (Frequency was about 2.3 GHz, about the same as a microwave oven.) The peak output was 4 MW. The power was applied to the tube in the form of a 10 kV, 500 A pulse which was stepped up by an oil-filled 10:1 transformer right at the base of the tube to 100 kV, 50 A. The duty cycle was low, so the average power was a few kW, but those pulses were serious stuff. That's what it took to detect airplanes at 400 miles using 1N21 germanium diodes for a detector.

Roy Lewallen, W7EL

Erich Muschinske wrote:
>
> In article <7bs6c9$l1k@news.imt.net>, saremington@imt.net says...
> > I recently picked up a surplus 90 kW J-band (16 GHz) magnetron and would
> > like to learn more about what's required to make this thing "hum". No, I
> > really don't want to fire this thing up because I still want to have kids!
> > I really want to learn about microwave theory and the engineering required
> > to make equipment like this work. Pointers to reference books, websites,
> > etc. would be greatly appreciated!
> >
> > Thanks,
> > Scott KC7MRV
> >
> >
> >
> Usually such items are designed as low duty cycle radar sources. The
> power required is likely to be 10-20 kV at nearly 1 amp. It probably
> won't run CW without overheating. Usually the duty cycle is less than
> 1%. It has to do with the way magnetrons are built, especially the ones
> for higher frequencies (like 16 GHz). To switch the power for the tube
> usually requires another tube about the size of a table lamp. Be very
> careful because the voltages and currents involved are LETHAL!
>
> All my reference books are at work, but you might try the Artech House,
> Wiley or Crestone publishing sites for books on the subject.
>
> Erich KA6AMD
> Will do radar for food.

2694. Re: WTB: Beginners book on PLL frequency synthesis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Zimmerman <dave_zimmerman@dlcc.com>
Message-ID: <blcF2.448$xB4.1013@typhoon-la.pbi.net>
Source record: 72669

Motorola had a classic app note by Garth Nash that was
about 50 pages on the theory & application of PLLs. It
may be on their we site. They also had a 100 page booklet
called "Phase Lock Loop Handbook" that had general info
and data sheets on the 4024 voltage - controlled multivibrator,
MC 1648 LC VCO, MC1658 VCO, and MC4044 Phase/
Frequency detector.
----davez

Michael Black wrote in message ...
>
>
>On 3 Mar 1999, Jeffrey Herman wrote:
>
>> My library doesn't do too well in this area. I have some non-amateur
>> radios begging to be converted to the ham bands. Can someone suggest
>> or sell me a book on PLL circuitry?
>> 73, Jeff WH6U
>>
>>
>The ARRL Handbook seems to have a fair introduction to PLL's in recent
>editions, maybe for about the past ten years or so.
>
>There's never been much in the way of advanced material on the topic in an
>inexpensive book. Howard Sam's once had a book "Design of Phase-Locked
>Loop Circuits, with Experiments" by Howard Berlin which was a reasonable
>hobby-based coverage of the topic as it was twenty years ago when the book
>came out.
>
>The other books that I've seen mention made of tend to be expensive and
>aimed at professionals. Someone mentioned the Rohde book; I imagine it
>would be nice to have but I've also seen the price. There's a chapter on
>the topic in his "Communications Receivers" book, which is also expensive
>but I once got as part of a book club sign up.
>
>
>F.M. Gardner's "Phaselock Techniques" always shows up in bibliographies
>about synthesizers, but considering it came out in 1966 (or was there an
>updated version later) it probably covers more than you want to know about
>the topic of PLL's but completely misses a lot of changes in implentation
>that has occurred since then.
>
>There have been plenty of articles on PLL's in the ham magazines, though
>most have been about construction rather than background or design. Ham

>Radio magazine probably had the best articles, including an article by
>Rohde, "Modern Design of Frequency Synthesizers" in the July 1976 issue.
>
>But aside from the older material being more about the theory of PLL's,
>they also suffer because IC's have become the heart of PLL's and new
>devices have come along since the articles came out. One of the better
>sources of material on the subject, once you've dealt with the basics in
>something like the Handbook, is the manufacturer's data sheets and
>application notes. They are far cheaper to get than a $90 book on PLL's,
>and will tell you how to use the device in question. This is especially a
>consideration when modifying commerical equipment, since you want to know
>what's in there, not a more generic understanding of the topic.
>
>Motorola has always had good data sheets on their PLL products, like the
>old MC4044 phase detector (it went on for pages), and presumably for their
>all-in-one (or more or less) synthesizer IC's that show up fairly often in
>commercial equipment. Signetics was always a good source of information
>on their line of PLL's like the 565 and the 560, which of course weren't
>really intended for synthesizer use, and one oculd probably find an old
>databook from them at a ham fest. `The common PLL these days is the
>CD4046 (and variations that allow for higher speed operation and some I
>gather provide improved operation). RCA alwaqys had a good data sheet for
>it, though RCA isn't around anymore. One company has a program tht you
>run for designing synthesizers using the 4046; I think it was Phillips.
>I got the program as shareware at a computer show some years ago, but
>don't have it handy to check for it's name.
>
>If you're modifying equipment, it's worth looking inside and finding the
>PLL, and then trying to find the datasheet for it. The problem with that
>being that there are IC's used in commercial equipment that can be hard to
>track down information on.
>
>As for CB sets, a lot of that area has been covered in 73 years ago.
>
> Michael VE2BVW
>
>

2695. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: chris@pooh.cc.ucf.edu
Message-ID: <7c3mhlijj1@news.cc.ucf.edu>
Source record: 72670
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In article <1icF2.14514$hC.7397826@news1.teleport.com>,
Colin Caulkins <caulkins@user1.teleport.com> writes:
> In rec.radio.amateur.misc Steve Sampson <ssampson@usa-site.net> wrote:

> You're right, zoning is unfair,

I do not recall reading, or be told or prommissed anywhere that
life is or is suppoed to be fair. It is not fair. Deal with it.

Chris

--
==
Chris Maukonen "Change is not merely necessary
Sr. Systems Programmer to life - IT IS LIFE"
Univeristy of Central Florida Alvin Toffler
chris@.ucf.edu (407) 823 5460

2696. Re: Microwave xmitter/oven

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Jim <jbolinger@lintek.com>
Message-ID: <36e560e1.0@news.netwalk.com>
Source record: 72671

Gary Coffman wrote in message
<37a12501.1759090590@news.atl.bellsouth.net>...
>On Mon, 8 Mar 1999 12:58:13 -0500, "Jim" <jbolinger@lintek.com> wrote:
>>This has been done.
>>
>>There was an article several years ago in one of the ham magazines (QEX or
>>Communications Quarterly?????) showing how to do this.
>
>It was in 73 Magazine, though the original idea came from RF Design
>magazine.
>

Won't argure with you on this, but I know I saw it in one of the two I
mentioned since I don't read the others.

>>The basic idea was that the frequency of the magnetron was dependent on
the
>>load impedance mismatch. By injecting the harmonic of a crystal
oscillator,
>>by means of a directional coupler, (thereby appearing as if there was a
>>reflected signal from a load mismatch) it is possible to ''phase lock" the
>>magnetron.
>
>It is called injection locking.
>
>>As the other posters have said, I would urge extreme caution.
>
>In the 73 Magazine article, a waveguide to coax transition was
>used to couple the maggie to the feedline and hence to the antenna.
>The oven compartment remained "cold" and housed the injection lock
>oscillator and modulator (FM). So the HV was as protected as
>when the oven was in normal operation, and the only RF exposure
>risk was at the antenna (though that could be substantial).
>

The article I saw used a homebrew waveguide directional coupler

>>As far as the high voltage is concerned, is it any more dangerous than an
HF
>>amplifier?
>
>No. A tube kW amp is a tube kW amp. The voltages and currents have to be
>similar in either one.
>

That was a rhetorical question on my part, by the way. Besides, you can easily kill yourself with a car battery 'if you are not careful'! (Give yourself a nice cut on both index fingers and then grab the battery terminals)

Jim
N8EE

2697. WTD: MD-1-C8 or MD-100-A8X desk mic's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: bcny@aol.com
Message-ID: <19990309131743.05933.00000127@ng27.aol.com>
Source record: 72672

Hello, I am looking for the Yaesu MD-1-C8 Desk Mic, but maybe will take
MD-100-A8X, in place, if the price is right.

Send reply to... Rich
BCNY@AOL.COM

2698. Antique Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: "Daniel Hicks, Jr." <w8mmq@voyager.net>
Message-ID: <7c3q9d$qv0@news.voyager.net>
Source record: 72673

Check out the W8MMQ Antique Radio Page
http://my.voyager.net/w8mmq/oldradio/

2699. Tonna Antenna Size?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Anthony Coldman <anthony@excalibur2.linkuk.co.uk>
Message-ID: <fveF2.44$FA2.123@wards>
Source record: 72674

I have been given a 23 element Tonna for 23cm, the only problem is it doesnt have any instructions and seems to be missing one of its elements.

I was wonder if anyone has the exact length for each element?

Also what is inside the driven element? Could I make new driven elements so I can build copies so I can have a box of 4?

Thanks Anthony (G7LRQ IO91TQ)

2700. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: Zorn Jr Robert L <zorn@bucknell.edu>
Message-ID: <Pine.OSF.3.91.990309143354.29126C-100000@coral.bucknell.edu>
Source record: 72675

> At -60 dB spurious response, the
> performance of the receiver using DDS approaches the published specs of many
> commercial pieces of equipment.

Would the same be true for transmitters?
In my QRP transmitter design, I want the oscillator to run from
3 to 30 MHz but it would be asking a lot from a traditional PLL circuit.
I had planned on using a MC14151 PLL and MC1648 VCO.
The AD9850 seemed to be much better for wide band.
Now I am confused.
My amplifier circuit will be tuned but I will be playing with
broadband designs. I don't expect to exceed 25 Watts CW.

The 9850 data shows an AM modulation method as well. Would this
design be good enough for Amateur band use?

This group has been a great help. Thanks.

2701. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-09 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e56ab1.796517461@news.online.no>
Source record: 72676

On Mon, 8 Mar 1999 19:48:11 -0600, "Doug Smith" <nospam@nospam.org>
wrote:

>J M Noeding wrote in message <36e447bb.722020632@news.online.no>...
>>>Try using more bias voltage on the finals.
>>
>>probably a good idea for an FM transceiver, but the most common way
>>for CW/SSB transmitter is to increase cathode resistor in ALC-
>>controlled IF amplifier. Unfortunately the drive levels may differ
>>between SSB and CW, so you may have to reduce gain further for cw
>>compared to ssb.
>
>
>Besides, I think this radio uses the same IF amplifier in receive and
>transmit. Decreasing IF gain would have undesirable effects on the
>receiver...
>
>73 DOug
>
>
>
have you ever heard about application of a transistor? 2N2222 will
work fine to add extra gain potmeter for transmitter

LA8AK@ONLINE.no

2702. SN74LS390 as decade counter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e5ba34.816876195@news.online.no>
Source record: 72585

Having used only CMOS logics for the last 25 years I am somewhat confused about how to connect the 'LS390 as divide bly 10 or 100 counter. I have the Motorola LS-TTL handbook(1977).

Just found it in the junkbox, and don't want to buy a new item if I can use the old one for 10MHz clock divider for frequency standard

hpe bcnu
73
Jan-Martin
LA8AK
LA8AK@ONLINE.no

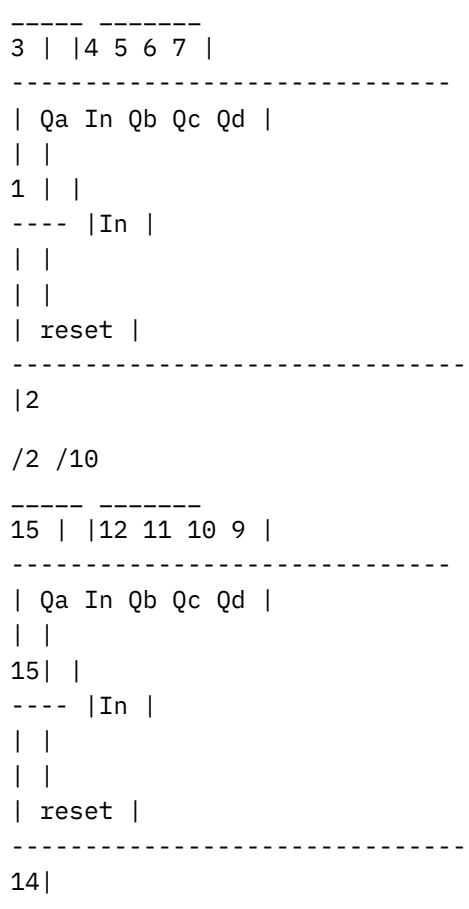
2703. Re: SN74LS390 as decade counter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990309234631.1746D-100000@Ocean.CAM.ORG>
Source record: 72586

On Wed, 10 Mar 1999, J M Noeding wrote:

> Having used only CMOS logics for the last 25 years I am somewhat
> confused about how to connect the 'LS390 as divide bly 10 or 100
> counter. I have the Motorola LS-TTL handbook(1977).
>
> Just found it in the junkbox, and don't want to buy a new item if I
> can use the old one for 10MHz clock divider for frequency standard
>

Maybe it's because people have moved on to other things, but I am surprised that the 74LS390 has never gotten too much attention in hobbyist circles. It's a dual decade counter and in effect the equivalent of 2 7490's.



Vcc is of coursepin 16, and ground is pin 8.

The only difference from a 7490, other than packaging, is that the reset input is not as complicated.

As with the 7490, if you want a 50 perccent square wave, you can move the \/2 stage from the input to the output of the /5 stage. It will upset the BCD counting if you've got a readout connected to the BCD outputs, but is no problem when using it as a simple divider.

Michael VE2BVW

2704. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: cjX@hth.com
Message-ID: <36e67250.42769044@news.buller.se>
Source record: 72587
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
================================================================================
- L.O.S.A Contribution Form -
================================================================================
New Contribution [ ] Update [ ]
--------------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
--------------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
--------------------------------------------------------------------------------
Description : (5-50 rows describing your application)

================================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

2705. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: mktg@ix.netcom.com
Message-ID: <36e78bdf.3541688@nntp.ix.netcom.com>
Source record: 72588

I used an HW-101 for a number of years. You can turn down
the power with the drive level control on the front panel.

David
W7HTJ

la8ak@online.no (J M Noeding) wrote:

>On Mon, 8 Mar 1999 19:48:11 -0600, "Doug Smith" <nospam@nospam.org>
>wrote:
>
>>J M Noeding wrote in message <36e447bb.722020632@news.online.no>...
>>>>Try using more bias voltage on the finals.
>>>
>>>probably a good idea for an FM transceiver, but the most common way
>>>for CW/SSB transmitter is to increase cathode resistor in ALC-
>>>controlled IF amplifier. Unfortunately the drive levels may differ
>>>between SSB and CW, so you may have to reduce gain further for cw
>>>compared to ssb.
>>
>>
>>Besides, I think this radio uses the same IF amplifier in receive and
>>transmit. Decreasing IF gain would have undesirable effects on the
>>receiver...
>>
>>73 DOug
>>
>>
>>
>have you ever heard about application of a transistor? 2N2222 will
>work fine to add extra gain potmeter for transmitter
>
>LA8AK@ONLINE.no

2706. FS!- Pair (2) Eimac 304TL FULL output pulls.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <7c66co$3tg$1@remarQ.com>
Source record: 72589
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.marketplace,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

One pair (2) Eimac 304TL triodes. These are low hour pulls, FULL OUTPUT & PERFECT and getting quite scarce. $100.00 for the pair plus shipping.

TNX for reading!

Steve

2707. FS!- Pair (2) Eimac 304TL FULL output pulls.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <7c674k$nc8$1@remarQ.com>
Source record: 72590
Cross-posted to: alt.ham-radio.hf,alt.ham-radio.marketplace,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

One pair (2) Eimac 304TL triodes. These are low hour pulls, FULL OUTPUT & PERFECT and getting quite scarce. $100.00 for the pair plus shipping.

TNX for reading!

Steve

2708. Bafoofnik's Ham Radio Search Engine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Spencer Lazar <slazar19@sgi.net>
Message-ID: <36E71349.7699@sgi.net>
Source record: 72591

You are invited to visit Bafoofnik's Ham Radio Search Engine.

http://www.qth.com/stamper/search/bafoofnik.htm

A one stop resource for almost everything in ham radio.

73, Spike W9XR

2709. FS!- Pair (2) Eimac 304TL FULL output pulls.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <7c68a4$p8n$1@remarQ.com>
Source record: 72592
Cross-posted to:
alt.ham-radio.marketplace,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

One pair (2) Eimac 304TL triodes. These are low hour pulls, FULL OUTPUT &
PERFECT and getting quite scarce. $100.00 for the pair plus shipping.

TNX for reading!

Steve

2710. FA: Tektronix 5L4N Spectrum Analyzer Plug-In (eBay)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Mike Nadeau <mnadeau@gwi.net>
Message-ID: <4AzF2.1281$i12.17098@newsfeed.slurp.net>
Source record: 72593
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

I have a Tektronix 5L4N Spectrum Analyzer Plug-In for auction on eBay:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=75934160

2711. FA: Heathkit ET-1000 Circuit Design Trainer (eBay)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Mike Nadeau <mnadeau@gwi.net>
Message-ID: <6AzF2.1282$i12.17098@newsfeed.slurp.net>
Source record: 72594
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

I have a Heathkit ET-1000 Circuit Design Trainer for auction on eBay:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=75930685

2712. Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Charles Dumont <francis.dumont@jhuapl.edu>
Message-ID: <36E6BC62.538819CA@jhuapl.edu>
Source record: 72595
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Anyone know of a good, repeatble method to accurately wind coils for ducky-type helical antennas? Thanks.

Charles Dumont
The Applied Physics Laboratory
francis.dumont@jhuapl.edu

2713. Re: Dream Homebrew Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <7c6jdspqf1@ocean.cup.hp.com>
Source record: 72596

Hello OM,

Your requirements can be met today by building a direct conversion phasing receiver, using AD831 low-distortion mixers for the I and Q channel input mixers.
These can yield +30 dBm intercept with only -10 dBm LO power. See latest issue of
QEX for article. You can achieve 50 dB of opposite sideband suppression, using a
design like the R2 (Campbell, Jan 93 QST), which has been duplicated by hundreds of builders.
The phase noise is dependent on the LO used. A DDS device such as the AD9851 with low phase noise reference crystal oscillator may meet your needs. Or else
build your own very low phase noise analog VFO/PLL synthesizer.
These same building blocks can make a transmitter or transceiver of course. All the audio
(baseband) stuff is can and is being done today with DSP, eliminating the analog audio phase
shift networks.
Not a pipedream at all. At least not for homebrew! For factory built, well, it will take a while.

I predict that this is how all transceivers will be made as soon as manufacturers give
up on superhet designs. It should result in dramatic price decreases.

73 and GL,
Don, W6JL

>I would like my homebrew transceiver to be a single band unit, with a
>receiver thats got a 3rd order intercept point of greater than +30dbm, a
>high 2nd order intercept point, very low phase, lower than most tube radios,
>and the transmiiter third order imd products to below -50db below pep. Has
>anybody designed or built such a beast.
>
>Yes i know its a dream, that might be fulfilled in 60 years by the current
>crop of manufacturers.
>
>Good Builiding!
>
>

2714. Re: How do I reduce power on hw-101?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <7c6jpg$q0c$1@ocean.cup.hp.com>
Source record: 72597

John OM,
Why, and in what mode(s) do you want to reduce the power? Changing it
from 100W to 25 W is only a 6 dB reduction, an S unit or so, makes very
little
difference in normal conditions. What is the objective?
Doesn't the HW101 have a drive level or carrier insertion level control?
You
can run any output power you want, by inserting an audio signal into the
rig, and
adjusting the level for any desired output power, same as with any SSB
transmitter.
Do a little reading up of available documentation and info and you may
well find
you don't have a problem to solve!

73,
Don, W6JL

itzack@hotmail.com wrote in message <7bvaad$ut1$1@nnrp1.dejanews.com>...
>Hello,
>
> I am looking for an way to reduce the power out of the hw-101...
>I am looking to get <25 watts out maybe even <10. I you have any
>Ideas on how to do this please e-mail me... Itzack@hotmail.com
>Also if I remove the 6141's what is the power out from just the radio
>before it reaches the finals?
>
>TNX
>John
>Kc4npd
>
>------------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2715. Grid Dip schematic request

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Robert Giel <giel@earthlink.net>
Message-ID: <36E6D944.7CD86DC2@earthlink.net>
Source record: 72598

Can anybody direct me to a manual or just a schematic for an old Eico
Model 710 Grid Dip Meter?

My Dad, the Ham in the family, can't locate his and needs to work on it.

Any help will be appreciated.

TIA,
Bob Giel

2716. GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Paul Martin <pmartin@bright.net>
Message-ID: <7c6l6rsfd1@cletus.bright.net>
Source record: 72599

I would like to change the old FET (a 3sk40) on my 2M front end to a gaasfet (such as a BF981) to try to lower the noise floor. Any one know of a source for the BF981 and what would the bias differences be? This rig also uses the 3SK40 in the mixer and I wondered if I might gain anything by changing it to a gaasfet also but can't seem to find any references to using one in that configuration. Any experiences or ideas?
Paul N8ULS

2717. Parabolic dish info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: YZ7REA/45AT142 Vladimir <atomski@EUnet.yu>
Message-ID: <36E6DC70.B802E64B@EUnet.yu>
Source record: 72600
Body handling: Binary attachment payload not displayed: atomski.vcf

Hello all,
I need some blueprints for building a 3-6m parabolic dish for 23 cm
(1296 MHz) EME. I have the feed horn designs but I didn't find any dish
designs. Can anyone help? THANKS IN ADVANCE!!!!

[One or more binary attachments are retained only in the source text.]

2718. FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: napoli@i-2000.com
Message-ID: <36f9e949.41696217@news.i-2000.com>
Source record: 72601

F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
with rectangular face 0--10 amp- scale..brand new..pse remove the
(ns) from my address..thanks..Bob ..on Long Island....$40.00

2719. W5LET 6L6 xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: k5iq@my-dejanews.com
Message-ID: <7c6ttjjhu1@nnrp1.dejanews.com>
Source record: 72602

Back in the heyday of Electronics Illustrated, Jim White (W5LET) wrote a series of construction articles for simple transmitters. One of them was for a 40/80M rig with a 6L6 final. Over the intervening 25 or so years I have acquired most of the parts, but alas! I have lost the article with the plans. Anyone remember that article (it's not the one with the parts nailed to a piece of plywood!) or have a copy? I would sure love to put together this anything-but-state-of-the- art xmtr.

Thoughts, suggestions? Please reply directly if you would.

Tnx & 73,
Bob
K5IQ

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2720. Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7c6te0$qg5$1@plutonium.btinternet.com>
Source record: 72603
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I need a circuit for a frequency counter, covering a range of about 500kHz
to 30MHz, for amateur radio use, preferably using TTL i.c's.
I intend to use it for measuring the frequencies of vfo's, local
oscillators, etc. The circuit should preferably be as simple and inexpensive
as possible. If anyone can help by suggesting a suitable circuit, please
email me.
Thanks.

2721. WTB:NEC 6JS6C tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19990310180635.19351.00000664@ng106.aol.com>
Source record: 72604

Looking for a pair of New/Old stock NEC 6JS6C tubes.
Tnx,
Jim

2722. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: munsch@ibm.net
Message-ID: <36e70048@news1.us.ibm.net>
Source record: 72605
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

We used to set up a standard metal turning lathe. It allows you to set pitch and winding speed. Use a block of wood or plastic to feed wire through.
--
Crazy George

2723. FA: Nice Collins S Line..,,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f1ffe1.20818292@207.217.77.140>
Source record: 72606

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=75813344

2724. WTB: 5VCT 15A filament xfmr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <F8EKww.sF@server.nlbbs.com>
Source record: 72607

I need a 5VCT 15 amp filament transformer for a single 3-500Z, a 30 amp xfmr would be fine too. Thanks, Dick NY1E

2725. Simpson 260-8xpi f.s. (NEW)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <7c7chg$r9f$1@news.ispn.net>
Source record: 72608
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

For Sale:

Simpson 260-8xpi VOM. New in original box - even has the original
(un-used/never installed) batteries.
Includes leads, manual, warranty card, etc.

$130 plus $5.50 USPS Priority Mail stateside.

2726. Re: Simpson 260-8xpi f.s. (NEW)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <7c7cmj$r9p$1@news.ispn.net>
Source record: 72609
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

. . . forgot my name/location:

Ron Ostman, W0NYQ
Mt. Iron, MN

Thanks!

2727. Re: W5LET 6L6 xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-10 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <7c7dkf$4dc$1@news.onr.com>
Source record: 72610

YEP I remember this article. My late father built
the thing on a board using nails as terminals. It
is still in his garage in Decatur, Alabama.

I will see if I can find the mag...somewhere in my garage...
don't hold your breath.

73's
Charlie

--
-->Remove the x's from my email address before using <--
k5iq@my-dejanews.com wrote in message <7c6ttjjhu1@nnrp1.dejanews.com>...
>Back in the heyday of Electronics Illustrated, Jim White (W5LET) wrote a
>series of construction articles for simple transmitters. One of them was
for
>a 40/80M rig with a 6L6 final. Over the intervening 25 or so years I have
>acquired most of the parts, but alas! I have lost the article with the
plans.
> Anyone remember that article (it's not the one with the parts nailed to a
>piece of plywood!) or have a copy? I would sure love to put together this
>anything-but-state-of-the- art xmtr.
>
>Thoughts, suggestions? Please reply directly if you would.
>
>Tnx & 73,
>Bob
>K5IQ
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2728. Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36E7FF0A.167E@eece.maine.edu>
Source record: 72528

I tried building the radios on the Homebrew is gud 4 u websight a while back, but the radio never worked. I used some cheap wire that I had, who knows what kind it was (red and black, if that helps). Is there a huge difference between using magnet wire and other stuff? And if there is, is it because of insulation having a high dielectric?

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

2729. FS: HOLLOW CERAMIC INSULATORS, 1 5/8 AND 1 1/8

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-1103991038450001@murphy1.cts.com>
Source record: 72529
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.optics,rec.crafts.metalworking,alt.mechanical.engineering

100 MIXED FOR $12 300 MIXED FOR $24

PICT AT;

http://209.239.34.153/murphyjunk/5_VAC_CAPS_RELAYS_MIS_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

2730. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <36E80C93.EB0A3E5E@up.net>
Source record: 72530

IMHO, the current prices for low-end freq.counters
is such, that it is cheaper to buy a new one, than to
get the parts and build one, not even counting one's time.
(If using one is the end product, and not the experience gained
building/designing it).

marsgal42@hotmail.com wrote:

> In article <7c6te0$qg5$1@plutonium.btinternet.com>,
> "David Cunningham" <D.L.C@btinternet.com> wrote:
> > I need a circuit for a frequency counter, covering a range of about 500kHz
> > to 30MHz, for amateur radio use, preferably using TTL i.c's.
> > I intend to use it for measuring the frequencies of vfo's, local
> > oscillators, etc. The circuit should preferably be as simple and inexpensive
> > as possible. If anyone can help by suggesting a suitable circuit, please
> > email me.
>
> TTL is neither "simple" nor "inexpensive" - not in 1999, anyway.
>
> Why not check out some of the microcontroller-based counters instead?
>
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2731. Parts needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990311150935.01684.00000707@ngol01.aol.com>
Source record: 72531

I am still looking for the parts listed below, if you have them and are will to part with them please advise. Purchase or swap is ok.

JW Miller 2102 or 1462-BS 3 gang tuning capacitor
JW Miller 1709 100 Khz I.F. Transformers
JW Miller 1711 100 Khz BFO transformer
JW Miller 958 50mh RF choke
JW MIller 960 100mh RF choke
1 1/4 inch 5 pin plug in coil forms (I need 25 of these)
4-6 hy 100-150ma filter chokes (need 3)
5x7x2 steel chassis
10x14x3 sturdy aluminum chassis
7360 tube
pillar type single connection tie points (don't know what the correct name is HP and Tek used to use them in a lot of their equipment. The have a 6/32 stud at one end, a body 1/4 inc dia and about 3/8 heigh, with a single connection point to solder to.)

Thanks
Bob, W4RLC
73's
Bob, W4RLC (formerly WA7OGU)

2732. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <36E8236B.648A@ixpres.com>
Source record: 72532

Paul OM,

What noise figure do you have now? What noise figure are you
requiring?
Do you have a calibrated noise source so that you are able to measure
and adjust the
new device for min NF? It is not just dependent on bias; it is also
dependent
on input impedance matching to make the device look into a source
impedance
that is optimum for noise figure. Note that this is not generally the
same
as maximum gain. If you are using FM, you may not notice any
performance improvement by lowering the noise figure, since FM is not
a useful weak-signal mode (10 dB threshold penalty).
If any of these questions or comments are new or unexpected to you,
you may first want to do a little studying on noise figure, how it is
measured,
and what noise figure you need for your application. This could save
you
a lot of work, yielding no discernable practical improvement.

73 and GL,
Don, W6JL

Paul Martin wrote:
>
> I would like to change the old FET (a 3sk40) on my 2M front end to a gaasfet
> (such as a BF981) to try to lower the noise floor. Any one know of a source
> for the BF981 and what would the bias differences be? This rig also uses the
> 3SK40 in the mixer and I wondered if I might gain anything by changing it to
> a gaasfet also but can't seem to find any references to using one in that
> configuration. Any experiences or ideas?
> Paul N8ULS

2733. Wanted 2 ghz spectrum analyzer.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Jonny S <jonny@dragonet.es>
Message-ID: <7c9860$d9t$1@diana.bcn.ttd.net>
Source record: 72533

Wanted 2 ghz spectrum analyzer.

2734. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7c9cfjoos1@nnrp1.dejanews.com>
Source record: 72534

In article <36E80C93.EB0A3E5E@up.net>,
Roland Burgan <rburgan@up.net> wrote:
> IMHO, the current prices for low-end freq.counters
> is such, that it is cheaper to buy a new one, than to
> get the parts and build one, not even counting one's time.
> (If using one is the end product, and not the experience gained
> building/designing it).

This explains, of course, why you just don't see plans for
certain devices (2m FM radios are another that comes up in this
newsgroup all the time) in the amateur press anymore.

For fun, I just had a look through a well-known distributor's
catalogue (Digi-Key) for the prices on a 1970s-style frequency
counter. Not only are the prices on the chips scary (and you
still have to wire them up!), you end up with an inflexible,
power-hungry counter that will only count to 30 MHz or so.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2735. Re: Parts needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36E82921.4E16A5E0@arrl.net>
Source record: 72535

RobertC908 wrote:

> pillar type single connection tie points (don't know what the correct name is
> HP and Tek used to use them in a lot of their equipment. The have a 6/32 stud
> at one end, a body 1/4 inc dia and about 3/8 heigh, with a single connection
> point to solder to.)

Surplus Sales of Nebraska has the Collins-type turret tie points. Don't know if
that's what you're looking for,
but it might be close:

http://www.surplussales.com

also, there are a lot of old Tek tube-type scopes on the market, and they can be
had for CHEEP -
I paid $50 for a working 80MHz 500-series scope recently. You might buy up some
old broken ones and
tear them down for parts...

good luck and 73,
nick caruso kb1dej

2736. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Charles Dumont <francis.dumont@jhuapl.edu>
Message-ID: <36E81C69.580C3995@jhuapl.edu>
Source record: 72536
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Said like a true home-brewer. How the hell then do antenna
manufacturers get repeatble designs?? Thanks for the advice.

Reg Edwards wrote:

> Because of the conditions in which 'ducky-type' antennas
> are used, the dimensions, eg, former diameter, height,
> number of turns, wire gauge, dielectric constant and losses
> of shrouding plastic material, the connector, are very
> uncritical. Just as much depends on the dimensions of what
> is held in the hand, is it sweaty ? the size of the case,
> than on the antenna.
>
> The resonant frequency and load on transmitter, or
> impedance presented to receiver, vary all over the shop
> depending on whether held at arms length, close to the head
> or left lying around on a wooden table or on a metal car
> bonnet.
>
> Make one. Does it work ? Yes ? Fine ! Repeatability
> - don't worry about it.! Make a million of them all just
> like that and make yourself rich.
> --
> ******************************
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp
>
> ******************************
>
> Charles Dumont <francis.dumont@jhuapl.edu> wrote in article
> <36E6BC62.538819CA@jhuapl.edu>...
> > Anyone know of a good, repeatble method to accurately
> wind coils for
> > ducky-type helical antennas? Thanks.
> >
> > Charles Dumont
> > The Applied Physics Laboratory
> > francis.dumont@jhuapl.edu
> >
> >
> >

2737. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <36E82A0B.38A4@ixpres.com>
Source record: 72537

Jim wrote:
>
> gbowne wrote in message <#w18$6QZ#GA.220@upnetnews05>...
> >
> >NG,
> >
> >I certainly will, Monty. It's taken a year and a half or more to get where
> >I am in the design process, and the procurement of parts which I may need.
> >
> >The book has been a great help! I wish there was a web site based on the
> >book, but there isn't. I was thinking about making one for my rig once I
> >get it done.
> >
> >Anyone else read that book by Randy L. Henderson?
> >
> >
> >
>
> Interesting thread, but.....
>
> How come no one has talked about how to achieve a 150+ dB dynamic range with
> third order intercept of +30 dBm? _That_ is what makes a good HF rig, not
> how many MB you have in the processor!!!
>
> Also, in my humble experience (ham for 30 years, engineer for 23 years,
> masters degree for 10 years) Tab books are traditionally full of mistakes
> and bad designs, although I haven't looked at any since McGraw-Hill bought
> them out.
>
> Jim
> N8EE

Jim OM,

Dynamic range seems to be one of those favorite words lately. Sort of
like "halogen" and "laser" was to the average consumer in the '80's.
You might ask yourself what good is 150 dB of dynamic range? Do you
live next door to a 100KW transmitter? I would expect that you are
unlikely to ever detect any difference in daily use between a receiver
with 110 dB of dynamic range, and 150 dB.
I almost never encounter signals over 10 mV (80 dBuV) at the receiver
input. Do you? That is 40 dB over S9, assuming 100uV RMS = S9. The
difference of an s9+40dB signal and a barely detectable signal at say
0.3 uV on 40M CW (is your QRN level less than 0.3 uV on 40M?), is
[20*Log(10mv/0.3uV)] or about 90 dB. If you switched in a 20 dB

attenuator in the front end, you increase the receiver's dynamic range by 20 dB, and reduce the MDS (minimum detectable signal) by the same amount. So now you could only hear a 3 uV signal (still above your QRN level on 40M?).
The real need for dynamic range is when attempting to copy very weak signals in the presence of nearby VERY STRONG signals. While I find myself copying weak signals a lot (I'm a CW op), I almost never do it in the presence of 40 dB over 9 adjacent signals. Your QTH and operating style may vary...
So it is good to keep in perspective what these numbers mean in practice. Not doing so makes you a good high-yield target for marketing hype by manufacturers of ham radio equipment.

73,
Don, W6JL

2738. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990311170327.6638A-100000@Ocean.CAM.ORG>
Source record: 72538
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Thu, 11 Mar 1999, MOstrowski wrote:

> You can use this link to search past issues of Popular Electronics and
> Electronics Now. They have published many articles on constructing
> frequency counters. You'll then just need to find a local library that
> has the issues or can get them through inter-library loan.
>
> http://www.gernsback.com/noframe/pe/html/PEaisearch_nf.html
>
Be careful though. A few years ago (I don't recall the year but believe
it was in a December issue) Electronics Now (or maybe it was before the
name change in which case it would have been Radio Electronics) had a
"1GHz Frequency Counter" that probably would have had problems getting up
to 5MHz. The uathor was a little confused on the concept, and for some
very odd reason it slipped by the editors.

It was a straightforward counter, probably using the Intersil 7208 or more
likely a later variation. But the author put dividers ahead of it to get
a higher count. Two or three decade counters if I recall correctly, so
the mid-HF range of the LSI frequency counter IC could be extended to a
much higher frequency.

The problem was, the author used plain old 4017 CMOS dividers as the
prescaler, and there was no way that they could count any higher in
frequency than the LSI counter.

To compound the problem, last year in the Q&A column someone asked about a
frequency counter, and they were pointed to that same article. Luckily,
someone sent in a followup letter, as there were when the article was
originally published, pointing out that there was no way the thing could
count very high.

So be sure to avoid that particular frequency counter article.

Michael VE2BVW

2739. Re: Parabolic dish info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7c9ffa$n95$1@scotty.tinet.ie>
Source record: 72539

YZ7REA/45AT142 Vladimir wrote in message <36E6DC70.B802E64B@EUnet.yu>...
>Hello all,
> I need some blueprints for building a 3-6m parabolic dish for 23 cm
>(1296 MHz) EME. I have the feed horn designs but I didn't find any dish
>designs. Can anyone help? THANKS IN ADVANCE!!!!

VHF UHF MANUAL (RSGB) Chapter 9.

73, Ed. EI9GQ

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/
www.qsl.net/ei9gq

****

2740. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7c9ffa$n95$2@scotty.tinet.ie>
Source record: 72540

Paul Martin wrote in message <7c6l6rsfd1@cletus.bright.net>...
>I would like to change the old FET (a 3sk40) on my 2M front end to a
gaasfet
>(such as a BF981) to try to lower the noise floor. Any one know of a source
>for the BF981 and what would the bias differences be? This rig also uses
the
>3SK40 in the mixer and I wondered if I might gain anything by changing it
to
>a gaasfet also but can't seem to find any references to using one in that
>configuration. Any experiences or ideas?
>Paul N8ULS
>

The BF981 is a dual gate Mosfet. I used one as the RF amp in
my H/B 2M rig. The 3SK88 is a similar device.

73, Ed. EI9GQ.

--
****
Eamon 'Ed' Skelton EI9GQ
Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com
www.nettaxi.com/citizens/ei9gq/
www.qsl.net/ei9gq

****

2741. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Oris <oris@dirtball.com>
Message-ID: <36E84815.6128@dirtball.com>
Source record: 72541

Shawn Upton wrote:
>
> I tried building the radios on the Homebrew is gud 4 u websight a while
> back, but the radio never worked. I used some cheap wire that I had,
> who knows what kind it was (red and black, if that helps). Is there a
> huge difference between using magnet wire and other stuff? And if
> there is, is it because of insulation having a high dielectric?
>
> --
> **********
> Shawn Upton
> Electrical Engineering Student
> University of Maine at Orono
> webpage: http://www.eece.maine.edu/~supton/
> mail: supton@eece.maine.edu
> KB1CKT Tech Plus
> **********
From What I Understand.
Magnet wire is used inplace of copper for the reduction of harmonics
and self oscilations in amplifiers. Magnet wire is used instead of
copper in band switch operations and feeds to the parsidic chokes in
amplifiers. this helps the chokes from passing VHF frequencies.
I hope this helped you
73 from Oris
http://www.dirtball.com

2742. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: jadney@vwtype3.org
Message-ID: <36e74d6d.19993358@news.doit.wisc.edu>
Source record: 72542
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"David Cunningham" <D.L.C@btinternet.com> wrote:

>I need a circuit for a frequency counter, covering a range of about 500kHz
>to 30MHz, for amateur radio use, preferably using TTL i.c's.
> I intend to use it for measuring the frequencies of vfo's, local
>oscillators, etc. The circuit should preferably be as simple and inexpensive
>as possible. If anyone can help by suggesting a suitable circuit, please
>email me.

I understand that you may really want to build your own, but if you
change your mind, I have a couple of Hewlett-Packard counters that are
excellent and affordable. They also offer a degree of quality that you
are very unlikely to match.

These are both modular sets that use an upper half that houses the
reference clock and the display, and a lower half that houses the
counter electronics. The two halves lock together, but can be swapped
quickly if you wish to change counters. They are AC line powered.

HP5300A: 6 digit display module with an internal clock that is
accurate to better than 1 part per million. $40.

HP5301A: 10MHz frequency counter with .1, 1, 10 second gate times and
adjustable sensitivity. $20.

HP5302A: 50MHz counter/timer, with same gate times, but also does
period, period average, time interval, etc. $60

Shipping CONUS, $5, or buy all three and I'll pay the shipping.

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

2743. Denver, NC - Help find him!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Dan Vaught <afarmer@roanoke.infi.net>
Message-ID: <36E85825.B6669EC1@roanoke.infi.net>
Source record: 72543

Hard Drive crashed!
Need help finding gentleman in Denver, NC about our 19"rack deal.

2744. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Joe Lane <jlane@wcl.on.ca>
Message-ID: <7c9p2f$62n$1@nr1.toronto.istar.net>
Source record: 72544

Oris wrote in message <36E84815.6128@dirtball.com>...
>Shawn Upton wrote:
>>
>> I tried building the radios on the Homebrew is gud 4 u websight a while
>> back, but the radio never worked. I used some cheap wire that I had,
>> who knows what kind it was (red and black, if that helps). Is there a
>> huge difference between using magnet wire and other stuff? And if
>> there is, is it because of insulation having a high dielectric?
>>
>> --
>> **********
>> Shawn Upton
>> Electrical Engineering Student
>> University of Maine at Orono
>> webpage: http://www.eece.maine.edu/~supton/
>> mail: supton@eece.maine.edu
>> KB1CKT Tech Plus
>> **********
>From What I Understand.
> Magnet wire is used inplace of copper for the reduction of harmonics
>and self oscilations in amplifiers. Magnet wire is used instead of
>copper in band switch operations and feeds to the parsidic chokes in
>amplifiers. this helps the chokes from passing VHF frequencies.
> I hope this helped you
> 73 from Oris

Magnet wire IS made of copper. It has an enamel insulation
coating which is very thin allowing more turns per square inch
in motor and transformer windings. If you are making small
coils the insulation should not make great deal of difference
as long as you have the correct number of turns.

regards
Joe

2745. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36E86B68.CB1ADD21@erols.com>
Source record: 72545

Magnet wire is simple copper wire with an insulated enamel coating. It's probably called magnet wire because it was originally used to wind electro-magnets. If you wind RF coils with copper wire using a different insulation you will likely end up with a different inductance than what was intended due to the different dielectric properties of the insulation and different turns spacing due to the added thickness of the insulation. How much difference this will make depends on the circuit in which it is used.

Oris wrote:

> Shawn Upton wrote:
> >
> > I tried building the radios on the Homebrew is gud 4 u websight a while
> > back, but the radio never worked. I used some cheap wire that I had,
> > who knows what kind it was (red and black, if that helps). Is there a
> > huge difference between using magnet wire and other stuff? And if
> > there is, is it because of insulation having a high dielectric?
> >
> > --
> > **********
> > Shawn Upton
> > Electrical Engineering Student
> > University of Maine at Orono
> > webpage: http://www.eece.maine.edu/~supton/
> > mail: supton@eece.maine.edu
> > KB1CKT Tech Plus
> > **********
> From What I Understand.
> Magnet wire is used inplace of copper for the reduction of harmonics
> and self oscilations in amplifiers. Magnet wire is used instead of
> copper in band switch operations and feeds to the parsidic chokes in
> amplifiers. this helps the chokes from passing VHF frequencies.
> I hope this helped you
> 73 from Oris
> http://www.dirtball.com

2746. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: "DJ Wang (KE3ZB)" <ddw2@mail.lehigh.edu>
Message-ID: <36E84379.431A@mail.lehigh.edu>
Source record: 72546

Roland Burgan wrote:
>
> IMHO, the current prices for low-end freq.counters
> is such, that it is cheaper to buy a new one, than to
> get the parts and build one, not even counting one's time.
> (If using one is the end product, and not the experience gained
> building/designing it).

I agree completely. I built a counter myself using a 7216 chip and an 11C90 prescaler. It worked fine for a while until oneday one segment is dead on all the LEDs. The 7216 chip somehow developed a short in the pin driving this segment on the LED. Later, I found a handheld counter at a Radio Shack stand at a hamfest. It was brandnew and was on sale for only $39.95. It counts up to 1.3GHz with quite good a sensitivity. It has a LCD diaply (although not very high quality) with backlight and the metal case provides very good shielding. It even have a switch for NiCad battery charging.
In my opinion, I would spend my time and money building other stuff like QRP rig or something more useful rather than building a counter or a DVM.

DJ Wang, KE3ZB

2747. MFJ Antenna Analyzers For sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <36E89BF1.5EAE@ix.netcom.com>
Source record: 72547
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

I have two. One brand new sealed in box MFJ 259B $200 save $30 from AES
And one MFJ 259 like new in excellent condition in box complete for $140
73 Chris VE3NGW/W4 Florida

2748. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36E8768E.1840@pop.valley.net>
Source record: 72548

Roland Burgan wrote:
>
> IMHO, the current prices for low-end freq.counters
> is such, that it is cheaper to buy a new one, than to
> get the parts and build one, not even counting one's time.
> (If using one is the end product, and not the experience gained
> building/designing it).

Hello--

Seconded. I bought an HP 5334B 100 MHz universal counter for $195 postpaid from Pacific Test Equipment; the instrument's sold as used but appears new and includes an operations manual copy. No way could I even deam of building such a versatile instrument for that little money.

The 5334B offers time-interval, period, rise and fall time, ratio (it has two input channels), start/stop and accumulate operations. There's even an HP-IP port. ALso, there are math functions (frequency offset included).

PTE is at (408) 441-7341 and usually advertises in Nuts & Volts magazine.

Disclaimer: I don't work for PTE and have no interest in the company; I'm writing only as a satisfied customer.

73,
Brad AA1IP

2749. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36E8C8BA.17F14EF1@teleport.com>
Source record: 72549

Sorry for quoting you, Monty, in spite of your request. Your comments made me curious, so I did some checking.

The limit for unlicensed operation of an intentional radiator in the HF range is a field strength of 30 uV/m at a distance of 30 meters. At 30 meters from and broadside to a 40 meter dipole in free space, you hit the maximum allowable field strength at a power of 186 uW. This is 44 dB below 5 watts. If you wanted to be on the safe side, you'd add another 6 dB to account for ground reflection. Of course, any antenna gain over a dipole also increases the field strength.

Roy Lewallen, W7EL

Monty Northrup wrote:
>
> Hi Zorn!
>
> IMHO, DDS's are excellent for QRP transmitter designs. FCC Rules
> [97.307(d)] state that for transmitted signals below 30 MHz, spurious
> responses must be at least 40 db down, but they relax that to 30 db
> down for output powers of 5 watts or less.
>
> These are very reasonable goals. A 5 Watt QRP transmitter with
> spurious responses 30 dB down has 5mW of spurious output. At 60 db
> down, 5 micro-watts. [10 log P1/P2] Unlicensed transmitters can
> operate with 15mW (don't quote me). There are tens of thousands of
> incidental radiating devices with these kinds of transmitting levels,
> contributing to a general rise in broadband noise floor, especially in
> urban areas. And the average class B computing device probably is
> somewhere around 1 mw of lotsa spurs... of course, you don't hook your
> computer up to an antenna... hi... unless you consider the power line
> an antenna ;-\ I hate to think what an average TV radiates, but you
> can frequently hear in it the HF bands in metropolitan areas.
>
> Keep in mind that the FCC is talking about aggregate levels of
> spurious emissions, not a single spur, while the DDS manufacturer's
> are touting the levels of any one single spur. Nonetheless, for QRP
> transmitting, your AD9850 will do admirably, with plenty of spurious
> "margin", and no harm will come of it.
>
> >The 9850 data shows an AM modulation method as well. Would this
> >design be good enough for Amateur band use?
>
> I'll leave this to someone else...
>

> 73,
> monty, N5FC

2750. Re: QRP rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.3.96.990310184839.23622E-100000@cluster2>
Source record: 72611

what are you doing posting that in a news group?
it drives screen readers crazy.

On 9 Mar 1999, Dennis ZS4BS wrote:

> Date: 9 Mar 1999 20:09:30 GMT
> From: Dennis ZS4BS <dennisg@netactive.co.za>
> Newsgroups: rec.radio.amateur.homebrew
> Subject: QRP rig
>
>
> --
> Dennis ZS4BS
> begin 600 QRP.doc

2751. Re: Dream Homebrew Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e71623.1091164@news.io.com>
Source record: 72612

On Wed, 10 Mar 1999 12:07:18 -0800, "Don W6JL" <W6JL@ixpres.com>
wrote:

> Your requirements can be met today by building a direct conversion phasing
>receiver, using AD831 low-distortion mixers for the I and Q channel input
>mixers.These can yield +30 dBm intercept with only -10 dBm LO power.
[snip]
> The phase noise is dependent on the LO used. A DDS device such as the
>AD9851 with low phase noise reference crystal oscillator may meet your
>needs. Or else build your own very low phase noise analog VFO/PLL synthesizer.
[snip]
> All the audio (baseband) stuff is can and is being done today with DSP,
>eliminating the analog audio phase shift networks.

Hi Don!

If I read you right, what you're suggesting here is a receiver with
instantaneous dynamic range of 120dB or more. I thought you were
going along great gun until you started digitizing stuff:

1. Phase noise aside, spurs generated in DDS VFOs like the AD9851 are
only 80db down at best (typically 70dB). Doesn't this mean that an
unwanted full strength signal at the input is likely to convert to an
equivalent spurious signal at 30-40db (above MDS)?

2. DSP can (at best) resolve only signals that can be digitized. At
16-bits A/D, that means a theoretical maximum dynamic range of 96db,
or 85-90db real world. You can AGC that around, but that's not
instantaneous dynamic range.

> Not a pipedream at all. At least not for homebrew!

I'm happy to be corrected; or at least load my pipe with what your
smokin' (hi)

73,
monty N5FC

2752. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6ba4$421f2ae0$LocalHost@default>
Source record: 72613
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Because of the conditions in which 'ducky-type' antennas
are used, the dimensions, eg, former diameter, height,
number of turns, wire gauge, dielectric constant and losses
of shrouding plastic material, the connector, are very
uncritical. Just as much depends on the dimensions of what
is held in the hand, is it sweaty ? the size of the case,
than on the antenna.

The resonant frequency and load on transmitter, or
impedance presented to receiver, vary all over the shop
depending on whether held at arms length, close to the head
or left lying around on a wooden table or on a metal car
bonnet.

Make one. Does it work ? Yes ? Fine ! Repeatability
- don't worry about it.! Make a million of them all just
like that and make yourself rich.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Charles Dumont <francis.dumont@jhuapl.edu> wrote in article
<36E6BC62.538819CA@jhuapl.edu>...
> Anyone know of a good, repeatble method to accurately
wind coils for
> ducky-type helical antennas? Thanks.
>
> Charles Dumont
> The Applied Physics Laboratory
> francis.dumont@jhuapl.edu
>
>
>

2753. Re: SN74LS390 as decade counter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36e7230f.909269266@news.online.no>
Source record: 72614

On Wed, 10 Mar 1999 00:08:53 -0500, Michael Black <blackm00@CAM.ORG>
wrote:

>Maybe it's because people have moved on to other things, but I am
>surprised that the 74LS390 has never gotten too much attention in hobbyist
>circles. It's a dual decade counter and in effect the equivalent of 2
>7490's.
> /2 /10
> _____ _______
> 3 | |4 5 6 7 |
> ------------------------------
> | Qa In Qb Qc Qd |
> | |
> 1 | |
> ---- |In |
> | |
> | |
> | reset |
> --------------------------------
> |2
>
>
> /2 /10
> _____ _______
> 13 | |12 11 10 9 |
> ------------------------------
> | Qa In Qb Qc Qd |
> | |
> 15| |
> ---- |In |
> | |
> | |
> | reset |
> --------------------------------
> 14|
>
>Vcc is of coursepin 16, and ground is pin 8.
>
>The only difference from a 7490, other than packaging, is that the
>reset input is not as complicated.
>
>
>As with the 7490, if you want a 50 perccent square wave, you can move the
>\/2 stage from the input to the output of the /5 stage. It will upset the

>BCD counting if you've got a readout connected to the BCD outputs, but is
>no problem when using it as a simple divider.
>
> Michael VE2BVW
>
>
tnx Michael
is MR tied to ground as with CD4017 or left open (or +5V) as with
SN7473?

73
Jan-Martin

PS. should have looked for 74HC390, but don't want to order just one
IC

LA8AK@ONLINE.no

2754. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <36e722c3.42626358@news.magiclink.com>
Source record: 72615

Keep in mind a DDS does not make ONE spur, it makes many, MANY spurs. Ilive in rural Idaho and an AD9850 makes lots of spurs I can hear on a receiver. Some are very close to the main carrier, but they can be tens of MHz away too. Selectivity in LO generator (not just a generic lowpass filter) and on the antenna helps.

A receiver spur is my own business. Someone who puts a -60 dBC transmitter on the air (remember, MANY spurs) is asking for a hassle from anyone who lives in the same, or nearby town 'cause those spurs will be all up and down the band.

DSP is instant gratification. Like a roll in the hay with someone you met in a bar, it is not necessarily something you want to live with (NOTE: no sexes were named, it works either way!). One QRP article says "if you hear a spur, tune to the same pitch on the other side of zero beat". Personally I don't care to make rigs that do this. Making a tracking PLL is time consuming., as is making a temperature compensated analog VFO. It's a choice you get to make: more work for better performance.

Analog Devices specifies a "close in" spur level and they are nowhere near 80 dB at this point. Quadrature outputs with SFDR of 80 dB would make a GREAT image-reject product detector.

Regards - Bill - W7AAZ

2755. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36E77B27.47ED@megsinet.net>
Source record: 72616

Bill Carver wrote:
> Keep in mind a DDS does not make ONE spur, it makes many, MANY spurs.

This is all shocking to me. I've never had time to play with DDS yet,
but the reading I've done has always suggested low distortion levels
(which suggests to me low spur amplitude) with a little filtering.
National Semi's AN-263 suggests 0.5% distortion at the DAC output, and
0.1% after filtering; I just have trouble visualizing 1/1000 of the total
amplitude, spread over several spurs, producing spurs only 60 dB down.

It seems so tempting to go direct to a sine wave; but it's beginning to
look easier to filter the square wave.

> Analog Devices specifies a "close in" spur level and they are nowhere
> near 80 dB at this point. Quadrature outputs with SFDR of 80 dB would
> make a GREAT image-reject product detector.

AN-263 suggests 6 dB improvement per additional bit; maybe that's the
big secret of the newer chip. (I can't find the reference I could swear
I saw to a new chip from A/D. I wanna play with that chip.)

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

2756. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36E7C795.7864518F@mwci.net>
Source record: 72617

Bill Carver wrote:

> Some are very close to the main carrier

How narrow does the tracking PLL have to be to clean up the close-in spurs?

Bill W0IYH

2757. Re: Homebrew duplexer uhf?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: "CHRISTOPHER W. (Chris) BOONE" <Cboone@Earthlink.Net>
Message-ID: <36E87684.75397FBF@Earthlink.Net>
Source record: 72618

Be advised the homebrew duplexers at the site below are NOT
Bandpass-reject but Bandreject only...(or notch!)...
MOST commercial two way sites NO LONGER allow such use..
they require the BandPass-Reject type to minimize out of
band RF noise and reduce the possibility of intermod...
UHF duplexers are much easier to build.....
but temperature stability is a big issue...use of Invar as
the main tuning component is a MUST...and you must know how
to use a lathe, etc......and BE CAREFUL....Invar is not a
"clean" metal to use...it does have health issues!

You can build a duplexer out of PC Board...look for an old QST on
PCB duplexers in the late 70s or early 80s...I have the article
available in TIF file format to send if interested....
just email me direct for the request...I will not post it
on the NG...

Chris
WB5ITT
in rptrs since 1974 at age 15

Dino AL7LZ wrote:
>
> Here's some info about using heliax for 6m operation; don't know if you can
> adapt it for UHF, but worth looking at.
>
> http://www.dallas.net/~jvpoll/dup6m/dup6m.html
>
> GL -- Dino KL0S/4

2758. Need Sams manual: President Grant 40 ch. SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: k5dh@raytheon.com
Message-ID: <7c8jic$54p@news.rsc.raytheon.com>
Source record: 72619
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.cb

I need the Sams manual for a President Grant 40 channel SSB CB.
I have access to a large commercial copier, so what I'd like to
do is borrow your original manual and copy it myself. I promise
to treat it with utmost care, return it to you promptly, and pay
the postage both ways. Our local library doesn't have any Sams
manuals, and I don't have the time to to the Dallas or Fort Worth
libraries, plus I'm not a member of either. Can someone help me
out here? I'd like to get this radio working properly so I can
convert it to 10 meters.

73,
Dean / K5DH

2759. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be6bcb$3e451340$661e3bcb@default>
Source record: 72620

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Paul Martin <pmartin@bright.net> wrote in article
<7c6l6rsfd1@cletus.bright.net>...
> I would like to change the old FET (a 3sk40) on my 2M front end to a
gaasfet
> (such as a BF981)

Paul
You could try one of the newer devices such as the Siemens CF739 (?)
This device is relatively cheap and has excellent noise performance
Try http://www.imaxx.net/~kd9jq for some excellent articles on homebrewing
- in particular some on GASFET amplifiers with matching network software

Richard

2760. Help Heathkit SB 104

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Oris <oris@dirtball.com>
Message-ID: <36E7DB64.8FB@dirtball.com>
Source record: 72621

Hello
Has anyone replaced the 2N6456 finals in the Heathkit SB104 with the MRF455A's. They come in the same case style. After looking at the MRF455A they have the same characteristics. The differance between MRF455 and the MRF455A (NTE334 and NTE333) is the case style. The price is the only other differance, and that is a big differance. Does anyone have a diagram of the MRF455 in push pull. I was looking at the Palomar 255 amp and it has two MRF455 what appears to be in push pull but the amp comes with no diagram. I would of bought the thing for the diagram. I would like to know what the base resistor to ground would be with the 455's in push pull,and what the resistor going accross the two push pull circuits would be. The base resistors going to ground with the 2N6456 are 10 ohms and the resistor connecting the two push pull curcuits is 100 ohms.
Thank you for reading
73 from
Oris
http://www.dirtball.com

2761. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Paul Martin <pmartin@bright.net>
Message-ID: <7c8p14$hl0$1@cletus.bright.net>
Source record: 72622

Thanks for the reply and I will check it out. I've also received a number of replies informing me that the BF981 is not a gaasfet. I recently read an article about replacing 3SK40's with BF981's to reduce noise and not finding the specs for either device I assumed it must be a gaasfet to acheive the results stated. I was wrong. I would like to try this mod on an Icom 245 to clean up the front end a little. The 245 uses 3SK40's for the preamp and mixer.

2762. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: MOstrowski <M_OstrowskiXXX@yahoo.com>
Message-ID: <7c8p6r$3tc$1@ink.msen.com>
Source record: 72623
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

You can use this link to search past issues of Popular Electronics and Electronics Now. They have published many articles on constructing frequency counters. You'll then just need to find a local library that has the issues or can get them through inter-library loan.

http://www.gernsback.com/noframe/pe/html/PEaisearch_nf.html

Michael Ostrowski - KC8GBM
Saline, MI
M_OstrowskiXXX@yahoo.com
(remove XXX when replying directly)

2763. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7c8sbd$9c7$1@nnrp1.dejanews.com>
Source record: 72624

In article <7c6te0$qg5$1@plutonium.btinternet.com>,
"David Cunningham" <D.L.C@btinternet.com> wrote:
> I need a circuit for a frequency counter, covering a range of about 500kHz
> to 30MHz, for amateur radio use, preferably using TTL i.c's.
> I intend to use it for measuring the frequencies of vfo's, local
> oscillators, etc. The circuit should preferably be as simple and inexpensive
> as possible. If anyone can help by suggesting a suitable circuit, please
> email me.

TTL is neither "simple" nor "inexpensive" - not in 1999, anyway.

Why not check out some of the microcontroller-based counters instead?

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2764. Re: SN74LS390 as decade counter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990311115440.16413A-100000@Stratus.CAM.ORG>
Source record: 72625

On Thu, 11 Mar 1999, J M Noeding wrote:

> tnx Michael
> is MR tied to ground as with CD4017 or left open (or +5V) as with
> SN7473?
>
> 73
> Jan-Martin
>
> PS. should have looked for 74HC390, but don't want to order just one
> IC
>
> LA8AK@ONLINE.no
>

Sorry. I meant to mention that the reset pin should be grounded for operation as a divider. Putting it high resets it.

The only databook that I have that has the '390 is in fact a CMOS databook.

Michael VE2BVW

2765. FA: Nice Collins S Line..,,,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36e7f91f.9695126@207.217.77.140>
Source record: 72626

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=75813344

2766. HTX-202 noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-11 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36E7FFB4.2781@eece.maine.edu>
Source record: 72627

I recently bought a used HTX-202, and it really hates being near computers. My FT-50 is not affected (if you turn the squelch off, the noise does change, the S-meter indicates more noise but "real" signals are not wiped out by the noise, and just turing the squelch on takes care of hte problem). I really haven't done extensive testing on it, but if I recall, it seemed to even lose strong signals (from a repeater) from just being in the same room as the computer, and it was affected by the computer some 20 feet from it! Is this radio known for this, or did I get a dud?

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

2767. Re: WTB: Beginners book on PLL frequency synthesis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36E9783C.504C@megsinet.net>
Source record: 72478

Zimmerman wrote:
> Motorola had a classic app note by Garth Nash that was
> about 50 pages on the theory & application of PLLs. It
> may be on their we site.

<http://mot2.mot-sps.com/books/apnotes/pdf/an535rev0a.pdf>

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

2768. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36E979B6.6170@megsinet.net>
Source record: 72479

Monty Northrup wrote:
> <clifto@megsinet.net> wrote:
> >This is all shocking to me. I've never had time to play with DDS yet,
> >but the reading I've done has always suggested low distortion levels
> >(which suggests to me low spur amplitude) with a little filtering.
> >National Semi's AN-263 suggests 0.5% distortion at the DAC output, and
> >0.1% after filtering; I just have trouble visualizing 1/1000 of the total
> >amplitude, spread over several spurs, producing spurs only 60 dB down.
>
> db (voltage/current) = 20 log V1/V2
>
> for 0.1% (0.001) distortion (distortion is just the ratio of unwanted
> signals to desirable signals), then,
>
> db = 20 log 0.001 = -60db

Talk about not making a simple connection...! Thanks. I'm gonna go
practice my Ohm's law calculations now. :-)

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

2769. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36E9807E.8951274E@teleport.com>
Source record: 72480

nicholas charles caruso wrote:
>
> One thing that noone's mentioned, but might be crucial, is that magnet wire
> is enamel coated SINGLE STRANDED copper wire. I bet you used wire which is
> multistranded. I know that multistranded wire has high losses at RF
> frequencies -- this may be why the circuits you built did not work.
>
> Of course, if you did use plastic insulated single strand wire, my theory's
> totally out the window.
>
> good luck, and 73
> nick caruso kb1dej

That's interesting, and something I've never encountered. Consider Belden coax types 9659 and 9240. Both are RG-59/U type cable, and are virtually identical except that 9659 has a stranded center conductor and 9240 has a solid copper-covered steel center conductor. The attenuation specifications of both are identical from 50-1000 MHz. (9240 loss is slightly greater at 10 MHz, and quite a bit greater at 1 MHz, presumably due to significant current penetrating into the steel.) This agrees with my experience that, at least well into UHF, there's no significant difference in loss between solid and stranded wire of equal outside diameter.

On what do you base your statement that multistrand wire has high losses at RF, and how does it explain the similarity between the coax cables?

Roy Lewallen, W7EL

2770. Variable Capacitor question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: DAB <daburroughs@hotmail.com>
Message-ID: <7cc141$bsr@news-central.tiac.net>
Source record: 72481
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

I removed the tuning (variable) capacitor from a broken walkman.
What values should I expect from this: pf., etc.??

Can I use this for a SW antenna tuner??

send replies to: daburroughs@hotmail.com
thanks!!
p.s. I used the variable capacitor from the RadioShack AM/Shortwave
radio kit to build my last antenna tuner- works OK (never used any
other, so no standard to compare to) What are the values on that one?? (the
instructions didn't say)

2771. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Oris <oris@dirtball.com>
Message-ID: <36E98795.6081@dirtball.com>
Source record: 72482

Don W6JL wrote:
>
> Oris wrote:
> >
> > Shawn Upton wrote:
> > >
> > > I tried building the radios on the Homebrew is gud 4 u websight a while
> > > back, but the radio never worked. I used some cheap wire that I had,
> > > who knows what kind it was (red and black, if that helps). Is there a
> > > huge difference between using magnet wire and other stuff? And if
> > > there is, is it because of insulation having a high dielectric?
> > >
> > > --
> > > **********
> > > Shawn Upton
> > > Electrical Engineering Student
> > > University of Maine at Orono
> > > webpage: http://www.eece.maine.edu/~supton/
> > > mail: supton@eece.maine.edu
> > > KB1CKT Tech Plus
> > > **********
> > From What I Understand.
> > Magnet wire is used inplace of copper for the reduction of harmonics
> > and self oscilations in amplifiers. Magnet wire is used instead of
> > copper in band switch operations and feeds to the parsidic chokes in
> > amplifiers. this helps the chokes from passing VHF frequencies.
> > I hope this helped you
> > 73 from Oris
> > http://www.dirtball.com
> Oris OM,
>
> You have confused magnet wire with nichrome wire. Magnet
> wire is simply copper wire with enamel or formvar or such insulation.
> For HF and low VHF, there is essentially no difference between using
> enamel insulation and bare or tinned copper when winding small
> inductors, antenna wire, etc.
> Nichrome wire has very high RF losses (high resistivity at RF),
> and is useful for making broadband parasitic suppressors in HF
> amplifiers, as Richard Measures has pointed out.
>
> 73,
> Don, W6JL
Yea OK thankyou Don
Oris

2772. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36E99287.70B9C4C0@certco.com>
Source record: 72483

Roy Lewallen wrote:

> On what do you base your statement that multistrand wire has high
> losses at RF, and how does it explain the similarity between the coax
> cables?

Received wisdom (!) about woven strapping having high loss at RF... I know I've read it somewhere, but sitting here I can't think of a reference.

I did not know there was any coax that had a stranded center conductor!

I should not have said "I know" -- at most I should have said "I have read". (hangs head in shame)

Needless to say, if you've got measurements and I've got hearsay, my money's on you.

On the litz wire front -- why is it not recommended for winding RF coils? Or am I wrong here too?
Perhaps there's simply no advantage to litz wire at high frequencies, rather than actuall lossiness.

73,
nick kb1dej

2773. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: tcrpe <tcrpe@yahoo.com>
Message-ID: <E5hG2.32155$YV6.16792@news2.giganews.com>
Source record: 72484
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I built a really simple and (relatively) inexpensive counter based upon the Harris/Intersil ICM7226DIPI.

The ARRL handbook had it several years ago.

TR

David Cunningham wrote in message <7c6te0$qg5$1@plutonium.btinternet.com>...
>I need a circuit for a frequency counter, covering a range of about 500kHz
>to 30MHz, for amateur radio use, preferably using TTL i.c's.
> I intend to use it for measuring the frequencies of vfo's, local
>oscillators, etc. The circuit should preferably be as simple and
inexpensive
>as possible. If anyone can help by suggesting a suitable circuit, please
>email me.
>Thanks.
>
>

2774. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: tcrpe <tcrpe@yahoo.com>
Message-ID: <P7hG2.32164$YV6.16890@news2.giganews.com>
Source record: 72485

Try to find an ECL 11C90 today. The Harris 7216 is a very cheap and simple
to use counter. The pre-scaler could be problematic, though if it's based
on the 11C90.

TR

DJ Wang (KE3ZB) wrote in message <36E84379.431A@mail.lehigh.edu>...
>Roland Burgan wrote:
>>
>> IMHO, the current prices for low-end freq.counters
>> is such, that it is cheaper to buy a new one, than to
>> get the parts and build one, not even counting one's time.
>> (If using one is the end product, and not the experience gained
>> building/designing it).
>
>I agree completely. I built a counter myself using a 7216 chip and an
>11C90 prescaler. It worked fine for a while until oneday one segment is
>dead on all the LEDs. The 7216 chip somehow developed a short in the pin
>driving this segment on the LED. Later, I found a handheld counter at a
>Radio Shack stand at a hamfest. It was brandnew and was on sale for only
>$39.95. It counts up to 1.3GHz with quite good a sensitivity. It has a
>LCD diaply (although not very high quality) with backlight and the metal
>case provides very good shielding. It even have a switch for NiCad
>battery charging.
>In my opinion, I would spend my time and money building other stuff like
>QRP rig or something more useful rather than building a counter or a
>DVM.
>
>
>DJ Wang, KE3ZB

2775. a few 1S5 tubes sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <36E963EF.7D1C@ns.atl.org>
Source record: 72486

Should have posted to boith at once.
Shame on me.

Anyone got a few good 1S5 tubes in the Junkbox?

I'll swap a copy of an article for a little battery
regen SW RX that uses a pair plus a ceramic
socket for the 1st stage tube plus a pair of
small variable caps that may be close enough to use
for tuning and BS. Caps do not have bearings but
hey, a little conductive grease and the BS
made small enough and it will be workable.

These are 1V low current and are supposed to run nicely
on a D cell for A and 4 or 5 x 9V batteries, stacked, for the B

-bob

2776. transverter plans anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Mike <va3hie@eagle.ca>
Message-ID: <36E9B1BC.D069515D@eagle.ca>
Source record: 72487

Does anyone have plans to build a transverter that operates 10m to 6m.
If you can help please e-mail me at va3hie@eagle.ca
Thanks in advance

2777. Needing Antenna Tech Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "Dr.Bad" <drbadboy@hotmail.com>
Message-ID: <dIiG2.403$c55.56@news15.ispnews.com>
Source record: 72488

First of all I'm new at this so I don't even know if I'm posting in the right newsgroup anyway hears my question. I'm wanting to try to build an outside magnetic antenna for my mobile cellular phone I have a magnet base that is 3" in dia.with the RG-58u coax on it (I think this is a CB antenna magnet) also I can get stainless steel welding rod where I work from size 3/16" to 1/8"and up to 36"long can these parts and coax be used to build an antenna if so could you please help me.
the reason I'm wanting to build an antenna is that Alltel wants to charge me $80. for an installation kit for each vehicle I need an antenna on which I think I could build my own for a lot less.
"THANKS IN ADVANCE FOR YOUR HELP"

2778. Re: Needing Antenna Tech Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36E9BE96.96B1EC97@erols.com>
Source record: 72489

Radio Shack sells a mag mount cellular antenna for $24.95

"Dr.Bad" wrote:

> First of all I'm new at this so I don't even know if I'm posting in the
> right newsgroup anyway hears my question. I'm wanting to try to build an
> outside magnetic antenna for my mobile cellular phone I have a magnet base
> that is 3" in dia.with the RG-58u coax on it (I think this is a CB antenna
> magnet) also I can get stainless steel welding rod where I work from size
> 3/16" to 1/8"and up to 36"long can these parts and coax be used to build an
> antenna if so could you please help me.
> the reason I'm wanting to build an antenna is that Alltel wants to charge me
> $80. for an installation kit for each vehicle I need an antenna on which I
> think I could build my own for a lot less.
> "THANKS IN ADVANCE FOR YOUR HELP"

2779. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36E9C1D1.F79FC1A1@teleport.com>
Source record: 72490

nicholas charles caruso wrote:
>. . .

> I did not know there was any coax that had a stranded center conductor!

Many coax cable types do. It makes the cable a lot more flexible.

> . . .

> Needless to say, if you've got measurements and I've got hearsay, my money's on
> you.

Spoken like a true man of science. We all should strive for this attitude.

> On the litz wire front -- why is it not recommended for winding RF coils? Or am
> I wrong here too?
> Perhaps there's simply no advantage to litz wire at high frequencies, rather than
> actuall lossiness.

Litz wire is a different animal than ordinary stranded wire. In Litz wire, the strands are individually insulated from each other, and at least in some cases, they're interwoven in a random-seeming pattern. This has some advantages at low frequencies (MF and below), where the currents can follow individual strands. At higher frequencies, the current just flows on the outside of the whole bundle, so it doesn't make much difference whether or not the strands are individually insulated. At these frequencies, the interweaving might cause more loss, as the current has to keep traversing from one strand to another to stay on the outside of the bundle.

It's true that braided coax shielding causes increased loss at very high frequencies. I don't know where this first becomes noticeable, but suspect it's no lower than UHF. (If Tom Bruhns is reading, maybe he'll comment. He should know.) Just the other day I had occasion to measure the loss in some RG-58 and some 0.141" semi-rigid (solid copper shield) coax at 6 GHz, and the RG-58 was much lossier, despite its larger size. I'm certain this was primarily due to the braided shield. And I wouldn't be surprised if stranded wire has more loss or at least some interesting impedance effects at frequencies where the twist period is a sizeable fraction of a wavelength. This is well into the microwave region for most wire, however.

Roy Lewallen, W7EL

2780. WTB:BAND SWITCH FOR AMPLIFIER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: David J Bryden <dan.bryden@deltanet.com>
Message-ID: <36E9D4A8.31EE87B5@deltanet.com>
Source record: 72491

anone know a source for bandswitches for 3-500z amplifier. I want to add the WARC bands to an old amplifier by replacing the bandswitch. thanks
Dan

2781. Re: ABSOLUTELY FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "MIKE (707)" <cobra2@gisco.net>
Message-ID: <36e9dce1.0@news.gisco.net>
Source record: 72492
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

No thanks... I've already seen my radio naked with the cover off!
chakazulu@axu.net wrote in message <7c4bmn$a2f$119@nslave1.tin.it>...
>
>100% ANONYMOUS, NO CREDIT CARD, NO SUBSCRIPTION, NO PASSWORD, NO CENSURING
>
>Italian
>www.thirdsex.com
>
>English
>www.xxx1on1.com
>

2782. Optically coupled regenerative receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Jim McEwen <starsekr@nctimes.net>
Message-ID: <36EA1116.E99@nctimes.net>
Source record: 72493

In the June '98 QST there is a neat looking idea for a regen receiver by Dan Wissell, N1BYT. I was surfing the net and came upon someone with a kit to construct this, but I've lost the URL. Anyone know who/where this kit is? I thought it was Dan's Parts (http://www.fix.net/dans.html) but its not there now.

TIA & 73's
Jim KA6TPR

2783. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36E85A00.FDEF6CD@worldnet.att.net>
Source record: 72550

Dynamic range is, loosely defined, the ratio of the strongest signal that can be handled (everyone has their own idea of what that means) to the weakest signal that can be recovered. Putting an attenuator in doesn't improve dynamic range, it merely shifts everything up x dB. The only two things that can improve dynamic range are better overload performance, or better weak signal performance. If either of these comes at the expense of the other, dynamic range hasn't been improved.

Don W6JL wrote:

> If you switched in a 20 dBattenuator in the front end, you increase the
> receiver's dynamic range
> by 20 dB, and reduce the MDS (minimum detectable signal) by the same
> amount. So now you could only hear a 3 uV signal (still above your QRN
> level on 40M?).

2784. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6c73$17e253e0$f4e7abc3@default>
Source record: 72551
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

The transmit RF power anplifier is designed to operate satisfactorily and withstand all possible adverse conditions due to very near proximity, or not, of foreign objects including the user. There's a huge safety margin to ensure reliable communications with hand-held gadgets.

Shifts in dimensions and materials due to normal manufacturing variability have an insignificant effect compared with variations due to the environment when in use.

In short, manufacturers couldn't obtain a non-repeatable design even if they tried. The RF PA designer gets the credit for equipment tolerant to abuse - not the antenna manufacturer.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

2785. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Oris <oris@dirtball.com>
Message-ID: <36E8839B.24D4@dirtball.com>
Source record: 72552

Bob Lewis wrote:
>
> Magnet wire is simple copper wire with an insulated enamel coating. It's
> probably called magnet wire because it was originally used to wind
> electro-magnets. If you wind RF coils with copper wire using a different
> insulation you will likely end up with a different inductance than what was
> intended due to the different dielectric properties of the insulation and
> different turns spacing due to the added thickness of the insulation. How
> much difference this will make depends on the circuit in which it is used.
>
> Oris wrote:
>
> > Shawn Upton wrote:
> > >
> > > I tried building the radios on the Homebrew is gud 4 u websight a while
> > > back, but the radio never worked. I used some cheap wire that I had,
> > > who knows what kind it was (red and black, if that helps). Is there a
> > > huge difference between using magnet wire and other stuff? And if
> > > there is, is it because of insulation having a high dielectric?
> > >
> > > --
> > > **********
> > > Shawn Upton
> > > Electrical Engineering Student
> > > University of Maine at Orono
> > > webpage: http://www.eece.maine.edu/~supton/
> > > mail: supton@eece.maine.edu
> > > KB1CKT Tech Plus
> > > **********
> > From What I Understand.
> > Magnet wire is used inplace of copper for the reduction of harmonics
> > and self oscilations in amplifiers. Magnet wire is used instead of
> > copper in band switch operations and feeds to the parsidic chokes in
> > amplifiers. this helps the chokes from passing VHF frequencies.
> > I hope this helped you
> > 73 from Oris
> > http://www.dirtball.com
OOPS then what kind of wire did I discribe?
Oris

2786. Re: Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36e88fd1.1703661@netnews.worldnet.att.net>
Source record: 72553

On Thu, 11 Mar 1999 10:55:37 +0100, Harry lythall <no.one@no.where>
wrote:

>Harry's Homebrew Homepage has grown and I am now getting over 330
>visitors every day. Unfortunately I have
>had to hide my E-mail address due to all the stupid questions I have
>been receiving. The latest addition is a PCB
>VHF antenna that can be duplicated with precision. It was first needed
>for a Commutated Antenna Direction
>Finding system that I built several years ago. I may well post the rest
>of the homebrew CADF article if there is any
>interest.

Harry,

Yes, please do post the CADF article! Is that a doppler unit?

Dave

P.S. I really like your site - well done! D.

2787. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e890e6.720569@news.io.com>
Source record: 72554

On Thu, 11 Mar 1999 02:13:27 -0600, "Clifton T. Sharp Jr."
<clifto@megsinet.net> wrote:

>Bill Carver wrote:
[snip]
>This is all shocking to me. I've never had time to play with DDS yet,
>but the reading I've done has always suggested low distortion levels
>(which suggests to me low spur amplitude) with a little filtering.
>National Semi's AN-263 suggests 0.5% distortion at the DAC output, and
>0.1% after filtering; I just have trouble visualizing 1/1000 of the total
>amplitude, spread over several spurs, producing spurs only 60 dB down.

db (voltage/current) = 20 log V1/V2

for 0.1% (0.001) distortion (distortion is just the ratio of unwanted
signals to desirable signals), then,

db = 20 log 0.001 = -60db

Not bad for music synthesis, but not too great for weak signal
detection in a wide dynamic-range ham receiver.

monty, N5FC

2788. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e89326.1296698@news.io.com>
Source record: 72555

On Tue, 9 Mar 1999 14:57:34 -0500, Zorn Jr Robert L
<zorn@bucknell.edu> wrote:

>
>> At -60 dB spurious response, the
>> performance of the receiver using DDS approaches the published specs of many
>> commercial pieces of equipment.
>
>Would the same be true for transmitters?
>In my QRP transmitter design, I want the oscillator to run from
>3 to 30 MHz but it would be asking a lot from a traditional PLL circuit.
>I had planned on using a MC14151 PLL and MC1648 VCO.
>The AD9850 seemed to be much better for wide band.
>Now I am confused.
>My amplifier circuit will be tuned but I will be playing with
>broadband designs. I don't expect to exceed 25 Watts CW.

Hi Zorn!

IMHO, DDS's are excellent for QRP transmitter designs. FCC Rules
[97.307(d)] state that for transmitted signals below 30 MHz, spurious
responses must be at least 40 db down, but they relax that to 30 db
down for output powers of 5 watts or less.

These are very reasonable goals. A 5 Watt QRP transmitter with
spurious responses 30 dB down has 5mW of spurious output. At 60 db
down, 5 micro-watts. [10 log P1/P2] Unlicensed transmitters can
operate with 15mW (don't quote me). There are tens of thousands of
incidental radiating devices with these kinds of transmitting levels,
contributing to a general rise in broadband noise floor, especially in
urban areas. And the average class B computing device probably is
somewhere around 1 mw of lotsa spurs... of course, you don't hook your
computer up to an antenna... hi... unless you consider the power line
an antenna ;-\ I hate to think what an average TV radiates, but you
can frequently hear in it the HF bands in metropolitan areas.

Keep in mind that the FCC is talking about aggregate levels of
spurious emissions, not a single spur, while the DDS manufacturer's
are touting the levels of any one single spur. Nonetheless, for QRP
transmitting, your AD9850 will do admirably, with plenty of spurious
"margin", and no harm will come of it.

>The 9850 data shows an AM modulation method as well. Would this
>design be good enough for Amateur band use?

I'll leave this to someone else...

73,
monty, N5FC

2789. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e898b1.2715910@news.io.com>
Source record: 72556

On Thu, 11 Mar 1999 12:39:39 -0800, Don W6JL <W6JL@ixpres.com> wrote:

>Jim OM,
>
> Dynamic range seems to be one of those favorite words lately. Sort of
>like "halogen" and "laser" was to the average consumer in the '80's.
>You might ask yourself what good is 150 dB of dynamic range? Do you
>live next door to a 100KW transmitter? I would expect that you are
>unlikely to ever detect any difference in daily use between a receiver
>with 110 dB of dynamic range, and 150 dB.
> I almost never encounter signals over 10 mV (80 dBuV) at the receiver
>input. Do you? That is 40 dB over S9, assuming 100uV RMS = S9. The
>difference of an s9+40dB signal and a barely detectable signal at say
>0.3 uV on 40M CW (is your QRN level less than 0.3 uV on 40M?), is
>[20*Log(10mv/0.3uV)] or about 90 dB.

The point is very well taken, Don; it's hard to imagine anyone would need 150dB dynamic range in a ham application, but I could be wrong. But I will take issue with your figures. In a metropolitan area in close proximity to other ham stations (and sometimes out-of-band stations apply also, since many receivers have fairly broad front end circuitry), it's not unheard of to see 0.1 - 1.0 V of RF at the receiver input. In a rural area, your cheapo Direct Conversion receiver with 75 db of dynamic range will do just fine 99.9% of the time.

> If you switched in a 20 dB
>attenuator in the front end, you increase the receiver's dynamic range
>by 20 dB, and reduce the MDS (minimum detectable signal) by the same
>amount. So now you could only hear a 3 uV signal (still above your QRN
>level on 40M?).

This is a common misunderstanding. Lets take an example. Without the attenuator, lets say the largest signal your receiver will handle before spurious effects or overload takes place is 0.1V (for arguments sake), and it's MDS (Minimum Discernable Signal) is 1 uV. This is an instantaneous dynamic range of 100db. [20 log V1/V2]

Now lets put the 20 db attenuator in. -20 db represents a voltage ratio of 1/10. Now overload takes place in the presence of a 1.0 V signal, but the MDS has also been raised by that ratio, to 10uV. This is an instantaneous dynamic range of 100db. [20 log V1/V2]. The dynamic range hasn't changed.

Then what's the sense of having an attenuator? Well, if the signal you were trying to copy was 10uV, and there was simultaneously a

nearby signal of 0.5V, that signal might cause the receiver to overload, typically causing some kind of distortion. If you then apply 20 db attenuation, the desired input signal is attenuated to the equivalent of 1 uV, and the nearby strong signal to 0.05V, below the level that causes distortion. I find this most helpful on 40M at night, when the euro BC stations are SOOoooo loud. But for weak signal work, this is no fix at all, because the attenuator raises the equivalent MDS, making weak signals disappear.

> The real need for dynamic range is when attempting to copy very weak
>signals in the presence of nearby VERY STRONG signals.

Well said!

>While I find
>myself copying weak signals a lot (I'm a CW op), I almost never do it in
>the presence of 40 dB over 9 adjacent signals. Your QTH and operating
>style may vary...

I guess you never work 40M novice band at night... I do, on occasion.

And in Europe, watch out!

73 all,
monty, N5FC

2790. Silicon Valley CA hamfest at Foothills College Saturday morning Mar 13

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseF8Gu46.KJC@netcom.com>
Source record: 72557

First hamfest at Foothills I believe will be this Saturday the 13th. Bring
8 quarters for parking fee. Otherwise free for buyers.

Foothills College is just off of I280 in Los Altos.

2791. Re: Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e8a149.4915447@news.io.com>
Source record: 72558

On Thu, 11 Mar 1999 10:55:37 +0100, Harry lythall <no.one@no.where>
wrote:

>http://sm0vpo.8m.com/ (still under construction)
>http://www.geocities.com/SiliconValley/3569/
>http://hem2.passagen.se/sm0vpo.
>http://members.xoom.com/sm0vpo.

Harry,

Your homebrew site is the best... I've watched it for some time now,
and just felt it was time I let you know hoiw much I appreciate it.
You're a great ambassador for amateur radio. Keep up the good work!

73,
monty, N5FC

2792. Commercial HF AMP $350 shipped

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <36E8BF4E.6BA0@ix.netcom.com>
Source record: 72559
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Price reduction.......Must sell
I have a beautifully built Sailor HF AMP. This one has two RCA 8122
ceramics tetrodes which checked out full output. 1.8MHz to 30MHz
All the tuning is motorized and the band settings are preset manually
Built under high standards, rackmount, very high quality
components including a large cooling fan. It was removed and fully
functional from a cruise ship that went to solid state. This amp puts
out about 800watts with very little input. It has a built on solid
state pre-driver stage which can be bypassed if need to. It's complete
and in excellent condition. It requires a power supply
No manual but can be found at marine electronics shops.
Sailor is still the leader in Marine and satelitte communication
networks. I will send jpgs by request to anyone interested. I want
$350+shipped for it. The tubes alone cost that! Roughly 45 lbs
73 Chris VE3NGW/W4 Florida

2793. Re: xtals for 14MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Harry lythall <a@sm0vpo.8m.com.spam>
Message-ID: <36E90AD2.49ED682C@sm0vpo.8m.com.spam>
Source record: 72560

I know that I should not be pushing this one, but Ericsson Components AB, Upplands vasby, Sweden have 14.000MHz crystals as a stock item for about US$3 per piece plus postage. Dunno about postage price though. I know because i jave just bought a couple myself for testing, since I am also seeking 14.100MHz crystals. If you have no joy and decide to have some made then perhaps we could put in a joint order (it's a lot cheaper to order several than just one) together?

If you want to "go it alone" with getting them ground then "Quartslab" in Erith, Kent, England will make crystals to your spec. I cannot remember the on-line URL but you can find it from the "suppliers" chapter in my homepage (http://hem2.passagen.se/sm0vpo).

best regards Harry
(remove ".spam" if replying to me personally)

Hrafnkell Eiriksson wrote:

> Could anyone point me to a company (with a webpage :)
> that sells xtals for use on the 20m band. I'd like to find someone
> to sell me a 14.1MHz xtal or a 14.0MHz. I'll be using them to build
> a VXO.
>
> Hrafnkell

2794. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36E91B53.A1A8D362@home.com>
Source record: 72561
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

If you really have to build one, the circuit in the ARRL handbook works and it shouldn't cost more than $20 to put together. You can learn something about display drivers etc. by looking at the circuit.

I have a "formerly" expensive HP model that I purchased used, and a radio shack portable model. Interesting, the RS model will interface a PC and it was about $80 when I bought it and they are a lot cheaper now. It's a matter of whether you want to invest time or money.

David Cunningham wrote:

> I need a circuit for a frequency counter, covering a range of about 500kHz
> to 30MHz, for amateur radio use, preferably using TTL i.c's.
> I intend to use it for measuring the frequencies of vfo's, local
> oscillators, etc. The circuit should preferably be as simple and inexpensive
> as possible. If anyone can help by suggesting a suitable circuit, please
> email me.
> Thanks.

2795. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be6c8e$c1fb99c0$0d1e3bcb@default>
Source record: 72562

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Paul

I have no way of measuring noise figure so I have to assume that a design works in practice as it is designed in theory. I designed a preamp with the CF739 and the software mentioned above - it seemed to work as predicted with regard to gain and output. In this case I was aiming for good headroom (+12 dBm out) for a repeater receiver. I couldnt find a source of BF981s they are out of production now so I understand. The CF739 (?) is a SM device and quite small but I have found these are easier than thru hole now.

Richard

2796. Re: Homemade Duplexer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: wa5kbq@hotmail.com
Message-ID: <36ea2365.4952115@news.flash.net>
Source record: 72563

http://www.dallas.net/~jvpoll/dup6m/dup6m.html

Larry

On Thu, 4 Mar 1999 20:30:27 -0600, "Christopher Zeman, KB9RHA"
<zman.SCREW.YOU.SPAMMERS@iwc.net> wrote:

>I was on a site a few months back. I believe the title was
>"Jim's Homemade Duplexers". The gentleman who owns the site constructs 6
>meter duplexers out of heliax cable. I would like to find this site again
>and can't seem to locate it on the search engines. If you are familiar with
>the site I am referring to, please post or e-mail the link to me.
>
>Thank you,
>Christopher Zeman, KB9RHA
>zman@iwc.net
>
>

2797. Adjusting PK-232 LED display...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Rick Mintz <Rmintz@Frontiernet.net>
Message-ID: <7cbdjsqfg4@node17.cwnet.frontiernet.net>
Source record: 72564

Adjusting PK-232 LED display...

Hi.

I am looking for the method of adjusting the LED display on
my PK-232.

For contesting I will be using a HAL P38, just installed,
(gives much better performance). But..... The onscreen
tuning bars are much more difficult to align quickly than
the PK-232 LED display. So I am feeding audio to the PK for
tuning purposes only.

The PK-232 display shows the 'on frequency' position about
20-25 hz higher than the HAL P38. Want to adjust the PK
display to match. Any gurus out there that can tell me how
to move the PK display frequency center?

Thanks.

--

Rick Mintz, W1TY
Rochester (NY) DX Association
Rmintz@Frontiernet.net or W1TY@arrl.net

2798. FS: Radios, parts & accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <36e8fc2a.1073646@news.earthlink.net>
Source record: 72565
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

For sale - add shipping:

EICO 753 transceiver for 80, 40 and 20m SSB, AM, CW. Excellent
appearance.
Includes EICO 752 AC power supply for 120 V AC operation, all
opriginal manuals etc. Needs two 7199 tubes available for $9.00 each
and a small replacement speaker for the power supply to get it on the
air. $150.00

Heath DX-60 with HG-10B with manuals - excellent shape. 90 Watts CW
and 60
Watts AM on 80, 40, 20, 15 and 10m. A few nicks on top cover of DX 60.
Front panel is very good. VFO looks like new. With all cables etc.
Will sell for $175.00 or best offer.

Small HF Transmitter with 6146 final and Internal Revenue 5735 kHz
crystal, with four small Thordarson transformers, apparently using
Screen
modulation. Missing outer case, but chassis intact and looks to be in
good
shape. Plug-in coil final and has antenna relay, typical RFCs etc. No
manual, untested
Will sell for only $20.00 as a parts / historical rig.

Lafayette 99-2503 Grid Dip Meter - brand new in box and unused!
All original. Great little GDO, with all coils, case etc. $40.00

DRAKE TV-1000-LP Low Pass Filter 30 MHz 1000 Watts $27.00

B&W T-R Switch, 110V AC using 6AU6 tube and SO-239 connectors. Will
sell for $40.00

2 posn. antenna switch with SO-239 connectors $15.00

Wall transformer, 120V AC to 14 V DC 500 mA - $6.00

Yaesu FT-840 HF transceiver. Includes original manual and microphone,
DC cable etc. VLF through 30 MHz with 100 Memories. SSB, AM, CW, RTTY
etc. 100 Watts output. Has two additional filters worth $120 each,
for wide AM and narrow CW. The 6kHz AM filter is essential for
listening to Shortwave broadcasts, hams on AM etc. All band tranmsmit
enabled. In mint condition.
Will sell for $600.00

National TMK-50 Variable capacitor New In Box $15.00

Plate variable transmitting capacitors:
50 pF 800V Hammarlund 1.5" deep, 1/4" shaft, clean used $5.00
140 pF 1000V 1.5" deep 1/4" shaft New, unused $8.00
200 pF 1000V 3" deep 1/4" shaft clean used $6.00
250 pF 1000V 2" deep 1/4" shaft clean used $7.00
400 pF 800V Brass plate variable KS-8221, 3" deep used clean $5.00

250 pF 2500 V transmitting capacitor 154-9 by E.F. Johnson
1/4" shaft measures 2" X 2" X 6" Brand New $20.00

Loading Capacitor - 5 Section, each 400 pF for a total of 2000 pF.
Great for transmitter or linear amplifier. 3" X 2.5" X 6.0" deep.
3/8 diameter shaft. Brand new and unused. $18.00

Loading Capacitor - 2 section, each 500 pF. With 3/8 in. diameter
shaft $5.00

Modulation Transformer UTC Model S21 unused, classic. $50.00

Collins 20 Watt Modulation Transformer, unused classic. $40.00

Thordarson transformer - THORDARSON D161916
power transformer 120 V AC primary potted, square - has two
secondaries:
Sec 1: 5.78 H, C.T. 48 ohms - gives 700V c.t. at 250 mA (24 + 24 ohms
DC)
Sec 2: 23.6 H, 605 ohms - gives 1580V at 20 mA (605 ohms DC)
Approximately 4.5" X 4.5" x 4" Good for about a 180-200 Watt plate
supply.
Will sell for $20.00

UTC choke Model PA104 $15.00
This Inductor is a 18 Henry job with a tap at 14.4 Henries.
99 ohms series resistance It's large - like 5" X 5" x 4"
Good for a choke input filter on a nice sized 200 Watt plate supply.
Will sell for $20.00

Fujitsu Color Printer Model DX-2300, Low miles(!)
This is a dot matrix prinbter, but made very well, and in excellent
condition. Uses tractor feed or single sheet plain paper.
With manual - only $25.00

Books:

1981 ARRL Handbook, excellent condition ONLY $8.00

Television For Radiomen, by Ed Noll. 340 pages, illustrated
1962. Front cover torn a little but otherwise very good $3.00

TV SICK? Service your own TV, by Belmont TV Co.
33 pages, plus sale flyer, 1975 MINT $2.00

METHODS OF TEACHING SHOP AND TECHNICAL SUBJECTS by Leighbody & Kidd
College text, 201 pages, excellent condition $3.00

All four books for $13.00

COMING SOON: More Parts for the Glowbug Homebrewer!!

2799. Re: FS: Radios, parts & accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "G.Singer" <deltacom@bwn.net>
Message-ID: <36E93E94.3026F345@bwn.net>
Source record: 72566
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Will you take $10.00 for the antenna switch? I'll cover shipping with my
FedEx account.
Thanks,
Gerry

Cedric wrote:
>
> For sale - add shipping:
>
> EICO 753 transceiver for 80, 40 and 20m SSB, AM, CW. Excellent
> appearance.
> Includes EICO 752 AC power supply for 120 V AC operation, all
> opriginal manuals etc. Needs two 7199 tubes available for $9.00 each
> and a small replacement speaker for the power supply to get it on the
> air. $150.00
>
> Heath DX-60 with HG-10B with manuals - excellent shape. 90 Watts CW
> and 60
> Watts AM on 80, 40, 20, 15 and 10m. A few nicks on top cover of DX 60.
> Front panel is very good. VFO looks like new. With all cables etc.
> Will sell for $175.00 or best offer.
>
> Small HF Transmitter with 6146 final and Internal Revenue 5735 kHz
> crystal, with four small Thordarson transformers, apparently using
> Screen
> modulation. Missing outer case, but chassis intact and looks to be in
> good
> shape. Plug-in coil final and has antenna relay, typical RFCs etc. No
> manual, untested
> Will sell for only $20.00 as a parts / historical rig.
>
> Lafayette 99-2503 Grid Dip Meter - brand new in box and unused!
> All original. Great little GDO, with all coils, case etc. $40.00
>
> DRAKE TV-1000-LP Low Pass Filter 30 MHz 1000 Watts $27.00
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> B&W T-R Switch, 110V AC using 6AU6 tube and SO-239 connectors. Will
> sell for $40.00
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> 2 posn. antenna switch with SO-239 connectors $15.00
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>

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> DC cable etc. VLF through 30 MHz with 100 Memories. SSB, AM, CW, RTTY
> etc. 100 Watts output. Has two additional filters worth $120 each,
> for wide AM and narrow CW. The 6kHz AM filter is essential for
> listening to Shortwave broadcasts, hams on AM etc. All band tranmsmit
> enabled. In mint condition.
> Will sell for $600.00
>
> National TMK-50 Variable capacitor New In Box $15.00
>
> Plate variable transmitting capacitors:
> 50 pF 800V Hammarlund 1.5" deep, 1/4" shaft, clean used $5.00
> 140 pF 1000V 1.5" deep 1/4" shaft New, unused $8.00
> 200 pF 1000V 3" deep 1/4" shaft clean used $6.00
> 250 pF 1000V 2" deep 1/4" shaft clean used $7.00
> 400 pF 800V Brass plate variable KS-8221, 3" deep used clean $5.00
>
> 250 pF 2500 V transmitting capacitor 154-9 by E.F. Johnson
> 1/4" shaft measures 2" X 2" X 6" Brand New $20.00
>
> Loading Capacitor - 5 Section, each 400 pF for a total of 2000 pF.
> Great for transmitter or linear amplifier. 3" X 2.5" X 6.0" deep.
> 3/8 diameter shaft. Brand new and unused. $18.00
>
> Loading Capacitor - 2 section, each 500 pF. With 3/8 in. diameter
> shaft $5.00
>
> Modulation Transformer UTC Model S21 unused, classic. $50.00
>
> Collins 20 Watt Modulation Transformer, unused classic. $40.00
>
> Thordarson transformer - THORDARSON D161916
> power transformer 120 V AC primary potted, square - has two
> secondaries:
> Sec 1: 5.78 H, C.T. 48 ohms - gives 700V c.t. at 250 mA (24 + 24 ohms
> DC)
> Sec 2: 23.6 H, 605 ohms - gives 1580V at 20 mA (605 ohms DC)
> Approximately 4.5" X 4.5" x 4" Good for about a 180-200 Watt plate
> supply.
> Will sell for $20.00
>
> UTC choke Model PA104 $15.00
> This Inductor is a 18 Henry job with a tap at 14.4 Henries.
> 99 ohms series resistance It's large - like 5" X 5" x 4"
> Good for a choke input filter on a nice sized 200 Watt plate supply.
> Will sell for $20.00
>
> Fujitsu Color Printer Model DX-2300, Low miles(!)
> This is a dot matrix prinbter, but made very well, and in excellent
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> With manual - only $25.00
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> Books:
>
> 1981 ARRL Handbook, excellent condition ONLY $8.00
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> TV SICK? Service your own TV, by Belmont TV Co.
> 33 pages, plus sale flyer, 1975 MINT $2.00
>
> METHODS OF TEACHING SHOP AND TECHNICAL SUBJECTS by Leighbody & Kidd
> College text, 201 pages, excellent condition $3.00
>
> All four books for $13.00
>
> COMING SOON: More Parts for the Glowbug Homebrewer!!

--

Gerry Singer KC0CAT
Loc:40 09 38N 103 12 50W Grid Square DN80jd N/E Colorado
Pro 2042 W/Optocom 535 MX7000 Pro67 Pro2004 DX390 W/MFJ 784
R5000 W/MFJ VersaTunerII Azden PCS2000 HTX-242 Alinco DJ191
Icom H16 and U16 HyGain VIII TRC 499
.....and lots of antennas!
Scanner,Weather and Ham Radio web site
http://www.geocities.com/CapeCanaveral/Lab/5137

2800. List #1 = 3CX300A7 +

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990312111856.08839.00000089@ng115.aol.com>
Source record: 72567

List #1= 3CX3000A7 tube,
Socket, Filament transformer 7.5 volts @ 51 Amps
Plate Transformer 2.7 Amps @ 5000 volts
HV Caps, Blower, Meters, Tank Coils
Cabinet to build a large amplifier.
I will sale all parts for $2,000.00 plus shipping.

2801. F.S. 500 Watt E cores for switched mode power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <36E94378.49865688@sympatico.ca>
Source record: 72568

Hi,

I have a case of Philips/Ferroxcube E cores that have 500 W ratings. End plates and hardware included but no plastic bobbin.

I am asking $5 for each core set.

Email for data sheet.

John VE3PCN

2802. Re: xtals for 14MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Jack Hardin <jhardin@hal-pc.org>
Message-ID: <01be6ca7$1efba8a0$6f82b4ce@jhardin>
Source record: 72569

Try International Crystals at
http://www.icmfg.com

Jack, KD5EDO

>>>Hrafnkell Eiriksson <hkelle@rhi.hi.is> wrote in article
> Hi
>
> Could anyone point me to a company (with a webpage :)
> that sells xtals for use on the 20m band. I'd like to find someone
> to sell me a 14.1MHz xtal or a 14.0MHz. I'll be using them to build
> a VXO.
>
> TIA
> Hrafnkell

2803. Got Heath?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: marijimc@axs.net
Message-ID: <7cbk81nbl1@nnrp1.dejanews.com>
Source record: 72570

Looking for some Heath - HW-5400 for parts, SS-9000 complete. Got one?
Wanna' sell? Or trade? Thanks, Jim

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2804. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: bob@bnbcomp.net
Message-ID: <7cbtob$4q$1@nnrp1.dejanews.com>
Source record: 72571
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <36E6BC62.538819CA@jhuapl.edu>,
Charles Dumont <francis.dumont@jhuapl.edu> wrote:
> Anyone know of a good, repeatble method to accurately wind coils for
> ducky-type helical antennas? Thanks.
>
> Charles Dumont
> The Applied Physics Laboratory
> francis.dumont@jhuapl.edu
>
>

Charles -
I know what I use - a metal lathe. You need one with a lead screw and change gears that allow you to cut threads in a piece of metal. Then make a simple tensioning rig for the toolpost, and chuck up the form that you are winding the coil on in the lathe. Set up the lathe to cut the number of threads per inch that you want turns per inch (or cm, etc) in the coil and fasten the end of the wire to the form. Make sure the lead screw is feeding the right direction. Then setup your tensioning gadget (several easy ways to do this) and feed the wire thru it. Turn on lathe. Wind wire on to form until the length of the winding is what you want. Stop lathe.

For tension, you can use a pair of rubber wheels and a spring to pull them together, or any of a number of other things.

I realize this will make little sense unless you are familiar with machine tools, but a visit to any local machine shop will get you an expanation of my message.

If you do lots of coils, probably worth getting a small lathe of your own.

Best 73's
Bob
KQ6ZA

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2805. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <36E96DF0.27D2@ixpres.com>
Source record: 72572

Rocci OM,

I stand corrected; I was really referring to the overload point of the
receiver being increased if you add attenuation at the input. I realize
the dynamic range of the receiver has not changed. However, many times
in a strong-signal environment, it is an acceptable tradeoff to increase
max signal handling ability by shifting the dynamic range of the
receiver upward, using an attenuator. At least, in the rare situations
I have encounted it, it works well for me.

73,
Don, W6JL

Rocci wrote:
>
> Dynamic range is, loosely defined, the ratio of the strongest signal that can be
> handled (everyone has their own idea of what that means) to the weakest signal
> that can be recovered. Putting an attenuator in doesn't improve dynamic range, it
> merely shifts everything up x dB. The only two things that can improve dynamic
> range are better overload performance, or better weak signal performance. If
> either of these comes at the expense of the other, dynamic range hasn't been
> improved.
>
> Don W6JL wrote:
>
> > If you switched in a 20 dBattenuator in the front end, you increase the
> > receiver's dynamic range
> > by 20 dB, and reduce the MDS (minimum detectable signal) by the same
> > amount. So now you could only hear a 3 uV signal (still above your QRN
> > level on 40M?).

2806. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <36E96D0C.1EA9@ixpres.com>
Source record: 72573

Oris wrote:
>
> Shawn Upton wrote:
> >
> > I tried building the radios on the Homebrew is gud 4 u websight a while
> > back, but the radio never worked. I used some cheap wire that I had,
> > who knows what kind it was (red and black, if that helps). Is there a
> > huge difference between using magnet wire and other stuff? And if
> > there is, is it because of insulation having a high dielectric?
> >
> > --
> > **********
> > Shawn Upton
> > Electrical Engineering Student
> > University of Maine at Orono
> > webpage: http://www.eece.maine.edu/~supton/
> > mail: supton@eece.maine.edu
> > KB1CKT Tech Plus
> > **********
> From What I Understand.
> Magnet wire is used inplace of copper for the reduction of harmonics
> and self oscilations in amplifiers. Magnet wire is used instead of
> copper in band switch operations and feeds to the parsidic chokes in
> amplifiers. this helps the chokes from passing VHF frequencies.
> I hope this helped you
> 73 from Oris
> http://www.dirtball.com
Oris OM,

You have confused magnet wire with nichrome wire. Magnet
wire is simply copper wire with enamel or formvar or such insulation.
For HF and low VHF, there is essentially no difference between using
enamel insulation and bare or tinned copper when winding small
inductors, antenna wire, etc.
Nichrome wire has very high RF losses (high resistivity at RF),
and is useful for making broadband parasitic suppressors in HF
amplifiers, as Richard Measures has pointed out.

73,
Don, W6JL

2807. Air Coil Winding Software Program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: Lance Collister <w7gj@bigsky.net>
Message-ID: <36E966AD.78D9B3E5@bigsky.net>
Source record: 72574

Hello!

Does anyone know where I can download a DOS (or windows) program to automatically calculate how to wind coils for a specific inductance? It would be great if it provided the option of wire size and/or actual conductor diameter (for large tank coils). Even better would something that took VHF considerations into account. Please reply directly to me. TIA and 73, Lance

--
Lance Collister, W7GJ (ex: WA3GPL, WA1JXN, WA1JXN/C6A, ZF2OC/ZF8)
P.O. Box 73
Frenchtown, MT 59834 USA
QTH: DN27UB 2m WAS # 44 (all EME) 6m WAS # 1039
TEL: (406) 626-5728 FAX:(406) 728-6320
URL: http://missoula.bigsky.net/cri/w7gj

2808. WTB: Heath SB-220 Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "A. Billings" <abillings@worldnet.att.net>
Message-ID: <36E97573.1BD5A73C@worldnet.att.net>
Source record: 72575

I am looking for a Heath SB-220 Amp.
Must be clean and in good working condition. priced reasonably.
Also looking for the same for parts.

Thanks Art./kc5doo
318 424-3312

2809. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: nicholas charles caruso <caruson@certco.com>
Message-ID: <36E97340.6A124694@arrl.net>
Source record: 72576

Shawn Upton wrote:

> I tried building the radios on the Homebrew is gud 4 u websight a while
> back, but the radio never worked. I used some cheap wire that I had,
> who knows what kind it was (red and black, if that helps). Is there a
> huge difference between using magnet wire and other stuff? And if
> there is, is it because of insulation having a high dielectric?

One thing that noone's mentioned, but might be crucial, is that magnet wire is enamel coated SINGLE STRANDED copper wire. I bet you used wire which is multistranded. I know that multistranded wire has high losses at RF frequencies -- this may be why the circuits you built did not work.

Of course, if you did use plastic insulated single strand wire, my theory's totally out the window.

good luck, and 73
nick caruso kb1dej

2810. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-12 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36E97AB7.21C7@megsinet.net>
Source record: 72577
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Reg Edwards wrote:
> In short, manufacturers couldn't obtain a non-repeatable
> design even if they tried. The RF PA designer gets the
> credit for equipment tolerant to abuse - not the antenna
> manufacturer.

Yeah, but nice antenna manufacturers don't test RF PA designers' mettle
in this regard. :-)

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

2811. Hamfest in York PA Sunday March 14

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: bradk58@aol.com
Message-ID: <19990312201349.26954.00000158@ng-fc1.aol.com>
Source record: 72494

Attention mid-atlantic hams. The 14th annual York Springfest takes place this Sunday, March 14 8-2 at the York County Vo-Tech School just off exit 6 of I-83 in York PA. Visit our website at http://members.aol.com/yorkfest

Join us and break out of those winter ham doldrums.

2812. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: ss <ssluz@worldnet.att.net>
Message-ID: <36E9BEA0.FEEBA5D8@worldnet.att.net>
Source record: 72495

I second the comments of Don, W6JL. Read up on noise and get access to the right test equipment if you still wish to do this. Just building it and tuning for max gain won't give the min. nf. If this is for FM you will never notice the difference unless your rig is from the 70's.

Paul Martin wrote:

> I would like to change the old FET (a 3sk40) on my 2M front end to a gaasfet
> (such as a BF981) to try to lower the noise floor. Any one know of a source
> for the BF981 and what would the bias differences be? This rig also uses the
> 3SK40 in the mixer and I wondered if I might gain anything by changing it to
> a gaasfet also but can't seem to find any references to using one in that
> configuration. Any experiences or ideas?
> Paul N8ULS

2813. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Paul Martin <pmartin@bright.net>
Message-ID: <36EA815B.18B69576@bright.net>
Source record: 72496

> If this is for FM you will never notice the
> difference unless your rig is from the 70's.
>
> It's an Icom 245 and used mostly on SSB.

2814. Re: Needing Antenna Tech Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: kilroy <kilroy@fuse.net>
Message-ID: <7ccsbl$8to$1@remarQ.com>
Source record: 72497

use ((3E8 * 0.66)/4)/freq to get your antenna radiator length in meters.
3E8=speed of light in vacuum
0.66=velocity factor of rg58

now, why bother with a cell phone? get your ticket and go 2 meter!

73
de KC8HPG

Dr.Bad wrote in message ...
>First of all I'm new at this so I don't even know if I'm posting in the
>right newsgroup anyway hears my question. I'm wanting to try to build an
>outside magnetic antenna for my mobile cellular phone I have a magnet base
>that is 3" in dia.with the RG-58u coax on it (I think this is a CB antenna
>magnet) also I can get stainless steel welding rod where I work from size
>3/16" to 1/8"and up to 36"long can these parts and coax be used to build an
>antenna if so could you please help me.
>the reason I'm wanting to build an antenna is that Alltel wants to charge
me
>$80. for an installation kit for each vehicle I need an antenna on which I
>think I could build my own for a lot less.
>"THANKS IN ADVANCE FOR YOUR HELP"
>
>

2815. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseF8Iq4x.K82@netcom.com>
Source record: 72498

I've heard it said that tinned copper wire is a poor choice for RF coils because of the skin effect. That the "skin" is the lead-tin and not the copper, and the effective resistance is higher.

Stranded wire is used in some RG58 coax, so it shouldn't be a problem in RF work.

2816. FM Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e9fa57.3510804@news.io.com>
Source record: 72499

Hi Gang!

I recently had problems with my 2 Meter HT's transmit audio quality, probably for a long time, until someone had the courage to mention it. This led me to think about easy ways to monitor FM modulation.

What I'd like to build is a simple "hands-off" monitor that would demodulate the HT's (or mobile rig's) local RF, without having to tune it. This is easy as pie for an AM rig, a simple untuned diode detector will do it handily, but what about FM? All the FM detector circuits I looked at require some kind of tuned circuit, i.e., they only work at one frequency (usually, an IF).

An added side benefit of such a circuit would be "sidetone", which would aid one in maintaining consistent modulation levels (ever notice how some people talk too loud into the mic, causing distortion, and some undermodulate and sound weak, because they can't hear themselves? sidetone is a natural way of taking care of that problem). Seems to me an additional possible benefit might be the ability to quantify the deviation, perhaps with a meter or LEDs.

Gotta be a way, doncha think?

73,
monty, N5FC

2817. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: maddog@io.com
Message-ID: <36e9f630.2447282@news.io.com>
Source record: 72500

On Thu, 11 Mar 1999 23:56:42 -0800, Roy Lewallen <w7el@teleport.com>
wrote:

>The limit for unlicensed operation of an intentional radiator in the
>HF range is a field strength of 30 uV/m at a distance of 30 meters. At
>30 meters from and broadside to a 40 meter dipole in free space, you
>hit the maximum allowable field strength at a power of 186 uW. This is
>44 dB below 5 watts. If you wanted to be on the safe side, you'd add
>another 6 dB to account for ground reflection. Of course, any antenna
>gain over a dipole also increases the field strength.

Thanks, Roy!

Would you mind giving a quickie mini-tutorial on how to go from
radiated power to field strength, for a simple case. Are there some
quick rules of thumb?

Also, doesn't it seem odd that FCC allows hams spurious outputs at
30dB below 5W, (and antenna gain not even in the equation), yet
unlicensed radiators have to be 44 dB down. What do you suppose is
the philosophy behind that decision?

Thanks for the feedback. I always consider your contribution to this
group to be invaluable.

73,
monty, N5FC

2818. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <36ea0e79.60308034@news.magiclink.com>
Source record: 72501

Most of the Analog Devices data sheets (off their web site) plots
typical spectra for their DDS products for different clocks and output
frequencies. Of course none are ever exactly what you want, but it's a
start.

It's not so much the spur amplitudes as much as their location: in,
around, above, below.....everywhere there are little spurs of some
sort and unlike harmonics it is difficult/impossible to filter them
out. For example, Ulrich Rohde in QST used DDS reference for a VHF
oscillator, and ran it though a 10.7 MHz crystal filter to clean it
up. Still had spurs 80 dB down.

Most of these spurs are "high order", and sometimes you can track them
down. Like 13 x the clock - 53 x the output frequency = spur. As such,
they usually "tune" really fast. So these little "tweets" run through
your receiver passband 53 times as fast as the desired signal tunes.
So for receive, if you choose, you can kind of ignore them a lot of
the time. Kinda like having gnats flying around your hamburger while
you try to eat. Transmitting?....now you're exporting your gnats to
other picnic tables.

On Fri, 12 Mar 1999 14:31:50 -0600, "Clifton T. Sharp Jr."
<clifto@megsinet.net> wrote:

>Monty Northrup wrote:
>> <clifto@megsinet.net> wrote:
>> >This is all shocking to me. I've never had time to play with DDS yet,
>> >but the reading I've done has always suggested low distortion levels
>> >(which suggests to me low spur amplitude) with a little filtering.
>> >National Semi's AN-263 suggests 0.5% distortion at the DAC output, and
>> >0.1% after filtering; I just have trouble visualizing 1/1000 of the total
>> >amplitude, spread over several spurs, producing spurs only 60 dB down.
>>
>> db (voltage/current) = 20 log V1/V2
>>
>> for 0.1% (0.001) distortion (distortion is just the ratio of unwanted
>> signals to desirable signals), then,
>>
>> db = 20 log 0.001 = -60db
>
>Talk about not making a simple connection...! Thanks. I'm gonna go
>practice my Ohm's law calculations now. :-)
>
>--
>| Cliff Sharp | All relevant people are pertinent. |

>| WA9PDM | All rude people are impertinent. |
>| | Therefore, no rude people are relevant. |
>| | --Solomon W. Golomb |
>
>

2819. WTB: Trimmer Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: patrick Green <UserID@swbell.net>
Message-ID: <36EA22BF.1EB22A76@swbell.net>
Source record: 72502

Want to buy some trimmer capacitors for low frequency transmitter
project.
Need four of the following:

115 to 550 picofarad trimmer capacitors.

And does anyone have the link to Fair Radio Sales and address in Lima ,
Ohio?

Thanks in Advance
Pat Green.......KC5WCC

2820. Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7cdbe6$k34$2@news.netcologne.de>
Source record: 72503

Hi,

do have frequency doublers (e.g. MiniCircuits SKY-2R) a considerable
advantage over double balanced mixers ?

Peter

2821. RE Transverters Anyone??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Mike <va3hie@eagle.ca>
Message-ID: <36EA4473.3A989A1A@eagle.ca>
Source record: 72504

Now that I've been helped by W4OP and VE6XT, to whom I owe many thanks ,where can I get plans to build a 20m to 6m transverter? This actually makes more sense as pointed out by these two fellas. It will be interfaced with a Yaesu FT-840. Any suggestions ? Please e-mail me at va3hie@eagle.ca

2822. Re: Homemade Duplexer...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: "Christopher Zeman, KB9RHA" <zman.SCREW.YOU.SPAMMERS@iwc.net>
Message-ID: <mLrG2.14$Vn6.63@news14.ispnews.com>
Source record: 72505

Thank you to all who replied. You were all very helpful and I appreciate it.

Thank you,
Christopher Zeman, KB9RHA
czeman@zman.iwc.net

L.K. wrote in message <36ea2365.4952115@news.flash.net>...
>http://www.dallas.net/~jvpoll/dup6m/dup6m.html
>
>Larry
>
>On Thu, 4 Mar 1999 20:30:27 -0600, "Christopher Zeman, KB9RHA"
><zman.SCREW.YOU.SPAMMERS@iwc.net> wrote:
>
>>I was on a site a few months back. I believe the title was
>>"Jim's Homemade Duplexers". The gentleman who owns the site constructs 6
>>meter duplexers out of heliax cable. I would like to find this site again
>>and can't seem to locate it on the search engines. If you are familiar
with
>>the site I am referring to, please post or e-mail the link to me.
>>
>>Thank you,
>>Christopher Zeman, KB9RHA
>>zman@iwc.net
>>
>>
>

2823. Strip line coils?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: YZ7REA/45AT142 Vladimir <atomski@EUnet.yu>
Message-ID: <36EA3EAB.B9015B4F@EUnet.yu>
Source record: 72506
Body handling: Binary attachment payload not displayed: atomski.vcf

Hello,
does anyone know where can I download a good program for
calculating the strip line coils and capacitors. I'm pretty much
involved in the "above 1 GHz" projects, lately. Making coils out of
ordianry wire isn't actually an easy job. So, I'd like to give it a try
with this software.

THANKS IN ADVANCE!!!

[One or more binary attachments are retained only in the source text.]

2824. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <K48trCAkjh62EwD5@ifwtech.demon.co.uk>
Source record: 72507

ss wrote:
>I second the comments of Don, W6JL. Read up on noise and get access to the right
>test equipment if you still wish to do this. Just building it and tuning for max
>gain won't give the min. nf. If this is for FM you will never notice the
>difference unless your rig is from the 70's.
>

That reminds me... there is a simple trick to tune a preamp for minimum
NF by listening to a very weak carrier in FM mode. At the threshold
level of the FM detector, the noise quieting is very sensitive to the
signal/noise ratio (not simply the signal strength) so it's quite easy
to hear when the preamp is optimized.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2825. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36EA6F0E.3218D138@mwci.net>
Source record: 72508

Bill Carver wrote:

> l filter to clean it
> up. Still had spurs 80 dB down.

80 dB xmit spurious is plenty good enough by more than 20 dB for a 1500 W xmtr, according to FCC HF regs.

See ARRL HB.

Future expected tightening of the regs in next few years will still not come close to 80 dB.

Bill W0IYH

2826. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36EA8CCF.8F36C4CC@mwci.net>
Source record: 72509

William E. Sabin wrote:

> Bill Carver wrote:
>
> > Some are very close to the main carrier
>
> How narrow does the tracking PLL have to be to clean up the close-in
> spurs?
>
> Bill W0IYH

I believe a practical answer to this question is that if we inspect the sidebands, out-of-band distortion products and phase noise of the xmit sig or the rcv sig, the DDS spurs can be relaxed to perhaps 50 dB until spurs become dominant. For SSB, for example, 3 or 4 kHz would probably be good enough.

Outside that band, 80 dB would be desirable. 80 dB is "excellent" for xmit and "pretty good" for rcv.

For a CW mode the cleanup PLL bandwidth (xmit or rcv) should be equal to the bandwidth of the CW filter in the typical rcvr, say 200 to 500 Hz. Interference would not be exactly zero but it would be very good statistically.

If both xmtr and rcvr do this there would be very little trouble.

Too much perfectionism does not seem to be necessary for a "high" quality radio. Radio manufacturers know when to stop perfecting and consider other realities. The advantages of a synthesized LO are a big factor that forces compromises in other areas.

The DDS is certainly not the simplest approach, compared to a low drift, low noise VFO, and for many homebrew persons, simplicity may be very important. The VFO may be simple and old fashioned, but it is still a good approach for homebrew.

Bill W0IYH

2827. Re: Driving Impedance of 4CX250's ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: davearea51@aol.com
Message-ID: <19990313130159.10031.00000191@ng-fd1.aol.com>
Source record: 72510

IF the screen is regulated, the 4CX250 bottles have rather good IM characteristics. As with any of these type of tubes, gain is HIGHLY dependant on screen voltage. It MUST be regulated for linear service.

Dave - W6LEV

2828. Re: homebrew HV resistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: davearea51@aol.com
Message-ID: <19990313130658.10031.00000192@ng-fd1.aol.com>
Source record: 72511

Can't help you with nichrome resistors. However, I might suggest CuSO4 resistors. It depends on the value you want, but CuSO4 resistors can be made to about any value by controlling the amount of CuSO4 in solution. And they are great for handling lots of power.

Dave - W6LEV

2829. Re: Need 572b tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: davearea51@aol.com
Message-ID: <19990313130911.10031.00000193@ng-fd1.aol.com>
Source record: 72512

Try RF Parts in San Marcos, Ca. They have all the manufacturers at varying prices. None of 'em are expensive!

2830. ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <36eaaa4e.8422620@news.gv.net>
Source record: 72513
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I teach college courses in beginning electronics and I need a good introductory RF design tool. I've been told that (a) the ARRL program is excellent and (b) the ARRL program is trash. Before plunking down $150 for another CD coffee coaster of useless information, I'd like to play with it for a while. (Please, no personal rants. I've been reading the threads for a while.)

Anybody got a site where there is a demo, crippled, or otherwise "play around" version of the program to see if it will do what I want? I don't mind the $150 for a decent program, but my disk storage box has far too much garbage software that cost far too many $$ to keep playing that game.

Jim
Jim Weir, VP Eng. RST
A&P, CFI, and other good alphabet soup

2831. Re: Air Coil Winding Software Program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6dd1$3ff0f120$LocalHost@default>
Source record: 72514

Download program SOLENOID from my web site. Computes inductance from former diameter, former length, wire diameter, number of turns. Additional info on value of tuning capacitor for given frequency. Input data on a "what if ?" basis. Very accurate for normal proportion coils. For antenna traps, loading coils, ATU coils, VHF receiver coils etc.

A DOS program and can also be run from a Windows icon. Downloads in a few seconds. Not zipped-up. Can be run immediately. Program TOROID may also be of interest.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Lance Collister <w7gj@bigsky.net> wrote in article
<36E966AD.78D9B3E5@bigsky.net>...
> Hello!
>
> Does anyone know where I can download a DOS (or windows) program to
> automatically calculate how to wind coils for a specific inductance? It
> would be great if it provided the option of wire size and/or actual
> conductor diameter (for large tank coils). Even better would something
> that took VHF considerations into account. Please reply directly to
> me. TIA and 73, Lance
>
> --
> Lance Collister, W7GJ (ex: WA3GPL, WA1JXN, WA1JXN/C6A, ZF2OC/ZF8)
> P.O. Box 73
> Frenchtown, MT 59834 USA
> QTH: DN27UB 2m WAS # 44 (all EME) 6m WAS # 1039
> TEL: (406) 626-5728 FAX:(406) 728-6320
> URL: http://missoula.bigsky.net/cri/w7gj
>
>
>

2832. Re: WTB: Trimmer Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990213122215.OUI13.ejune@intuitive-data.com>
Source record: 72515

Pat,

I think you can find what you want here:

http://www.fix.net/dans.html/

Here is a jumbo list of suppliers and addresses:

ftp://ftp.lehigh.edu/pub/listserv/qrp-l/misc/megalist.txt

Which included this:

Fair Radio Sales (419) 227-6573
1016 E. Eureka (419) 223-2196 FAX: (419) 227-1313
Box 1105 Parts, transformers, power supplies,
Lima, OH 45802 Surplus and gov't surplus radios etc.

--
Regards,

Eric June
KU6J

2833. Re: Needing Antenna Tech Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990213122426.OUI67.ejune@intuitive-data.com>
Source record: 72516

If your mag mount base was originally for a CB antenna, it might contain a loading coil or matching components that will screw up usage in the cellular band. Might want to take it apart and have a look, remove (or short out) any that are in there.

--
Regards,

Eric June
KU6J

2834. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6dd4$b8b64580$LocalHost@default>
Source record: 72517

The resistivity of an alloy of tin and lead (solder) is about 10 times greater than copper. Never use tinned copper wire for winding high-Q tuning coils. Solder is OK on circuit boards and circuit wiring - it eases manufacturing processes.

Silver has only a slightly lower resistance than copper. Its not worth the cost of silver plating copper wire. To prevent tarnishing with age, use enamelled copper (magnet) wire.

Litz wire loses its usefulness above about 2 MHz. It works only when each individually insulated strand has a diameter less than the skin depth in copper. So for HF it becomes prohibitively expensive to manufacture. Reasonable coil Q is attainable by using solid or tubular conductors at 3 MHz upwards.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Robert Casey <wa2ise@netcom.com> wrote in article <wa2iseF8Iq4x.K82@netcom.com>...
> I've heard it said that tinned copper wire is a poor choice for RF
> coils because of the skin effect. That the "skin" is the lead-tin
> and not the copper, and the effective resistance is higher.
>
> Stranded wire is used in some RG58 coax, so it shouldn't be a
> problem in RF work.
>

2835. Help! Kenwood TK-830 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Tony Szablowski <a2112szablowski@worldnet.att.net>
Message-ID: <7cekof$2a1@bgtnsc03.worldnet.att.net>
Source record: 72518
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I've got a UHF TK-830H mobile that suddenly went dead upon powerup.
Now, I turn the unit on and get the self-test beep but I get no
display, no audio other than the powerup test beep, and it doesn't
respond to controls on the KCH-3 remote head. I've opened it up but
didn't see anything burnt out, though there might not be any
indicators.
Any help/directions is _GREATLY_ appreciated folks, since I've no $
to take this beast to a repair shop. Thanks.
--
Regards,
Tony
a2112szablowski@worldnet.att.net (remove 2112 to e-mail)

2836. Re: Help! Kenwood TK-830 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Tony Szablowski <a2112szablowski@worldnet.att.net>
Message-ID: <7ceku8$364@bgtnsc03.worldnet.att.net>
Source record: 72519
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Tony Szablowski wrote in message
<7cekof$2a1@bgtnsc03.worldnet.att.net>...

One last item: it does not Tx either.

Summation: the KCH-3 control head doesn't seem to work at all except the power button, the unit does appear to turn on because of the power-up test beep. I hear no audio and the radio doesn't Tx. Thanks again.
--
Regards,
Tony
a2112szablowski@worldnet.att.net (remove 2112 to e-mail)

2837. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36EADBC5.49D5@megsinet.net>
Source record: 72520
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

covert62@hellsouth.com wrote:
> I happen to design electronics courses for beer money, so you don't need that
> useless ARRL crap when you could have me help you out. For a look at one of
> my design triumphs, go to http://www.alexchiu.com/eternallife/index.html and
> see what I can do with magnets!

Ah, it's old spammer Alex Chiu! This is a DEFINITE must-read web site.
In the anti-spam newsgroups we have what's called a C&C warning for this
kind of material; Coffee & Cats. Your first look is guaranteed to make
you spit hot coffee all over your monitor and your cat, who will claw
your lap to shreds running from the coffee shower.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

2838. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7cemot$p29$1@news1.exit109.com>
Source record: 72521

NE602 works well as a doubler as also detailed in the
phillips App notes.

Advantage is you can double without tuned circuits.

Peter Bolch wrote in message <7cdbe6$k34$2@news.netcologne.de>...
>Hi,
>
>do have frequency doublers (e.g. MiniCircuits SKY-2R) a considerable
>advantage over double balanced mixers ?
>
>
>Peter
>
>
>

2839. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <36eae334.515723987@netnews.worldnet.att.net>
Source record: 72522

I haven't laughed that hard in weeks.
Might he also offer a 300 mile-per-gallon 8-cylinder emgine ??

On Sat, 13 Mar 1999 15:42:29 -0600, "Clifton T. Sharp Jr."
<clifto@megsinet.net> wrote:

>Ah, it's old spammer Alex Chiu! This is a DEFINITE must-read web site.
>In the anti-spam newsgroups we have what's called a C&C warning for this
>kind of material; Coffee & Cats. Your first look is guaranteed to make
>you spit hot coffee all over your monitor and your cat, who will claw
>your lap to shreds running from the coffee shower.

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

2840. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36EB1A41.D8299014@teleport.com>
Source record: 72523

Robert Casey wrote:
>
> I've heard it said that tinned copper wire is a poor choice for RF
> coils because of the skin effect. That the "skin" is the lead-tin
> and not the copper, and the effective resistance is higher.
>
> Stranded wire is used in some RG58 coax, so it shouldn't be a
> problem in RF work.

It's true that tinned wire has higher RF resistivity than copper. For example, you'll find that RG-58A/U (tinned center conductor) has higher loss than RG-58/U (bare copper center conductor). At 10 MHz, RG-58/U has a specified loss of 1.2 dB/100 ft. while RG-58A/U is 1.4. (I've found specified losses to be conservative, so you might find more or less difference in practice.)

In coax, the center conductor is the major contributor to loss, so its characteristics are most important. I don't know what "tinned" wires are typically plated with. The DC resistivity of pure tin is 6.6 times that of copper, resulting in an RF resistivity of sqrt(6.6) = 2.6 times as great if the plating is at least several skin depths thick. Tin-lead combinations will be more resistive than this.

Roy Lewallen, W7EL

2841. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36EB223A.D9C22686@teleport.com>
Source record: 72524

Sorry, but I don't have a mini-tutorial on radiated power-to-field strength at my fingertips. If you're far enough away from an antenna to be in the far field, it's a fairly simple calculation for a simple antenna like a dipole. In the case I gave of 30 meters away from a 40 meter dipole, you're kind of on the edge of the far field. But there are indeed some rules of thumb. I recommend getting a copy of Ed Hare's _RF Exposure and You_, published by the ARRL. (The copy I have says $15 -- a bargain.) It gives the relevant equations as well as a wealth of background information. Since all U.S. amateurs are now required to calculate or measure the field strengths they're producing, it's a topic we all need to get better acquainted with.

I develop and sell EZNEC, an antenna modeling program. Among other things, it does near-field analysis (which actually is a total-field analysis). So naturally I used it to come up with the numbers I gave in my posting. You can also use MININEC, NEC-2, or programs based on these. EZNEC or other programs can also be used for determining compliance with the FCC field strength requirements.

The limits for part 15 (unlicensed) operation are in terms of field strength, while amateur transmitter spurs are in terms of watts from the transmitter. The relationship between these limits will be different for every type of antenna. The antenna and tuner frequency response, as well as its gain at the operating frequency, will affect the ratio. For example, your transmitter could generate spurs which are very much worse than the FCC limits for amateur transmitters, and thereby be illegal, but if they're attenuated by the transmatch and poorly radiated by the antenna, the radiated field could be a long way below the part 15 limits. Or, close-in spurs to a high gain antenna could radiate a field well above the part 15 limit while being within the amateur transmitter spur requirements. I suppose that the FCC established the two sets of limits and measurement methods to make it easier for hams to determine if they comply. If amateur limits were in terms of field strength like part 15, you'd have to test your station like they do for part 15 -- run actual field strength measurements over a large frequency range. And you'd have to do it with each antenna, and when operating on each band -- or on several frequencies in each band. (Part 15 devices are restricted to a single, fixed antenna, and generally operate on a single, fixed frequency.)

The FCC rules are complex, so I'm not surprised that they're not entirely self-consistent. The job of trying to correlate the requirements for spurious emissions for all cases for all services would probably not be a good way for them to spend their limited resources.

Roy Lewallen, W7EL

Monty Northrup wrote:
>
> Would you mind giving a quickie mini-tutorial on how to go from
> radiated power to field strength, for a simple case. Are there some
> quick rules of thumb?
>
> Also, doesn't it seem odd that FCC allows hams spurious outputs at
> 30dB below 5W, (and antenna gain not even in the equation), yet
> unlicensed radiators have to be 44 dB down. What do you suppose is
> the philosophy behind that decision?
>
> Thanks for the feedback. I always consider your contribution to this
> group to be invaluable.
>
> 73,
> monty, N5FC

2842. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36EB2491.CACAC4A4@teleport.com>
Source record: 72525
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

It doesn't look like any of the several other responses are answering your question, so I'll take a stab at it.

The ARRL program is a limited version of Super-Compact, which is an industry standard frequency-domain modeling program. I personally feel that the interface could be more intuitive (this comment applies to Super-Compact as well, whose interface is identical), but the program is very powerful and a terrific bargain for the money. I don't know of any program which comes anywhere close to its capabilities for anywhere near the price. I suspect that anyone calling it "trash" doesn't have an appreciation for its capabilities.

I'd also recommend getting the demo version of PSpice. It's a time-domain oriented program and is likewise very powerful. And it's free.

Roy Lewallen, W7EL

Jim Weir wrote:
>
> I teach college courses in beginning electronics and I need a good
> introductory RF design tool. I've been told that (a) the ARRL program is
> excellent and (b) the ARRL program is trash. Before plunking down $150 for
> another CD coffee coaster of useless information, I'd like to play with it
> for a while. (Please, no personal rants. I've been reading the threads for
> a while.)
>
> Anybody got a site where there is a demo, crippled, or otherwise "play
> around" version of the program to see if it will do what I want? I don't
> mind the $150 for a decent program, but my disk storage box has far too
> much garbage software that cost far too many $$ to keep playing that game.
>
> Jim
> Jim Weir, VP Eng. RST
> A&P, CFI, and other good alphabet soup

2843. Where to look for 7.11 MHz Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: John C <N0URE1@email.msn.com>
Message-ID: <OG86Qscb#GA.107@upnetnews05>
Source record: 72526

Where might I find crystals for my 40 M QRP rig?
I need 7.10 MHz and 7.11 MHz.

JC

2844. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-13 00:00:00 UTC
From: rick@area.com
Message-ID: <7ceau0$c89$1@vax.area.com>
Source record: 72527

In article <7cdbe6$k34$2@news.netcologne.de>,
Peter Bolch <nc-bolchpe@netcologne.de> wrote:
>Hi,
>
>do have frequency doublers (e.g. MiniCircuits SKY-2R) a considerable
>advantage over double balanced mixers ?
>
>

I haven't tried those, but any basic DB mixer will work fine as a frequency doubler if you feed the LO and RF inputs in series, which is easy to do on most mixers because there is no common ground. It is helpful to put a series resonant tank (Q=3 or so) in series with the input. Don't forget to put a shunt choke across the IF output to prevent DC rectification.

Rick Karlquist N6RK
rick@area.com

2845. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: lrware@pipeline.com
Message-ID: <36ec11f1.512962128@news.pipeline.com>
Source record: 72429
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

covert62@hellsouth.com <rosiec@my-dejanews.com> cogitated then
commented:

>I happen to design electronics courses for beer money, so you don't need that
>useless ARRL crap when you could have me help you out.
Overpaid even if the beer is cheap!

>For a look at one of
>my design triumphs, go to http://www.alexchiu.com/eternallife/index.html and
>see what I can do with magnets!

ROTFLOL!
The prosecution should rest its case and just suggest people *should*
see this net kooks page at the URL above....
However for those so inclined, you can find the whole story of ol'
Alex's persecution with a news search on "Alex Chiu."
Don't miss his "Net Kook of the Month" award nomination(s) in
news.admin.net-abuse.e-mail.

2846. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36eb0ee7.1166291471@news.online.no>
Source record: 72430

On Sat, 13 Mar 1999 16:55:11 -0500, "abcd1234"
<abcd1234@ix.netcom.com> wrote:

>NE602 works well as a doubler as also detailed in the
>phillips App notes.
>
>Advantage is you can double without tuned circuits.
>
>
>Peter Bolch wrote in message <7cdbe6$k34$2@news.netcologne.de>...
>>Hi,
>>
>>do have frequency doublers (e.g. MiniCircuits SKY-2R) a considerable
>>advantage over double balanced mixers ?
>>
and the doublers are sort of two-way rectifiers, which also doubles
without tuned circuits?
By the way, I just remembered that I once discovered a German receiver
application using 6BE6/EK90 valve as a linear frequency doubler from
50 to 100kHz IF

LA8AK@ONLINE.no

2847. Need loop-filter with CD4046AE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36eb1709.1168373762@news.online.no>
Source record: 72431

Hi
I am building a frequency standard comparing 250kHz signals, but need
a good op-amp loop-filter with lowest possible cut-off frequency
Any suggestions? I will be pleased to receive gif files if possible
73
Jan-Martin
LA8AK
LA8AK@ONLINE.no

2848. nixie tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: wa9vrh <wa9vrh@ocslink.com>
Message-ID: <01be6dc1$557e2a40$057b9ece@larry>
Source record: 72432
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

HI all I have 6 nixie tubes for sale they have a Burroughs number of B-5092-A on them. These came out of a working piece of equipment but they have been in my parts bin for years. So there for they are being sold as is. I will however give a 30 day return warrentee. I am excepting offers for thes tube plus $3.00 shipping for the lot within the U.S. I will however not accept any offers over $100.00 for the set so please bid accordingly. Thanks Larry WA9VRH

2849. More nixies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: wa9vrh <wa9vrh@ocslink.com>
Message-ID: <01be6dc2$3a121860$057b9ece@larry>
Source record: 72433
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

HI since I have had sucj\h an interest in the last set of nixies I found another set of Burroughs tubes. I have a set of 6 Burroughs B-5750 nixies. These have also been in my parts bin for years so the same warrenty is in effect. you have 30 days to return to me for a refund. I am accepting offers on this set also. I will again NOT accept offers over $100.00 for the set. Thanks Larry WA9VRH

2850. Re: Parabolic dish info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: dbink101@mindspring.com
Message-ID: <36eb2f57.6506041@news.mindspring.com>
Source record: 72434

the formula to set the feed horn,
it can also be used to create (design and build the reflector)

FP = DIAMETER(SQUARED) / 16*DEPTH

FP = FOCAL POINT, which is 1/4" - 1/2 " up from opening

*Note, the distance of the dish/reflector at any point to the feed
horn is the FP.

>
>YZ7REA/45AT142 Vladimir wrote in message <36E6DC70.B802E64B@EUnet.yu>...
>>Hello all,
>> I need some blueprints for building a 3-6m parabolic dish for 23 cm
>>(1296 MHz) EME. I have the feed horn designs but I didn't find any dish
>>designs. Can anyone help? THANKS IN ADVANCE!!!!
>
>VHF UHF MANUAL (RSGB) Chapter 9.
>
>73, Ed. EI9GQ
>
>
>--
>**********************************
> Eamon 'Ed' Skelton EI9GQ
> Cork, Ireland
>
> ANTI SPAM RETURN ADDRESS
> Real e-mail address below
>
> ei9gq@nettaxi.com
> www.nettaxi.com/citizens/ei9gq/
> www.qsl.net/ei9gq
>
>**********************************
>
>

2851. WTB: Looking for 6JB6's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: tbendell@bmts.com
Message-ID: <921383924.526126@cindy.bmts.com>
Source record: 72435

Greetings,

My old Drake needs new tubes, looking for two 6JB6 Finals and one
12BY7 Driver tube.

73

tbendell@bmts.com

Net-Tamer V 1.11.2 - Test Drive

2852. Re: Need loop-filter with CD4046AE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990314015642.25673A-100000@Stratus.CAM.ORG>
Source record: 72436

On Sun, 14 Mar 1999, J M Noeding wrote:

> Hi
> I am building a frequency standard comparing 250kHz signals, but need
> a good op-amp loop-filter with lowest possible cut-off frequency
> Any suggestions? I will be pleased to receive gif files if possible
> 73
> Jan-Martin
> LA8AK
> LA8AK@ONLINE.no
>
Philips has a program for designing with the 4046. I can't remember all
that it does, and I don't have an MS-DOS machine hooked up to check.

However, I think you can find the program at
www-eu.semiconductors.philips.com/logic/support/pll/pll.zip

I say think because I didn't actually download it.

Michael VE2BVW

2853. @@@JRC MW/SW 1KW TRANSMITTER FOR SALE CHEAP@@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: radio_man@usa.net
Message-ID: <MPG.11559af37cd91ed898970e@news.xs4all.nl>
Source record: 72437
Cross-posted to: nl.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

```
405-535 kHz
4-23 MHz
Synhesized
Power reduction
Complete with extensive manual
Consists of Bandpass Filters unit, final amp, driver unit, rectifiers
Removed from ship in working condition
FIXED PRICE NLG 950 COLLECT OR USD 475
See also http://www/xs4all.nl/~barendh
```

2854. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <371f70ff.1039831678@news.sci.fi>
Source record: 72438

On Sat, 13 Mar 1999 16:55:11 -0500, "abcd1234"
<abcd1234@ix.netcom.com> wrote:

: NE602 works well as a doubler as also detailed in the
: phillips App notes.
:
: Advantage is you can double without tuned circuits.

Apparently it works with the trigonometric equation sin(x) * sin(x) =
1/2(1-cos(2x)), in which a DC component and a sine wave at double
frequency and nothing else is produced. However, this requires that a
linear four quadrant multiplication is performed between the inputs to
the multiplier. The Gilbert cell mixer (used e.g. in NE602 and 1496)
must be driven at much lower levels (compared to mixer operation) to
stay in the linear region. With constant noise level, the SNR of the
produced signal will be degraded, which can be a problem if the
produced signal is used to drive a mixer in a high dynamic range
receiver.

The other way to use a double balanced mixer as a frequency doubler is
to drive the other input into hard saturation with a square wave (or
overdriven sine wave) and input a clean sine wave into the other
input. Essentially this is a voltage controlled full wave rectifier,
in which the negative sine half cycle is multiplied by -1 and the
positive half cycle is multiplied by +1, producing the absolute value
of the input sine wave. The sensitivities of the two inputs in various
Gilbert cell mixers are different, so by suitably setting the input
level, the other input will saturate, while the other input operates
in the linear region, even when the same signal level is at both input
terminals.

With a diode ring mixer used as a frequently doubler, the LO signal
should be strong enough to fully saturate the diodes (-1 and +1 gain),
while the RF input should be low enough to avoid distortion.

: Peter Bolch wrote in message <7cdbe6$k34$2@news.netcologne.de>...

: >do have frequency doublers (e.g. MiniCircuits SKY-2R) a considerable
: >advantage over double balanced mixers ?

I haven't seen internal diagram of this component, but apparently it
is some kind of full wave rectifier which is similar to the one used
in power supplies. Looking at the specifications for other Mini
Circuits frequency doublers, it appears that the input power range can
be larger than for DBMs. However, the prices seemed to be much higher
than standard SBL-1 style mixers.

The full wave rectified signal has quite strong even harmonics output, he 4th being only 12 dB below the second, so some sort of filtering is usually required, as it is also required when using diode ring mixers or Gilbert cell mixers as voltage controlled full wave rectifiers.

Paul OH3LWR

2855. Need capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: REDBONE <redbone1@swbell.net>
Message-ID: <36EB9B95.2AA42580@swbell.net>
Source record: 72439

Hello :
I am Looking for the following:

4 @ 115 to 550 pf. Trimmer Capacitors.
Does anyone have some for sale?

THANKS IN ADVANCE:
PAT GREEN.....KC5WCC

2856. CAD schematics and ARRL Radio Designer!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: ben / aa7hk <harp@pell.net>
Message-ID: <7cganggnm1@nnrp1.dejanews.com>
Source record: 72440

You can translate a schematic drawn with TinyCAD (a GOOD drawing program)
into a complete, correct *.ckt netlist block for ARRL Radio Designer in a
fraction of a second using "Tiny2ARD", my Win95 utility.

For $10.00, I
provide:

Tiny2ARD
ARD symbol library for TinyCAD
full-version TinyCAD (shareware), NOT a DEMO!

(You'll have to pay Matt Pyne
yourself, UKP 10.00 ~ $16.10, for TinyCAD. It's
worth the price!)

email
harp"AT"pell.net "AT" = @ of course

ben / aa7hk

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2857. Re: YES VIRGINIA, $6 INTO THOUSANDS! 3540 [4/2]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Richard Huelin <nowhere@nowhere>
Message-ID: <36eba661.0@news.netdirect.net.uk>
Source record: 72441
Cross-posted to: alt.bonehead.tim-spiecher,alt.business.career-opportunities,uk.local.channel-isles,rec.radio.amateur.homebrew

Not only is it a scam, it is also spam!

admin@nt.net

2858. Ferrite ring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: apolllo13@aol.com
Message-ID: <19990314075624.28410.00000388@ng-ft1.aol.com>
Source record: 72442

Where do I get ferrite rings for looping my antenna coax thru? I have a CB in car with antenna noise. Cut a ferrite ring out of an old computer power supply torroid, about 1.5 inch diameter, put about 6 loops thru close to the transmitter and it works great. Don't know the material but guess I got lucky. Problem is, where do I get more?

any help appreciated

thx..

2859. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be6e1f$f7baab40$8c003bcb@default>
Source record: 72443
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

David Cunningham <D.L.C@btinternet.com> wrote in article
<7c6te0$qg5$1@plutonium.btinternet.com>...
> I need a circuit for a frequency counter, covering a range of about
500kHz
> to 30MHz, for amateur radio use, preferably using TTL i.c's.
> I intend to use it for measuring the frequencies of vfo's, local
> oscillators, etc. The circuit should preferably be as simple and
inexpensive
> as possible. If anyone can help by suggesting a suitable circuit, please
> email me.
> Thanks.
>
David

You have had lots of replies but I will add mine anyway.
Counters are a bit more expensive in Oz so I might be inclined to build my
own.
Look at Elektor UK Jan 1998. There is an article by Eamon Skelton
describing a PIC micro based counter which is quite simple. As a bonus it
will stabilize a free running VFO with a PLL "huff and puff" circuit . It
uses 2 chips (74HC series) as squarer/prescaler and the PIC itself does
most of the work and drives a cheap LCD display (about US$20). The only
other chips are a regulator and opamp for the PLL if you choose to use
this. Of course you will have to buy a programmed chip and a PC board from
Elektor if you want to do this.
I have a similar circuit using the Atmel AT90S1200. I have got a prototype
going (it works!!) and need to tidy up the design to allow user definable
offsets (up to 8 selectable offsets which can be user programmed using
pushbutton switches). It also has automatic lockup (ie no switch to lock).
If there is interest I might be able to get a batch of boards made. I would
envisage the controller/PCB together would cost about AUS$40. E mail me if
you are interested.

Richard

2860. Re: Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Brian Kelly <Kelly@dvol.com>
Message-ID: <36EBC6C4.466BF02F@dvol.com>
Source record: 72444
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Charles Dumont wrote:

> Said like a true home-brewer. How the hell then do antenna
> manufacturers get repeatble designs?? Thanks for the advice.

What little repeatability they might get no doubt involves expensive tooling and machinery which is outside the realm of ham radio unless you run into some ham here in rraa who is in the commercial ducky business, most likely a JA or an HL. Or I expect that you might get the answer via one of the HT manufacturers who in turn might point you to their antenna sources, at which point you might be told that such info is proprietary.

In the final analysis dissect a ducky and talk with somebody who knows what's up with manufacturing.

Brian Kelly w3rv

2861. Measured Rds-on for FETs ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ebc11b.1211918392@news.online.no>
Source record: 72445

need to use some VN2222, VN2408 and J177, N and P type fets for some AGC circuits. Has the varying dynamic Rds for different gate voltages been described on a site or article? Hope to avoid having to measure it, particularly interested to find typical variation for low gate voltages <<1V DC

73
Jan-Martin
LA8AK@ONLINE.no

2862. Re: WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: pmarkham@newsguy.com
Message-ID: <7cghha$25pe@news1.newsguy.com>
Source record: 72446
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <WXYcQEAjbv22EwDw@falstaf.demon.co.uk>, Robin Birch <robin@falstaf.demon.co.uk> wrote:
>Dear All,
>Does anyone know of a reasonable but simple to use smith chart program.
>I want to be able to tell it to behave as though I was doing it
>graphically with a ruler and a chart. the purpose is to design some
>matching circuits.
>
>Rgds
>
>robin
>____
>Robin Birch robin@falstaf.demon.co.uk
>
>M1ASU/2E0ARJ Old computers and radios always welcome

Hello, Robin.

W9DMK has sc81.zip at:

ftp.qsl.net/pub/w9dmk/ (or wherever else you may find it)

with other useful programs he created.

His product is well worth investigating. He cronicled its development on rec.radio.antennas. I am surprised and disappointed that I noted only one indefinite reference to it.

It comes with a help file and without abusive commentary ;-).

Pete/wa4hei

2863. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7cgmlg$5p1$1@news1.fast.net>
Source record: 72447
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

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Roy Lewallen <w7el@teleport.com> wrote in message
news:36EB2491.CACAC4A4@teleport.com...
>It doesn't look like any of the several other responses are answering
>your question, so I'll take a stab at it.
>
>The ARRL program is a limited version of Super-Compact, which is an
>industry standard frequency-domain modeling program. I personally feel
>that the interface could be more intuitive (this comment applies to
>Super-Compact as well, whose interface is identical), but the program
>is very powerful and a terrific bargain for the money. I don't know of
>any program which comes anywhere close to its capabilities for
>anywhere near the price. I suspect that anyone calling it "trash"
>doesn't have an appreciation for its capabilities.
>
>I'd also recommend getting the demo version of PSpice. It's a
>time-domain oriented program and is likewise very powerful. And it's
>free.
>
>Roy Lewallen, W7EL

First, let me state that I haven't actually *used* the ARRL's
limited version of Super-Compact. The primary reason
is my understanding that it doesn't do non-linear, only linear
simulations. This is a limitation that had caused me to not
spend the $150 for the program.

Spice, on the other hand *does* do non-linear analysis
and seems to meet most of my needs.

A fancier, more capable program is Eaglewage "Genesis"
from, surprisingly Eagleware :-) It's a lot more expensive
than ARRL radio designer, but a lot cheaper than Super-Compact.

If you budget is limited, there are *free* Spice packages out
there for the WIN32 environment ... check the web with a search
for "free Spice" or "CAD tools", etc. and you should find several
to choose from.

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse

NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

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2864. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <36ebe5ec.6003851@news.azstarnet.com>
Source record: 72448
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sat, 13 Mar 1999 18:53:05 -0800, Roy Lewallen
<w7el@teleport.com> wrote:

>It doesn't look like any of the several other responses are answering
>your question, so I'll take a stab at it.
>
>The ARRL program is a limited version of Super-Compact, which is an
>industry standard frequency-domain modeling program. I personally feel
>that the interface could be more intuitive (this comment applies to
>Super-Compact as well, whose interface is identical), but the program
>is very powerful and a terrific bargain for the money. I don't know of
>any program which comes anywhere close to its capabilities for
>anywhere near the price. I suspect that anyone calling it "trash"
>doesn't have an appreciation for its capabilities.
>

I will second Roy's comments. I was waiting in line when
ARD was announced. The original version had a few bugs and
minor deficiencies, some of which I reported to ARRL. Dave
Newkirk was then the "guru" and somewhere along the line he
suggested that I talk to Ulrich Rohde, President of Compact.
I was very pleasantly surprised that Ulrich took my phone
calls and agreed to some of the changes that I suggested.

Version 1.5 fixed the problems, although, I was dismayed
that, because I had an "old copy" of v1.0, I was expected to
pay for the "ungrade" that corrected the problems that I
reported. This minor problem was worked out, however.

Unfortunately, Newkirk left ARRL and I believe gone to work
for Rohde, who has since sold Compact to ANSOFT, so further
support for ARD is problematic. Jon Bloom at ARRL is in the
support role there, but the future life of ARD is
questionable. There was a ARD reflector, but that's gone
bye bye, as has the QST column, "exploring rf."

Still, for 150 bucks, it's a bargain.

Disclaimer: The foregoing is my opinion and my recollections
of past events. Time and an increasing feeble mind may have
altered the reported events. <g>

Wes N7WS

2865. FS: Parts, accessories and radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <36eb9712.1536725@news.earthlink.net>
Source record: 72449
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.audio.tubes

For Sale:
(Add shipping costs to all prices unless stated)

ARRL Handbooks:
1955, 1958, 1965, 1969, 1973, 1975, 1978, 1981 at $10.00 each
All in good to excellent shape, plus one re-bound 1955.

IRS Antique transmitter?!
Small HF Transmitter with 6146 final and Internal Revenue 5735 kHz
crystal,
with four small Thordarson transformers, apparently using Screen
modulation.
Missing outer case, but chassis intact and looks to be in good shape.
Plug-in coil final and has antenna relay, typical RFCs etc. No manual,
untested
Will sell for only $25.00

Lafayette 99-2503 Grid Dip Meter - brand new in box and unused!
All original. Great little GDO, with all coils, case etc. $40.00
(SOLD??)

Lafayette 99-5020 Capacitance Substitution box - like new $10.00

Lafayette 99-5021 Resistance Substitution box - like new $10.00

DRAKE TV-1000-LP Low Pass Filter 30 MHz 1000 Watts $24.00

2 posn. antenna switch with SO-239 connectors $15.00

Plate variable transmitting capacitors:
50 pF 800V Hammarlund 1.5" deep, 1/4" shaft, clean used $5.00
140 pF 1000V 1.5" deep 1/4" shaft New, unused $8.00
200 pF 1000V 3" deep 1/4" shaft clean used $6.00
250 pF 1000V 2" deep 1/4" shaft clean used $7.00
400 pF 800V Brass plate variable KS-8221, 3" deep used clean $5.00

250 pF 2500 V transmitting capacitor 154-9 by E.F. Johnson
1/4" shaft measures 2" X 2" X 6" Brand New $20.00

Loading Capacitor - 5 Section, each 400 pF for a total of 2000 pF.
Great for transmitter or linear amplifier. 3" X 2.5" X 6.0" deep.
3/8 diameter shaft. Brand new and unused. $18.00

Loading Capacitor - 2 section, each 500 pF. With 3/8 in. diameter
shaft $5.00

Wall transformer, 120V AC to 14 V DC 500 mA - $6.00

Heavy-duty footswitch - brand new with AC cables m/f $15.00
(SOLD??)

Brand new SHURE 514B Mobile Mic in Box - sharp-looking. $15.00
(SOLD??)

MFJ-564 Precision Iambic Key Paddle in excellent condition. Chrome
finish with clear red paddles. $45.00 (SOLD??)

Heath DX-60 and HG-10B with manuals - excellent shape. 90 Watts CW and
60 Watts AM
on 80, 40, 20, 15 and 10m. A few nicks on top cover of DX 60. Front
panel is excellent.
VFO looks like new. With all cables etc. Will sell DX-60 for $85.00
Will sell mint HG-10B for $60.00.

EICO 753 transceiver for 80, 40 and 20m SSB, AM, CW. Excellent
appearance. Includes EICO 752 AC
power supply for 120 V AC operation, all opriginal manuals etc. Needs
two 7199 tubes available
for $9.00 each and a small replacement speaker for the power supply to
get it on the air.
$150.00 (SOLD??)

Yaesu FT-840 HF transceiver. Includes original manual and microphone,
DC cable etc. VLF
through 30 MHz with 100 Memories. SSB, AM, CW, RTTY etc. 100 Watts
output. Has two additional
filters worth $120 each, for wide AM and narrow CW. The 6kHz AM filter
is essential for
listening to Shortwave broadcasts, hams on AM etc. All band tranmsmit
enabled.
In mint condition, very low mileage (!) This is one excellent radio
for the money.
I love it but apartment life forces sale. Will sell for $600.00

Kenwood TM-261A VHF FM transceiver for 2m. 50 Watts output. With
manual and microphone.
(The mic needs a new PTT switch available from Kenwood for $1.75)
otherwise in
perfect shape. $175.00

Stancor ST-202A transmitter - a classic rig for 10m AM mobile
operation. Original case and
in very good condition. Includes repro manual and appears to be a
very, rare item
normally only seen in the old magazines and handbooks. Will sell for
$50.00
(SOLD??)

Tube tester I-177B in excellent shape. Case was painted red and needs
to be re-done, but front panel and interior in good operating shape.
With manual.
Will sell for $70.00 (SOLD??)

National TMK-50 Variable capacitor New In Box $15.00

Modulation Transformer UTC Model S21 unused, classic. $50.00

Collins 20 Watt Modulation Transformer, unused classic. $40.00

Thordarson transformer - THORDARSON D161916
power transformer 120 V AC primary potted, square - has two
secondaries:
Sec 1: 5.78 H, C.T. 48 ohms - gives 700V c.t. at 250 mA
(24 + 24 ohms DC)
Sec 2: 23.6 H, 605 ohms - gives 1580V at 20 mA
(605 ohms DC)
Approximately 4.5" X 4.5" x 4" Good for about a 180-200 Watt plate
supply.
Will sell for $20.00

UTC choke Model PA104 $15.00
This Inductor is a 18 Henry job with a tap at 14.4 Henries.
99 ohms series resistance It's large - like 5" X 5" x 4"
Good for a choke input filter on a nice sized 200 Watt plate supply.
Will sell for $20.00

Fujitsu Color Printer Model DX-2300, Low miles(!)
This is a dot matrix prinbter, but made very well, and in excellent
condition. Uses tractor feed or single sheet plain paper.
With manual - only $25.00

Books:

1981 ARRL Handbook, excellent condition ONLY $8.00

Television For Radiomen, by Ed Noll. 340 pages, illustrated
1962. Front cover torn a little but otherwise very good $3.00

TV SICK? Service your own TV, by Belmont TV Co.
33 pages, plus sale flyer, 1975 MINT $2.00

METHODS OF TEACHING SHOP AND TECHNICAL SUBJECTS by Leighbody & Kidd
College text, 201 pages, excellent condition $3.00

All four books for $13.00

Hallicrafters Manuals:
HT-46 $8.00 each (repro)

COMING SOON!! Lot of Tubes, Crystals and Exciting "Boatanchor Radio"
PARTS!!

2866. FS: Parts, accessories and radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <36ebb758.9800469@news.earthlink.net>
Source record: 72450
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.audio.tubes

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crystal,
with four small Thordarson transformers, apparently using Screen
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2 posn. antenna switch with SO-239 connectors $15.00 - SOLD!

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140 pF 1000V 1.5" deep 1/4" shaft New, unused $8.00
200 pF 1000V 3" deep 1/4" shaft clean used $6.00 - SOLD!!
250 pF 1000V 2" deep 1/4" shaft clean used $7.00 - SOLD!!
400 pF 800V Brass plate variable KS-8221, 3" deep used clean $5.00

250 pF 2500 V transmitting capacitor 154-9 by E.F. Johnson
1/4" shaft measures 2" X 2" X 6" Brand New $20.00

Loading Capacitor - 5 Section, each 400 pF for a total of 2000 pF.
Great for transmitter or linear amplifier. 3" X 2.5" X 6.0" deep.
3/8 diameter shaft. Brand new and unused. $18.00

Loading Capacitor - 2 section, each 500 pF. With 3/8 in. diameter
shaft $5.00

Wall transformer, 120V AC to 14 V DC 500 mA - $6.00

Heavy-duty footswitch - brand new with AC cables m/f $15.00
(SOLD??)

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on 80, 40, 20, 15 and 10m. A few nicks on top cover of DX 60. Front
panel is excellent.
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power supply for 120 V AC operation, all opriginal manuals etc. Needs
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for $9.00 each and a small replacement speaker for the power supply to
get it on the air.
$150.00 (SOLD??)

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output. Has two additional
filters worth $120 each, for wide AM and narrow CW. The 6kHz AM filter
is essential for
listening to Shortwave broadcasts, hams on AM etc. All band tranmsmit
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In mint condition, very low mileage (!) This is one excellent radio
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operation. Original case and
in very good condition. Includes repro manual and appears to be a
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normally only seen in the old magazines and handbooks. Will sell for
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supply.
Will sell for $20.00

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This Inductor is a 18 Henry job with a tap at 14.4 Henries.
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All four books for $13.00

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HT-46 $8.00 each (repro)

COMING SOON!! Lot of Tubes, Crystals and Exciting "Boatanchor Radio"
PARTS!!

2867. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ebd6c9.1217469070@news.online.no>
Source record: 72451

On Sat, 13 Mar 1999 07:51:00 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>ss wrote:
>>I second the comments of Don, W6JL. Read up on noise and get access to the right
>>test equipment if you still wish to do this. Just building it and tuning for max
>>gain won't give the min. nf. If this is for FM you will never notice the
>>difference unless your rig is from the 70's.
>>
>
>That reminds me... there is a simple trick to tune a preamp for minimum
>NF by listening to a very weak carrier in FM mode. At the threshold
>level of the FM detector, the noise quieting is very sensitive to the
>signal/noise ratio (not simply the signal strength) so it's quite easy
>to hear when the preamp is optimized.
>
>

Ian

Is it some relationship between actuak NF and 10 or 20dB quieting at
certain input levels?

73
Jan-Martin LA8AK
LA8AK@ONLINE.no

2868. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <36ecf528.5219940@news.gv.net>
Source record: 72452
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

jim@rst-engr.com (Jim Weir)
shared these priceless pearls of wisdom:

->
->Anybody got a site where there is a demo, crippled, or otherwise "play
->around" version of the program

I really do wish, just once in these ham NGs that I could get an answer to
TFQ. No, I've played with Spice. No, I've seen Eagleware. No, I don't
want to teach senior level engineering programs to freshmen. And I sure as
hell don't think magnets are going to help them.

The question: Is there a playaround version of ARRL Designer available?
Plain, simple question.

Jim
Jim Weir, VP Eng. RST
A&P, CFI, and other good alphabet soup

2869. FS: Russian 6C4C (=6B4G)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <36ebf910.2248464@news1.telia.com>
Source record: 72453
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

I have found some of these excellent 6B4G valves. 6C4C in Russia is
equivalent to 6B4G and it looks identical to the old Sylvania 6B4G
with double anode stapped together by a metal plate, not the type with
two separate anodes. The 6C4C valves is very well built and give you
an impression of high quality. It is unlike the new Sovtek 6B4G which
looks like a scaled down Sovtek 300B with a single anode.
E-mail me if you are interested.

Best regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

2870. Need info to build 137MHz turnstyle

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: scan7705@my-dejanews.com
Message-ID: <36EBF74B.1452AFB7@my-dejanews.com>
Source record: 72454
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur

Hello.
I need informations about building a NOAA satellite 137 MHz antenna (For instance "Turnstyle").
I am currently designing a special receiver for a project in university.

Please give me details about the construction (schematics and measurements welcome !!)

(Sorry if my English is not perfect, but ... I am French.).

You can either mail me at: ----->scan7705@my-dejanews.com
or:
----->fan_de_piercings@hotmail.com

Please DO NOT reply in the newsgroups please, because I will not be able to read messages, unless on saturday or sunday, at home ....

MANY THANKS IN ADVANCE . . .

2871. Re: Optically coupled regenerative receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: crabtreejr@aol.com
Message-ID: <19990314125650.28760.00000625@ng32.aol.com>
Source record: 72455

Jim McEwen, KA6TPR <starsekr@nctimes.net>, on Sat, Mar 13, 1999 02:17 EST wote:

>In the June '98 QST there is a neat looking idea for a regen receiver
>by Dan Wissell, N1BYT. I was surfing the net and came upon someone
>with a kit to construct this, but I've lost the URL. Anyone know
>who/where this kit is?

Jade Products at http://www.jadeprod.com

73's
John Crabtree

2872. Re: Marijuana Alternatives That Work, Guaranteed!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <36EC17CA.327B@ruraltel.net>
Source record: 72456

Why don't you post this in the .policy and .misc AR NG, sometimes I
think they need a higher quality of recreational smoke.

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net
Anonymous wrote:
>
> All of the marijuana herbal alternatives on this site are 100% legal and
> are GUARANTEED to F*CK you up or your money back. If you don't get
> high, you don't pay! it's that simple! Just go to:
>
> http://www.undergroundsoftware.com/smoke/page2.html
>
> (go to the web site above for more information and catalog)

2873. Re: Where to look for 7.11 MHz Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Doug Younker <dougy@ruraltel.net>
Message-ID: <36EC188F.75E9@ruraltel.net>
Source record: 72457

John C wrote:
>
> Where might I find crystals for my 40 M QRP rig?
> I need 7.10 MHz and 7.11 MHz.

Perhaps this site may help you out. GL...
http://www.mnsinc.com/bry/xtalpage.htm
>
> JC

--
73, Doug Younker N0LKK
Near Plainville,KS
dougy@ruraltel.net

2874. Re: Ferrite ring

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7cguej$sf9$2@news1.rmi.net>
Source record: 72458

Apolllo13 <apolllo13@aol.com> wrote:
: Where do I get ferrite rings for looping my antenna coax thru?
: Cut a ferrite ring out of an old computer power supply
: torroid, about 1.5 inch diameter, put about 6 loops thru close to the
: transmitter and it works great. Don't know the material but guess I
: got lucky.
: Problem is, where do I get more?

I've had success with the 'square' ferrite cores found in defunct
TV sets and video/PC monitors. There size usually allows 5 or more
turns with RG-8-sized cable.

: any help appreciated
Well.... IHTHs

73
Jonesy W3DHJ

--
SK

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
292 days to go until the Year 2000 -- So what!
657 days to go until the 3rd Millennium of the C.E.

2875. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Hans K0HB <k0hb@uswest.net>
Message-ID: <36EC1114.ED7B1DA4@uswest.net>
Source record: 72459
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Jim Weir wrote:

> The question: Is there a playaround version of ARRL Designer available?
> Plain, simple question.

No.

2876. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36EBFD29.49BBA144@mwci.net>
Source record: 72460
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Jim Weir wrote:

> The question: Is there a playaround version of ARRL Designer available?
> Plain, simple question.

If you were a little less belligerent and obnoxious you might have better luck.

The answer is no.

Bill W0IYH

2877. FS: Transformers, 22 volt 2.4 amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: worley@47hill.com
Message-ID: <36EC3D12.4B9F@47hill.com>
Source record: 72461

I have at least 20 ea. 22 volt 2.4 amp transformers in plastic case, with jack for computer type ac cord (120V 60Hz input). About 4" cubed, 3.5 lbs. each, unused mint condition, $3.75 each or 4/$14 or 10/$30 plus UPS. 36330 zip.(Alabama) Can be used with a rectifier and appropriate sized cap to power 28 V filaments, or as is for 21 V or 24 V sweep tube filaments. Also good for 24 V power supply. NOTE: Please REPLACE the "47" with "snow" to make "snowhill" or call 334-347-5281 day/eve/wknd.

2878. Re: Need info to build 137MHz turnstyle

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: DGC <mqt00703@up.net>
Message-ID: <7ch6dg$ouk@btc3.up.net>
Source record: 72462
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur

Sorry my friend, I can't help you with your antenna. But as far as your grammer and choice of word's, are more literate than a great many american's. So much for our education system.....but anyway that's a different subject. Good luck in your search.
D. Cook
KC8AUM/AAR5AC

2879. Re: GAASFETS MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <aJw5nNARwA72Ew6R@ifwtech.demon.co.uk>
Source record: 72463

J M Noeding wrote:
>On Sat, 13 Mar 1999 07:51:00 +0000, "Ian White, G3SEK"
><G3SEK@ifwtech.demon.co.uk> wrote:
>>
>>That reminds me... there is a simple trick to tune a preamp for minimum
>>NF by listening to a very weak carrier in FM mode. At the threshold
>>level of the FM detector, the noise quieting is very sensitive to the
>>signal/noise ratio (not simply the signal strength) so it's quite easy
>>to hear when the preamp is optimized.

>Is it some relationship between actuak NF and 10 or 20dB quieting at
>certain input levels?

Well, some kind of relationship must exist, but it will involve the
characteristics of the FM limiter/detector as well as the system NF.

The point about using a very weak carrier is that the relationship
between quieting and signal/noise ratio is very non-linear in this
region, so it's easier to hear any improvements you make.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

2880. FS: 5867A transmitting triodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990314160434.11170.00000607@ng-fu1.aol.com>
Source record: 72464

I am selling a pair of Amperex 5867A VHF transmitting triodes. I have posted pictures and more info on my ï¿½garage saleï¿½ website at;

http://members.aol.com/Reactor001

If youï¿½re interested, please contact me by email at <OvrReactor@aol.com>.

Thanks,
Tom Mitchell

2881. FS: 7189A tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990314160457.11170.00000608@ng-fu1.aol.com>
Source record: 72465

I am selling a matched quartet of GE 7189A tubes. They are NOS/NIB, and the boxes are like new. They spent a day on my burn-in bed prior to testing, then they were operated at full power before the parameters were checked. Each was tested with 250 V on the plate, 250 V on the screen, plate current at 45 mA. Hereï¿½s the specs on the tubes;

Tube 1 ~ Eg1 = -7.15 V / gm = 11.06 mS
Tube 2 ~ Eg1 = -7.17 V / gm = 11.06 mS
Tube 3 ~ Eg1 = -7.27 V / gm = 11.04 mS
Tube 4 ~ Eg1 = -7.37 V / gm = 11.02 mS

$60 for the set, shipping included. US 48 only, please.
If interested, email me at <OvrReactor@aol.com>

OR, check out these two items I have posted on eBay. There is NO RESERVE, and I started the bidding at $1. These auctions end at around 7:00 PM Pacific, Monday 3/15.

Five (5) RCA JAN 7189A tubes;
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=76766343

and

Three (3) GE JAN 7189A tubes;
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=76769555

Thanks,
Tom Mitchell
website - http://members.aol.com/ecc81

2882. List Of Stamp Applications [990314]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: cjX@hth.com
Message-ID: <36ec272b.10121637@news.buller.se>
Source record: 72466
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Below is the latest index of L.O.S.A and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 What is L.O.S.A all about?

This list was started back in -95 when I heard about (more or less)
uniqe problems that was solved by using a BASIC Stamp. Especially
Guy Gustavson's story (see #001) about how he saved his beloved cat
Kesha gave me the inspiration to start writing L.O.S.A. I hope Kesha
still is alive and having a great life. Now 3 years later there are
130+ applications described and I hope you will enjoy reading all
(or parts) of them.

The main purpose of this list is to get an idea of what other people
are using their BASIC Stamps for and maybe get some inspiration or
hints for your own projects. Some of the projects described in the
list also have links to source code and schematics for download.

1.1 How can I contribute to this list ?

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions

> = Indicates a new or updated application since last time.

001 Robo-Cat
002 Logic Rudder
003 Interfacing MAX186 8 channel 12bit A/D

004 Scrolling LED Sign
005 Tone Decoder
006 Pager
007 HexWalker Mobile Robot
008 Robo Bug
009 EXPBOT Robot controlled by Stamp
010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector
044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule

054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device
060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Mobile Robot
074 R/C helicopter altitude control unit
075 Automobile Rally Odometer Interface to Laptop
076 LCD drivers
077 Stamp I / PC Interface Demo
078 Stamp Photo Meter
079 Stiquito(TM) 97 HexaPod Robot
080 XRaCS DTMF Radio X10 Control with Voice Response
081 Interfacing the Basic Stamp 2 with I2C Devices
082 The WeatherStamp Meteorological Station
083 Maxxum 7000 Remote Release Widget
084 Xs And Os games for college project
085 Stamp II Mouse Emulator (Version 6)
086 Basic Alarm System
087 Interfacing with a Printer
088 Dinosaur Quiz Game
089 Chemical Injection System
090 RS-232 connections between Stamp and host
091 Video Character Overlay Generator Controller
092 Suction tube depth measurement display
093 Electronic Compass with Basic Stamp 2
094 Event Logger with 8K 24C65 I2C memory
095 Fixing the depth of a suction-pipe with the BS 2
096 Superchaser
097 Corky'z Robotz
098 Cloudrider: analog network with BS2 and BS1's
099 Yet Another Real Time Clock, Dallas DS1287
100 Amateur RadioSatellite Tracking (Az/El) Controller
101 DTMF Decoder
102 PC to STAMP via RS232 routines
103 PC Frequency Counter

104 Sub-Millisecond Reaction Timer
105 Computerized Dynamics Cart
106 Ham Radio Interface Using the Basic Stamp 2
107 Remote tempsensors communicates over the power lines
108 Interfacing a BASIC Stamp to SRAM
109 Stepper controller pulse generator
110 Automatic rang caller
111 Automatic emergency broadcast system
112 BASIC Stamp I as an welding machine
113 PLM-24 to X-10 Gateway
114 Semi-Automated Combusitible Gas Indicator Tester
115 Counter-rotating Servos
116 Joystick Controlled Robotic Arm
117 Anti Traction Control Device
118 Cat Chasing Lego Robot and Other Circuits
119 Camlift
120 Control 15 Servos in Parallel
121 8 Digit "Smart" Alphanumeric Display
122 Cycle Testing AC Motor Controller
123 Controlling an LCD by BS2 via I2C Bus
124 The Newcastle Robotic Bilby Project
125 The EM1 (Electric mule)
126 Distance Measurement with GP2D02 SHARP Sensor
127 TI82 Interface
128 Operator Interface for Multiple Stamps
129 Infrared Glucose (Blood Sugar) Monitor
130 Fox For ham radio or Automated Propogation Beacon
131 GPS Data Overlay on Video
132 10Base-T Cable Tester
133 Kodak DC40/50/120 camera control
134 Implement S.N.A.P network protocol in a BASIC Stamp
135 Stamp/PC RS-485 Network
136 Easy-to-build BS keyboard/display w/ 10 keys/LEDs
137 Joystick control: BS2, 2 motors & 2 HBridges
138 Basic Stamp 2 Mobile Robot
139 Home Automation and Security System
140 UM3750 Read Code
141 Magnetic Stripe Reader
142 Telephone Remote Control and Remote Alarm
143 Tube preamplifier control section
144 Interrupt for PBASIC
145 dLOG
146 Compass
147 BS-2 serial VISCA interface
148 Servo tester
149 Small-bot
150 Repeater Controller
>
>
>

># 154 Vector2X Compass Module with the new BS2SX Stamp

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-

2883. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <36ec34bf.3479663@news.azstarnet.com>
Source record: 72467
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 14 Mar 1999 17:45:42 GMT, jim@rst-engr.com (Jim
Weir) wrote:

>jim@rst-engr.com (Jim Weir)
>shared these priceless pearls of wisdom:
>
>->
>->Anybody got a site where there is a demo, crippled, or otherwise "play
>->around" version of the program
>
>I really do wish, just once in these ham NGs that I could get an answer to
>TFQ. No, I've played with Spice. No, I've seen Eagleware. No, I don't
>want to teach senior level engineering programs to freshmen. And I sure as
>hell don't think magnets are going to help them.
>
>The question: Is there a playaround version of ARRL Designer available?
>Plain, simple question.

Okay. Sorry to have put you into data overload. Must be
tough doing all of those VP things and having to read
newsgroups too. Now that we understand how busy you are, the
succinct answer is yes. It costs $150 from ARRL. Buy it
and you can play to your heart's content.

2884. Re: F.S. 500 Watt E cores for switched mode power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: maddog@io.com
Message-ID: <36ec4305.23035016@news.io.com>
Source record: 72468

On Fri, 12 Mar 1999 16:45:14 GMT, John Strupat
<john.strupat@sympatico.ca> wrote:

>I have a case of Philips/Ferroxcube E cores that have 500 W ratings. End
>plates and hardware included but no plastic bobbin.

John, what material are they?

monty, N5FC

2885. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7chg19$763$1@winter.news.rcn.net>
Source record: 72469

>
>Received wisdom (!) about woven strapping having high loss at RF... I know
I've
>read it somewhere, but sitting here I can't think of a reference.
>
This is true when using braided (woven) wire for grounding applications. If
the wire
becomes oxidized, the skin effect losses soar.

>I did not know there was any coax that had a stranded center conductor!
>>
Best reason is that the stranded coax center conductor will survive being
used
on a rotatable antenna system.

Regards

Peter

>
>
>

2886. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7chh54ss1@news1.fast.net>
Source record: 72470
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Jim Weir <jim@rst-engr.com> wrote in message
news:36ecf528.5219940@news.gv.net...
>jim@rst-engr.com (Jim Weir)
>shared these priceless pearls of wisdom:
>
>->
>->Anybody got a site where there is a demo, crippled, or otherwise "play
>->around" version of the program
>
>I really do wish, just once in these ham NGs that I could get an answer to
>TFQ. No, I've played with Spice. No, I've seen Eagleware. No, I don't
>want to teach senior level engineering programs to freshmen. And I sure as
>hell don't think magnets are going to help them.
>
>The question: Is there a playaround version of ARRL Designer available?
>Plain, simple question.

Jim,

To the best of my knowledge, NO ... sorry I overwhelmed you by
trying to suggest alternatives.

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBNuxHwZe+N6+q84HiEQK29wCg747ip7Yr++KEMMtj7QcdqWSiDDQAn3hf
DVvqB22Gnk+CkCuU/WL1Q+UV
=aHYd
-----END PGP SIGNATURE-----
```

2887. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36EC5360.D7F8D903@teleport.com>
Source record: 72471
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

My apology for failing to answer your FQ. The answer is no.

Roy Lewallen, W7EL

Jim Weir wrote:
>
> jim@rst-engr.com (Jim Weir)
> shared these priceless pearls of wisdom:
>
> ->
> ->Anybody got a site where there is a demo, crippled, or otherwise "play
> ->around" version of the program
>
> I really do wish, just once in these ham NGs that I could get an answer to
> TFQ. No, I've played with Spice. No, I've seen Eagleware. No, I don't
> want to teach senior level engineering programs to freshmen. And I sure as
> hell don't think magnets are going to help them.
>
> The question: Is there a playaround version of ARRL Designer available?
> Plain, simple question.
>
> Jim
> Jim Weir, VP Eng. RST
> A&P, CFI, and other good alphabet soup

2888. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Rod Kirkhart <pratch@postoffice.pacbell.net>
Message-ID: <36EC4192.A8325B46@postoffice.pacbell.net>
Source record: 72472

Basically, if you take the ring quad out of a double balanced mixer and preplace it with a bridge quad and terminated the IF port in 50 ohms you have a doubler. Just drive the LO port with the fundamental and you'll get your 2F at the RF port (plus 1F,3F,4F...etc).

Rod

2889. FS:4-125s cheap?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <36ec5e86.0@wagner.n2.net>
Source record: 72473

Have three 4-125s (one Eimac & 2 Pentas). Picked up a home brew HF amp
several years ago from a SK estate. Was going to fix it up but lost
interest...never started. Has burned pedistal choke and sloppy solder
connections. Had a pair of 4-125s and a spare. Nobody could tell me the
condx. of tubes. They look good and don't rattle. I have no way to test
them. I have reason to believe at least one is good....maybe all three!
Based on circumstancial PROBABALITY. Unless Murphy's law is in full
effect here. Then these words are meaningless.
If you have a device that uses these tubes, make me an offer over
$35.00.
Gotta start some place.

Delete "X"s from e-mail address to reply.
Tnx
John
---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

2890. FS: Test Eq manuals - Boonton Q meters, ect.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <Wi_G2.5249$fM1.8735521@brnws01.ne.mediaone.net>
Source record: 72474
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have the following manuals for Boonton:

Original manual for UHF Q Meter 280-A
Original manual for Sweep Generator 240-A
Manual copy for Boonton Q Meter 260-A
Manual copy for Boonton Q Meters 100-A, 160-A, 170-A

Copies are very good, originals also very good condition.

All are $10 each shipped CONUS

regards,
Chuck...

2891. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36EC7660.1DA43B8F@erols.com>
Source record: 72475

RG58A/U is one...

Roy Lewallen wrote:

> nicholas charles caruso wrote:
> >. . .
>
> > I did not know there was any coax that had a stranded center conductor!
>
> Many coax cable types do. It makes the cable a lot more flexible.
>
> > . . .
>
> > Needless to say, if you've got measurements and I've got hearsay, my money's on
> > you.
>
> Spoken like a true man of science. We all should strive for this
> attitude.
>
> > On the litz wire front -- why is it not recommended for winding RF coils? Or am
> > I wrong here too?
> > Perhaps there's simply no advantage to litz wire at high frequencies, rather than
> > actuall lossiness.
>
> Litz wire is a different animal than ordinary stranded wire. In Litz
> wire, the strands are individually insulated from each other, and at
> least in some cases, they're interwoven in a random-seeming pattern.
> This has some advantages at low frequencies (MF and below), where the
> currents can follow individual strands. At higher frequencies, the
> current just flows on the outside of the whole bundle, so it doesn't
> make much difference whether or not the strands are individually
> insulated. At these frequencies, the interweaving might cause more
> loss, as the current has to keep traversing from one strand to another
> to stay on the outside of the bundle.
>
> It's true that braided coax shielding causes increased loss at very
> high frequencies. I don't know where this first becomes noticeable,
> but suspect it's no lower than UHF. (If Tom Bruhns is reading, maybe
> he'll comment. He should know.) Just the other day I had occasion to
> measure the loss in some RG-58 and some 0.141" semi-rigid (solid
> copper shield) coax at 6 GHz, and the RG-58 was much lossier, despite
> its larger size. I'm certain this was primarily due to the braided
> shield. And I wouldn't be surprised if stranded wire has more loss or
> at least some interesting impedance effects at frequencies where the
> twist period is a sizeable fraction of a wavelength. This is well into

> the microwave region for most wire, however.
>
> Roy Lewallen, W7EL

2892. Wanted 250/300 PF Vacuum Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36ECAC2D.325D957C@uswest.net>
Source record: 72476
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Wanted 250/300 PF Vacuum Cap 3/5 KV need for loading cap for 6 meter
AMP project. Looking for small size such as USL, CVCA, CVDA or other
Cash or trade for other Higher Voltage larger cap.

Art
KB7WW

2893. packet radios(internet)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-14 00:00:00 UTC
From: lbetti@dinonet.IT
Message-ID: <Version.32.19990314221920.00e356b0@mail.dinonet.it>
Source record: 72477

Hi,
I'd like to know if packet radios to navigate on the net are reliable and
legal.
Would it be expensive to use such device?
What are the performances ?
Which devices do I need ?
What are prices for components needed?
Would it be legal to set up a sort of network for such thing?
Thanks,
Gabriele Betti
lbetti@dinonet.it

2894. Re: ARRL Radio Designer -- Questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <36ec566d.30124540@news.gv.net>
Source record: 72329
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hans K0HB <k0hb@uswest.net>
shared these priceless pearls of wisdom:

->Jim Weir wrote:
->
->> The question: Is there a playaround version of ARRL Designer
available?
->> Plain, simple question.
->
->No.

>If you were a little less belligerent and obnoxious you might have better luck.

>The answer is no.

>Bill W0IYH

There must be something in that Missouri water...

Jim
Jim Weir, VP Eng. RST
A&P, CFI, and other good alphabet soup

2895. WTB: HD soldering iron

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990314194451.12896.00000808@ng03.aol.com>
Source record: 72330

Looking for a heavy duty soldering iron, preferably new, like a 200 watt or 250 watt.

73

Evan

2896. Need Manual Precision E410C Sweep Gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: rod7rg@aol.com
Message-ID: <19990314213607.16886.00001181@ng-fi1.aol.com>
Source record: 72331

Hi
Above just about states it. Will be glad to pay for copying costs and postage
\. Thanks.
Rod Mayward

2897. Turning a single-ended DC Supply into a Duel-ended one

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7chu6j$dn1$1@sunhub-tulsa.onenet.net>
Source record: 72332

I am looking for a cheap way to turn a single-ended unregulated wall transformer output in to something that looks like a dual-ended power supply for powering op-amps. I could use a charge pump and get +- supply but this is an audio project and I can stand to use + and - half the full supply voltage and I am not sure I can stand the crosstalk from the switching circuit that might show up. What I am thinking of is using one op-amp set to unity and driven at its positive input from a resistive divider. The output of that op-amp would be the common or zero-reference point of the rest of the circuit. I have a hand full of 741's but I am wondering if there are any chips that are actually optimized for such service. There won't be much current involved at all, but I don't get much more than 50 to 100 mills out of the wall transformer so I don't have any to waste on a low-value resistive divider. My ref output needs to look like a solid ground like one gets out of a true dual-ended supply with the positive and negative voltages taken between it and the positive and negative leads of the DC wallwrt.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

2898. Re: RE Transverters Anyone??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: mojaveplan@aol.com
Message-ID: <19990314232141.05055.00000760@ng-fc1.aol.com>
Source record: 72333

>Now that I've been helped by W4OP and VE6XT, to whom I owe many thanks
>,where can I get plans to build a 20m to 6m transverter? This actually
>makes more sense as pointed out by these two fellas. It will be
>interfaced with a Yaesu FT-840. Any suggestions ? Please e-mail me at
>va3hie@eagle.ca
>
>

well, best of luck, but i still say you would be hard pressed to build your own for less than the $95 bucks it takes to get a ten tec transverter. you should have no problems with it if you can turn the 840's power down to a couple of watts. use that to get on the band and get some experience, then look into homebrewing some other stuff if you like. good luck! 73's.
jeff kd7dcy

2899. Re: 11 Meter to 10 Meter Conversion Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: mojaveplan@aol.com
Message-ID: <19990314232742.05055.00000763@ng-fc1.aol.com>
Source record: 72334

>I have an old Royce SSB CB transciver (Model 1-640)that I would like to
>modify to operate on the 10 meter band. Does anyone know of a web site that
>would list this modification specifically? Thanks for your help. Paul in
>Chattanooga..WA4AA

no, but check with this web site. lou can set you up with all the info you need
to modify that rig.

http://www.cbcintl.com/

73's kd7dcy

2900. Re: Turning a single-ended DC Supply into a Duel-ended one

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <37289866.1115454809@news.sci.fi>
Source record: 72335

On 15 Mar 1999 03:18:43 GMT, wb5agz@dc.cis.okstate.edu (Martin McCormick) wrote:

:
: I am looking for a cheap way to turn a single-ended
: unregulated wall transformer output in to something that looks like a
: dual-ended power supply for powering op-amps.

If you can find a wallwart _transformer_ (without rectifier bridge and filtering capacitor) you can connect the AC output to a voltage doubler producing +V and -V voltages for op-amps.

The "cold" end of the transformer secondary is simply your 0 V reference voltage.

Then connect two half wave rectifiers to the "hot" end of the transformer secondary. One rectifier has the anode connected at the hot end of the secondary and the cathode to a filter capacitor (other end at 0V), this is your +V output. The other rectifier is connected with the cathode to the "hot" end of the secondary and the anode to a filter capacitor (other end at 0V) and this is your -V output to the op-amps.

The op-amp power consumption is so low that half wave rectification is more than sufficient. With large filter capacitors and the relatively high internal impedance of a typical wallwart transformer, at startup, it takes several cycles until full DC voltage is reached, but both the positive and negative voltage will grow at the same rate, keeping their half point voltage close to 0 V, avoiding any large op-amp output swings at startup.

(If a switcher is used to make the negative voltage, the negative voltage starts to grow only after the positive supply is large enough to start the switcher, which may cause a large voltage swing at the op-amp output).

Paul OH3LWR

2901. Re: Homebrew paradise

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36ECD089.5CA7A841@asu.uswest.net>
Source record: 72336

That goes for me as well. Harry, you not only provide a wealth of
on-the-money homebrewing info, but you do it with style and wit, and the
site itself is fiendly to navigate and a pleasure to look at. Thanks for
the effort, and please keep it up forever!

Monty Northrup wrote:

> On Thu, 11 Mar 1999 10:55:37 +0100, Harry lythall <no.one@no.where>
> wrote: Harry,
> Your homebrew site is the best... I've watched it for some time now,
> and just felt it was time I let you know hoiw much I appreciate it.
> You're a great ambassador for amateur radio. Keep up the good work!
>
> 73,
> monty, N5FC

>http://sm0vpo.8m.com/ (still under construction)
>http://www.geocities.com/SiliconValley/3569/
>http://hem2.passagen.se/sm0vpo.
>http://members.xoom.com/sm0vpo.

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

2902. class c amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: cj1@aol.com
Message-ID: <19990315055348.03348.00000401@ng55.aol.com>
Source record: 72337

I am trying to design a tuned class c amplifier which works in the range of 100 M Hz. Any help would be appreciated.

2903. Antique Receiver Value

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: peterh2072@aol.com
Message-ID: <19990315062851.13244.00001019@ng-fr1.aol.com>
Source record: 72338

I'm trying to sell my late father's ham equipment, and need to know the approximate value of the following:

National HRO - 5T Communications Receiver [built circa. 1938]
Complete set of plug-in coils [9 units]
Fully operational - includes 120 vac power supply

A high performance, very rugged receiver, in excellent condition .... not 'restored'.

Thanks,

Peter

2904. DDS all mode receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: craiggib@deathtojunkmail.icon.co.za
Message-ID: <36ed122b.8418214@news.icon.co.za>
Source record: 72339

Hi all

I was talking to a contractor here at work who is also a ham and he mentioned that not so long ago, there was an article in one of the ham magazines detailing a all mode receiver using one of the Analog devices chips - I presume probably a DDS chip. Does anyone know about such a project? Unfortunately he cannot seem to find the article.

Kind regards
Craig Gibson
ZR6CG

2905. FA: Bird 43 With Slugs.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36ee13fe.9480293@207.217.77.140>
Source record: 72340

Real nice!!
Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78288225

2906. Re: Where to look for 7.11 MHz Crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: k5dh@raytheon.com
Message-ID: <7cj5ok$rn@news.rsc.raytheon.com>
Source record: 72341

In article <OG86Qscb#GA.107@upnetnews05>, N0URE1@email.msn.com says...
>
>Where might I find crystals for my 40 M QRP rig?
>I need 7.10 MHz and 7.11 MHz.

Call JAN Crystals at 1-800-JAN-XTAL. Get their free catalog. I've dealt with them for over 20 years and have always been happy with their products and their customer service.

C-W Crystals is still in business also. Check in the Ham-Ads in the back of any QST magazine for their ad with phone number. I've seen other crystal ads in QST lately also.

By the way... the QRPers hang out on 7040 KHz (for those with General or higher licenses). I'd avoid 7100 - 7110 KHz because of packet radio. If you're stuck in the Novice band, go higher in frequency to avoid the packet racket. Choose your crystal very carefully so you don't end up on top of a shortwave broadcast station. Do some listening in the evening and find the clearest spots, then order rocks for those spots. Or... upgrade to General and join the serious QRPers down on 7040 KHz!

73,
Dean / K5DH

2907. Thanks for the help!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: DAB <daburroughs@hotmail.com>
Message-ID: <7cj920$gj7@news-central.tiac.net>
Source record: 72342
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

thanks to everybody who sent me information on the variable capacitor. Very useful. So many people took the time to write I won't be able to name them all.

Thanks, DAB

2908. Re: Magnet wire vs plastic insulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36ED26B8.41C6@eece.maine.edu>
Source record: 72343

nicholas charles caruso wrote:
>

> One thing that noone's mentioned, but might be crucial, is that magnet wire
> is enamel coated SINGLE STRANDED copper wire. I bet you used wire which is
> multistranded. I know that multistranded wire has high losses at RF
> frequencies -- this may be why the circuits you built did not work.
>
> Of course, if you did use plastic insulated single strand wire, my theory's
> totally out the window.
>
> good luck, and 73
> nick caruso kb1dej

I had used solid strand stuff. It sounds like I screwed up the coils
with either the dieletric of the insulation, or (due to my inexperience)
wound the coils wrong. (I threw 'em out a while ago, so I can't see how
they were wound.)

Thanks for all the replies; I learned about a few new things from this
discussion!
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

2909. Re: WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: pmarkham@newsguy.com
Message-ID: <7cj59d$1api@news3.newsguy.com>
Source record: 72344
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Since my post listing Robert Lay's (W9DMK) ftp site, sc81.zip and other
programs, I have found his web page that may be easier to access, for some.

http://meltingpot.fortunecity.com/albania/784

Pete/wa4hei

>In article <WXYcQEAjbv22EwDw@falstaf.demon.co.uk>, Robin Birch
> <robin@falstaf.demon.co.uk> wrote:
>>Dear All,
>>Does anyone know of a reasonable but simple to use smith chart program.
>>I want to be able to tell it to behave as though I was doing it
>>graphically with a ruler and a chart. the purpose is to design some
>>matching circuits.
>>
>>Rgds
>>
>>robin

2910. Specs of eimac YU-204 tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Peter Delmotte <delmotte@tele.kotnet.org>
Message-ID: <Pine.LNX.4.05.9903151805050.28914-100000@popov.esat.kuleuven.ac.be>
Source record: 72345

Greetings,

I recently got hold of an eimac YU-204 tube,
pulled from an NMR-scanner. I was told the tube
was still working at the time of replacement.
Does anybody have some specs for it? It operates
at 80MHz or so in the scanner, and puts out at
least half a kilowatt. That's all i know.
Anybody out there with some more information?

Thanks,

Peter, ON4CDQ.

2911. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ec62ac.1253285765@news.online.no>
Source record: 72346

On Sun, 14 Mar 1999 09:37:08 GMT, keinanen@sci.fi (Paul Keinanen)
wrote:

>On Sat, 13 Mar 1999 16:55:11 -0500, "abcd1234"
><abcd1234@ix.netcom.com> wrote:
>
>: NE602 works well as a doubler as also detailed in the
>: phillips App notes.
>:
>: Advantage is you can double without tuned circuits.
>
>Apparently it works with the trigonometric equation sin(x) * sin(x) =
>1/2(1-cos(2x)), in which a DC component and a sine wave at double
>frequency and nothing else is produced. However, this requires that a
>linear four quadrant multiplication is performed between the inputs to
>the multiplier. The Gilbert cell mixer (used e.g. in NE602 and 1496)
>must be driven at much lower levels (compared to mixer operation) to
>stay in the linear region. With constant noise level, the SNR of the
>produced signal will be degraded, which can be a problem if the
>produced signal is used to drive a mixer in a high dynamic range
>receiver.
>
>The other way to use a double balanced mixer as a frequency doubler is
>to drive the other input into hard saturation with a square wave (or
>overdriven sine wave) and input a clean sine wave into the other
>input. Essentially this is a voltage controlled full wave rectifier,
>in which the negative sine half cycle is multiplied by -1 and the
>positive half cycle is multiplied by +1, producing the absolute value
>of the input sine wave. The sensitivities of the two inputs in various
>Gilbert cell mixers are different, so by suitably setting the input
>level, the other input will saturate, while the other input operates
>in the linear region, even when the same signal level is at both input
>terminals.
>
>With a diode ring mixer used as a frequently doubler, the LO signal
>should be strong enough to fully saturate the diodes (-1 and +1 gain),
>while the RF input should be low enough to avoid distortion.
>
>: Peter Bolch wrote in message <7cdbe6$k34$2@news.netcologne.de>...
>
>: >do have frequency doublers (e.g. MiniCircuits SKY-2R) a considerable
>: >advantage over double balanced mixers ?
>
>I haven't seen internal diagram of this component, but apparently it

>is some kind of full wave rectifier which is similar to the one used
>in power supplies. Looking at the specifications for other Mini
>Circuits frequency doublers, it appears that the input power range can
>be larger than for DBMs. However, the prices seemed to be much higher
>than standard SBL-1 style mixers.
>
>The full wave rectified signal has quite strong even harmonics output,
>he 4th being only 12 dB below the second, so some sort of filtering is
>usually required, as it is also required when using diode ring mixers
>or Gilbert cell mixers as voltage controlled full wave rectifiers.
>
>
>Paul OH3LWR
>

Paul

interesting to see the math behind, something I'd almost forgotten,
but now a practical demonstration of applyiing the math, practical
examples were just too often missed at school, hi

73
Jan-Martin
LA8AK
LA8AK@ONLINE.no

2912. Re: Need loop-filter with CD4046AE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ed41ee.1310448086@news.online.no>
Source record: 72347

On Sun, 14 Mar 1999 01:59:11 -0500, Michael Black <blackm00@CAM.ORG>
wrote:

>
>

>> I am building a frequency standard comparing 250kHz signals, but need
>> a good op-amp loop-filter with lowest possible cut-off frequency
>> Any suggestions? I will be pleased to receive gif files if possible

>>
>Philips has a program for designing with the 4046. I can't remember all
>that it does, and I don't have an MS-DOS machine hooked up to check.
>
>However, I think you can find the program at
> www-eu.semiconductors.philips.com/logic/support/pll/pll.zip
>
>I say think because I didn't actually download it.
>
> Michael VE2BVW
>
>
tnx, but it seems somewhat complicated to use. Does anybody have a
circuit I could copy, need low cutoff frequency and large timeconstant
as possible for minimum jitter on the 10MHz VCXO signal.

73 Jan-Martin
LA8AK@ONLINE.no

2913. Re: FM Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36ed4358.0@news.netwalk.com>
Source record: 72348

Theoretically you could have a 'direct conversion' FM receiver.

What I am thinking of is a wide range phase locked loop covering, for example, 144 to 148 MHz. The point that is normally connected to a reference oscillator would instead go to an antenna, perhaps with some gain stages. It would then lock on to the strongest signal. Gain would have to be such that the strongest signal would be yours.

The control voltage could then be amplified to recover the audio.

There are a lot of details to be worked out, and most likely a few 'gotchas' lurking in the background.

I also remember seeing an idea for a wide band FM demodulator that used nothing but pieces of coax. The basic idea was to split the signal with a power splitter. This was followed by two pieces of coax whose lengths differed by a quarter wavelength at the frequency of interest. Finally the two signals were subtracted from each other, which resulted in the FM being demodulated.

Jim
N8EE

2914. 10 meter rig or conversions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Michael Gray Anthony <mganthon@unity.ncsu.edu>
Message-ID: <36ED4778.14D931C7@unity.ncsu.edu>
Source record: 72349

Hey all,
I'm looking for plans for a 10 meter CW or SSB transceiver or info on converting an old CB. Does anyone know of a web site with such a beast or of an old CQ/QST/73 article about it. I remember seeing/hearing about them, but I don't have any in my files and I don't know around what years to look in the magazines.

Thanks in advance for all your help,

Gray KE4QIU

--
--One Man's Sunset is another Man's Dawn. -- Fievel Mouskawitz
--The art of flying is to throw yourself at the ground and miss. -- Douglas Adams
--"From what we get, we can make a living; what we give, however, makes a life." -- Arthur Ashe
--Don't cry because its over, smile because it happened.
--Have a nice day! :-)

ICQ # 22931469

-- M. Gray Anthony KE4QIU

2915. Equivalent circuit for ceramic resonnators?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ed495a.1312348212@news.online.no>
Source record: 72350

Using ceramic resonnators for VFO's and BandPassfilters, have tried
some different Murata types on 250, 440, 480, 500, 960, 3580, 4000kHz
Tried to measure Q compared to inductors, Would be interested to find
more data via internet, any suggestions?

73 jan-martin
LA8AK@ONLINE.no

2916. FS:144tubes $150.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <36ed4b34.0@wagner.n2.net>
Source record: 72351

144 GOOD tubes $150.00 UPS Shipping 48 states incl.

Got rid of my tube RF and Audio gear. Now the tubes

All these tubes test good on my Conar tester.All are in
boxes. A Few boxes (abt 11) are worn. Many of these tubes
have never been used. I am however selling them as used. These
are my top shelf backups.

Have MANY more loose Good 6's & 12's will
post after I test them. No sweeps left.

For Sale Now as a lot:

(2)1x2 (1)1H5 (1)1T4 (1)1s5 (2)1R5 (1)1G3 (3)1B3

(2)2AF4A

(2)3AU6 (1)3AL5 (2)3BZ6 (1)3CB6 (1)3CN3B

(1)5AM8 (3)5AN8 (1)5GS7 (1)5LJ8 (1)5V8 (1)5V4 (3)5U4
(1)5Y3GT

(1)6AU8 (1)6JU8A (1)6U8 (1)6JE7 (5)6AG5 (1)6AK5 (1)6EA8
(1)6GH8A (2)6AQ5 (1)6AS5 (2)6AU4GTA (1)6AU5GT (1)6AX4GT
(3)6BQ6/6CU6 (1)6BN8 (1)6AZ8 (2)6BG6A (1)6DQ6/6BW6 (1)6CB5A
(1)6BS8 (3)6BZ7 (2)6C4 (2)6CB6 (4)6CG7 (3)6CL6 (1)6CL8 (1)6EN5
(1)6DT6 (1)6EL5 (2)6GH8 (1)6HB7 (1)6HQ5 (1)6J5 (2)6J6
(1)6L6metal (1)6LU6 (1)6LY8 (2)6S4A (3)6SN7GTB (1)6N7GT
(1)6SF6 (1)6SL7GTB (1)6U8A (1)6T10 (1)6W4GT (1)6Y6

(2)7AU7

(1)11HF9

(4)12AL5 (1)12AV6 (1)12DQ6B (1)12CU6 (3)12SL7 (2)12AX4
(1)12BL6 (1)12CA5 (2)12AU6 (5)12AT7 (2)12AU7 (2)12BH7
(2)12BA6 (1)12AW6 (1)12BF6

(1)5591 (3)5842 (3)5847 (1)5963 (2)6012* NIB $70.00ea at
RF Parts
*special purpose Tubes, no idea what they are for.
ALL for $150.00 shipped UPS ground 48 states. COD ok
Note: ( )=quantity
To reply please remove "X"s from address.
--

---/---
---/---

----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

2917. Re: Turning a single-ended DC Supply into a Duel-ended one

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <36ED6D89.6433F207@up.net>
Source record: 72352

Try Maxim, they have a line of single supply opamps
that should take care of it...also will supply samples.
http://www.maxim-ic.com/

Martin McCormick wrote:

> I am looking for a cheap way to turn a single-ended
> unregulated wall transformer output in to something that looks like a
> dual-ended power supply for powering op-amps. I could use a charge
> pump and get +- supply but this is an audio project and I can stand to
> use + and - half the full supply voltage and I am not sure I can stand
> the crosstalk from the switching circuit that might show up. What I
> am thinking of is using one op-amp set to unity and driven at its
> positive input from a resistive divider. The output of that op-amp
> would be the common or zero-reference point of the rest of the
> circuit. I have a hand full of 741's but I am wondering if there are
> any chips that are actually optimized for such service. There won't
> be much current involved at all, but I don't get much more than 50 to
> 100 mills out of the wall transformer so I don't have any to waste on
> a low-value resistive divider. My ref output needs to look like a
> solid ground like one gets out of a true dual-ended supply with the
> positive and negative voltages taken between it and the positive and
> negative leads of the DC wallwrt.
>
> Martin McCormick WB5AGZ Stillwater, OK
> OSU Center for Computing and Information Services Data Communications Group

2918. packet radios for internet?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: lbetti@dinonet.IT
Message-ID: <Version.32.19990315224658.00e5b7a0@mail.dinonet.it>
Source record: 72353
Body handling: HTML body converted to readable text

Hi,

I'd like to know more about packet radios in Italy or abroad.

****
****

Agritourism : "Villaggio Ecologico" ; Tuscany, Italy.

A place for ecologically-minded people who are interested

in living in an eco-village community with an alternative

lifestyle (bed & breakfast available).

http:\\www.

****
****

Thanks,

Gabriele Betti

lbetti@dinonet.it

2919. Re: WTD: Smith Chart program

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6f75$81822780$LocalHost@default>
Source record: 72354
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Robin, for what particular set of problems do you require a
computerised Smith Chart ?
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

2920. Re: Turning a single-ended DC Supply into a Dual-ended one

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ed8307.1327115859@news.online.no>
Source record: 72355

On 15 Mar 1999 03:18:43 GMT, wb5agz@dc.cis.okstate.edu (Martin McCormick) wrote:

>
> I am looking for a cheap way to turn a single-ended
>unregulated wall transformer output in to something that looks like a
>dual-ended power supply for powering op-amps.
>
>Martin McCormick WB5AGZ Stillwater, OK
>OSU Center for Computing and Information Services Data Communications Group

it is easy using uA741, 4-5 resistors and two smaller power transistors (like 2N2904A and 2N3053). The op-amp is voltage follower with a voltage divider between + and minus rails dividing the voltage into two equal, fed to noninverting input of op-amp, output to ground and pin 7 goes to base of the PNP transistor, pin 4 to NPN transistor, collectors to ground, emitters to +V and -V , respectively. Use 100 ohm across emitter-base of transistors.
It will divide the input voltage into two exactly equal voltages, I have published it, it may be possible to find the circuit diagram and scan it to a gif file

another method is applied in the TNC2 or MFJ1270B using NE556 as a dual phase alternator operating on 10. Fed with +12V it is possible to draw at least -9V@50mA, I have used this circuit in some occasions, I have drawn a circuit diagram in powerpoint and converted to gif file. It uses 4x 1N4448 diodes, will even work for 1N4004 diodes - even on 20kHz(!) - with high efficiency (pse don't ask me why!)

73 jan-martin
LA8AK@ONLINE.no

2921. 1/4 antenna formual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Brian or Wayland <phantomx@integrityonline.com>
Message-ID: <36ed8eb9.0@205.238.18.7>
Source record: 72356

Hello
I'm looking for the formula for the length of a 1/4 antenna. I want to make a 1/4 vertical for 10m so I can have a cheep vertical for 10M. Any info is good. Please mail responses to phantomx@integrityonline.com Thanx

Brian
KD7BJF

2922. For Sale / Tubes & Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990315184144.28089.00001212@ng-ft1.aol.com>
Source record: 72357

813 Tubes / Graphite Plate $18.00 each
813 sockets $12.00 with tube / $18.00 with out
Johnson sockets 123-211-200 $20.00 each
450 Tube old stock / No Guarantee $55.00
250 Tube old stock / No Guarantee $40.00
RK 65 in box old stock / No Guarantee $45.00
RK 65 No Box / No Guarantee $25.00
All prices plus shipping

2923. looking for Tektronix 570

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <36ED77C3.7909@ns.atl.org>
Source record: 72358

Anyone got one gathering dust?
Guess I could build something but the project bin is overflowing.
-bob

2924. Icom (IC-706) Tuner Control Socket - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: Teresa e Paulo Campos <campos@mail.ua.pt>
Message-ID: <36ED8EC2.3A780B91@mail.ua.pt>
Source record: 72359
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi all,

I am looking for technical reference/information on the Icom (IC706...
/MK2/G) Tuner Control Socket (the socket that connects to AH-4 antenna
tuner).

I appreciate any info you can give!

Thanks.

73,

Paulo, CT1EFS
email: campos@mail.ua.pt

2925. Repair of Atwater Kent Transformers: Info wanted...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-15 00:00:00 UTC
From: NOSPAMpfriedr@azstarnet.com
Message-ID: <NOSPAMpfriedr.121.0028ED66@azstarnet.com>
Source record: 72360

Recently, I saw a thread here involving the repair of Atwater Kent transformers. One gentleman described the core as being composed of individual (iron?) wires. Does anyone have a bitmap or a link to an image of the internals of such a transformer? I'd like to see how these were constructed.

Remove NOSPAM from my address to email me. Thanks in advance.

Pete

****
To email me, remove NOSPAM from my return address.
Anyone sending unwanted advertising e-mail to this address will be charged $25 for network traffic and computing time. By extracting my address from this message or its header, you agree to these terms.

2926. Part Storage Cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990215163020.OUI05.ejune@intuitive-data.com>
Source record: 72361

Does anyone have a good source for those containers (cabinets) with small drawers that you would typically stack on your workbench (or under it) and use for small parts? I know that Mouser carries some conductive plastic ones, but they are kinda pricey.

--
Regards,

Eric June
KU6J

2927. Re: 1/4 antenna formual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990215163243.OUI08.ejune@intuitive-data.com>
Source record: 72362

The formula (in feet) is 234/f(MHz).

--
Regards,

Eric June
KU6J

2928. 8560-AS EIMAC tubes F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990315201756.09211.00001265@ng-fd1.aol.com>
Source record: 72363

Hello, I have SIX new 8560 AS Eimacs for sale, made a few years ago, never used. 3 are in the original boxes, 3 had lost theirs , but are definitely unused, and come with a copy of the original documentation.
60.00 for the boxed ones, 50.00 ea. for the others,
INCLUDES ALL INSURED SHIPPING, in the Continental USA.
Thank you,
Joe Pratt, Tubecntral@aol.com

2929. Simple & Folded Dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be6f8e$fcf1d960$14e4abc3@default>
Source record: 72364

Hello folks,

The virtues of large diameter antenna conductors and of 'folded' dipoles are often extolled. But how virtuous ARE these fat, doubled-up radiators ? From where can a quantitative description be obtained ? Why all the secrecy ? Do the Guru's really know how much broader will be the SWR bandwidth of a 40m dipole after increasing wire diameter from 18 gage to 14 gage. It certainly makes it a lot heavier. Or by replacing the antenna's single conductor with ubiqitious 300-ohm twin line, also used for the feeder. It catches the wind better.

Feedpoint impedance, in terms of R+jX, and SWR on the feeder, versus frequency over a band within +/-5 percent of the resonant frequency, of either a simple or folded half-wave dipole, can be investigated by downloading program SWR_FREQ.exe from my website.

Input data:- resonant frequency, conductor diameter, if folded enter conductor spacing, feedline impedance and acceptable VSWR over the band.

Output data is a table of Rin, Xin, Refl.Coeff., and VSWR versus frequency. Also computed:- accurate overall length of resonant dipole, Q and 3dB bandwidth of the antenna when connected to a matched receiver.

Principal assumption :- height of dipole is greater than 0.75 wavelengths. Accuracy falls off at low heights depending on type of ground. Predictions are reliable at dipole length/diameter ratios down to 10-to-1.

Download brand new SWR_FREQ.exe now.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

2930. FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Daniel Lavoie <LavoiedNOSPAM@iSTAR.ca>
Message-ID: <iYiH2.83$wn3.575967@NewsRead.Toronto.iSTAR.net>
Source record: 72365
Cross-posted to: alt.ham-radio.packet,aus.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.space,uk.radio.amateur

Does anyone know how to modify the Yaesu FT-470 HT for 9600bps?

73 de VE3DCL

2931. wanted tech data

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990315221911.11899.00001208@ng-fb1.aol.com>
Source record: 72366

need owners man for Zenith Trans-Oceanic mod. Royal "1000-1",copy OK Harold

2932. need tech data

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990315222146.11899.00001210@ng-fb1.aol.com>
Source record: 72367

RCA Radiola III type RI receiver also Radiola Balanced Amplifier copy OK
..Harold

2933. FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Daniel Lavoie <LavoiedNOSPAM@iSTAR.ca>
Message-ID: <qvlH2.104$wn3.668387@NewsRead.Toronto.iSTAR.net>
Source record: 72368
Cross-posted to: alt.ham-radio.packet,aus.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.space,uk.radio.amateur

Does anyone know how to modify the Yaesu FT-470 HT for 9600bps?

73 de VE3DCL

2934. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: stuartlandau@my-dejanews.com
Message-ID: <7ckr8l$c8o$1@nnrp1.dejanews.com>
Source record: 72369

Peter, A mixer makes an awful doubler. Double balance pretty much eliminates the even harmonics. The type that mini-circuits sells consists of a wideband rf transformer, two hot-carrier diodes and a high-pass filter. It takes about +13 dBm drive. They are easy to make also for very little money. An RF transformer such as found in a television balun unit,two inexpensive diodes,and an rf choke and capacitor does it. Stuart K6YAZ,

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2935. QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: "Matt J. McCullar" <mccullar@flash.net>
Message-ID: <36ECDAAF.38B6@flash.net>
Source record: 72370

I went ahead and bit the bullet, ordering a set of _QST_ on CD-ROM without being able to try out the product first. I thank everyone on this newsgroup for their opinions.

I could have ordered these discs from a place in Dallas, but I went through the ARRL for two reasons: they offered a coupon discount in the paper version of the magazine, and I also didn't have to pay state sales tax. The discs took about two weeks to get here after I mailed my check.

I now am the proud owner of the 1990-1994 set of _QST_ on CD-ROM. What do I think? I am quite satisfied. The index-database searching function really makes things simpler and now I can let a new ham take ownership of my paper-based copies of these issues. I've printed out a few pages from disc onto laser printer, and while the quality isn't pristine, it's good enough for what I need. Schematics are more than legible.

I do have a couple of sticking points. 1) The covers of each issue are not included for some reason. 2) All images are in black & white. I guess this was done to save storage space, and I can live with it. 3) A few errors crept into the manufacturing process. On only my fifth database search, the disc called up what it thought was page 64, but in fact page 62 was displayed, and vice-versa. It appears that whoever scanned all the pages simply got the two switched. As long as this doesn't appear to be a continuous problem, I can understand a small error creeping into such a huge library.

On the whole, I am very pleased with this and plan to purchase more sets of these CD-ROMs for other years. Figure this: each set covers five years (average), and each set costs about $40. That figures out to eight dollars for one year's worth of QST. The digital version takes up LESS space and you can find an article instantly thanks to the search function. For me, it's no contest. I am so glad that the ARRL has done this!

I asked the editors of _Popular Electronics_ and _Electronics Now_ if they plan on doing something similar, and they said they're working on it. (Which would really save my bacon, because I've got back issues for those going back several decades.) They plan on issuing the most recent five years' worth of _PE_ and _EN_, and work backwards from that. Hallelujah! :)

Some magazines are now defunct and if I want to see them on CD-ROM, I may have to do it myself. And I doubt I'll be able to include a database-search function on those, but what the heck.

No one is paying me to say this, I'm not getting my arm twisted, and there's nothing backhanded about my stating my opinion here. I'm simply a ham trying to spread the word about what I think is a good product. If you want a good chunk of your shack back, try the CD-ROM-based version of _QST_ and you won't be disappointed.

73 DE KJ5BA
Matt J. McCullar
Arlington, TX

2936. Re: Part Storage Cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7clo6n$45a$1@nnrp1.dejanews.com>
Source record: 72371

In article <09990215163020.OUI05.ejune@intuitive-data.com>,
ejune@intuitive-data.com wrote:
> Does anyone have a good source for those containers (cabinets) with
> small drawers that you would typically stack on your workbench (or under
> it) and use for small parts? I know that Mouser carries some conductive
> plastic ones, but they are kinda pricey.

Eric,

Sure - Wal-Mart, K-Mart, just about any well-stocked hardware or department store. Akro-Mills makes a bunch of that kind of stuff. Here at work we use a combination of containers and bins that have accumulated over the years, from $$$ 3M anti-static containers to $10 plastic boxes and drawer. Most components can go right into the clear polystyrene drawers, but we line the drawers with anti-static foam if we're going to store semicondictors in them.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2937. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36EE5FF0.3629F2CC@citrus.infi.net>
Source record: 72372

Hello, Matt ....

Thank you for a very good book (CD ROM) report. I wish more
hams would report on their review results of various books
and equipment.

Would suggest that you also post/forward this report to the
alt.books.technical & misc.books.technical newsgroups.

73 de Jim W4ONO .-.-.
==========

"Matt J. McCullar" wrote:
>
> I went ahead and bit the bullet, ordering a set of _QST_ on CD-ROM
> without being able to try out the product first. I thank everyone on
> this newsgroup for their opinions.
>
> I could have ordered these discs from a place in Dallas, but I went
> through the ARRL for two reasons: they offered a coupon discount in the
> paper version of the magazine, and I also didn't have to pay state sales
> tax. The discs took about two weeks to get here after I mailed my
> check.
>
> I now am the proud owner of the 1990-1994 set of _QST_ on CD-ROM. What
> do I think? I am quite satisfied. The index-database searching
> function really makes things simpler and now I can let a new ham take
> ownership of my paper-based copies of these issues. I've printed out a
> few pages from disc onto laser printer, and while the quality isn't
> pristine, it's good enough for what I need. Schematics are more than
> legible.
>
> I do have a couple of sticking points. 1) The covers of each issue are
> not included for some reason. 2) All images are in black & white. I
> guess this was done to save storage space, and I can live with it. 3) A
> few errors crept into the manufacturing process. On only my fifth
> database search, the disc called up what it thought was page 64, but in
> fact page 62 was displayed, and vice-versa. It appears that whoever
> scanned all the pages simply got the two switched. As long as this
> doesn't appear to be a continuous problem, I can understand a small
> error creeping into such a huge library.
>
> On the whole, I am very pleased with this and plan to purchase more sets
> of these CD-ROMs for other years. Figure this: each set covers five
> years (average), and each set costs about $40. That figures out to

> eight dollars for one year's worth of QST. The digital version takes up
> LESS space and you can find an article instantly thanks to the search
> function. For me, it's no contest. I am so glad that the ARRL has done
> this!
>
> I asked the editors of _Popular Electronics_ and _Electronics Now_ if
> they plan on doing something similar, and they said they're working on
> it. (Which would really save my bacon, because I've got back issues for
> those going back several decades.) They plan on issuing the most recent
> five years' worth of _PE_ and _EN_, and work backwards from that.
> Hallelujah! :)
>
> Some magazines are now defunct and if I want to see them on CD-ROM, I
> may have to do it myself. And I doubt I'll be able to include a
> database-search function on those, but what the heck.
>
> No one is paying me to say this, I'm not getting my arm twisted, and
> there's nothing backhanded about my stating my opinion here. I'm simply
> a ham trying to spread the word about what I think is a good product.
> If you want a good chunk of your shack back, try the CD-ROM-based
> version of _QST_ and you won't be disappointed.
>
> 73 DE KJ5BA
> Matt J. McCullar
> Arlington, TX

2938. Re: Antique Receiver Value

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36EE6182.46A8710@citrus.infi.net>
Source record: 72373

Hello, Peter ....

Suggest you also post this to rec.antique.radio+phono
newsgroup if you don't get your answer.

73 de Jim W4ONO .-.-.
==========

PeterH2072 wrote:
>
> I'm trying to sell my late father's ham equipment, and need to know the
> approximate value of the following:
>
> National HRO - 5T Communications Receiver [built circa. 1938]
> Complete set of plug-in coils [9 units]
> Fully operational - includes 120 vac power supply
>
> A high performance, very rugged receiver, in excellent condition
> .... not 'restored'.
>
> Thanks,
>
> Peter

2939. Re: Mixer as frequency doubler

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990316085956.16713.00000003@ng51.aol.com>
Source record: 72374

>
>Peter, A mixer makes an awful doubler. Double balance pretty much eliminates
>the even harmonics. The type that mini-circuits sells consists of a wideband
>rf transformer, two hot-carrier diodes and a high-pass filter. It takes about
>+13 dBm drive. They are easy to make also for very little money. An RF
>transformer such as found in a television balun unit,two inexpensive
>diodes,and an rf choke and capacitor does it. Stuart K6YAZ,
>
>
Gee! And mine works so well too! I feed the RF and LO ports with the 5 MHz out
of a precision standard, collect the 10 MHz sum frequency out the IF port, and
feed that thru the old hound dog 10 MHz crystal that was my clock for my
counter using it as a one pole filter. Walla! A precision frequency counter
where before I was never sure about the last 2 or 3 decimal places.
You're not using the mixer as a doubler, you're using it as a mixer.

W4ZCB

2940. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36EE64E0.75A57F2@home.com>
Source record: 72375

WRT Printing - make sure that the "Graphics" setting on your printer is set to "fine". I noticed when printing from manufacturers web-pages that the default setting did not allow enough detail.

Matt J. McCullar wrote:

> I went ahead and bit the bullet, ordering a set of _QST_ on CD-ROM
> without being able to try out the product first. I thank everyone on
> this newsgroup for their opinions.
>
> I could have ordered these discs from a place in Dallas, but I went
> through the ARRL for two reasons: they offered a coupon discount in the
> paper version of the magazine, and I also didn't have to pay state sales
> tax. The discs took about two weeks to get here after I mailed my
> check.
>
> I now am the proud owner of the 1990-1994 set of _QST_ on CD-ROM. What
> do I think? I am quite satisfied. The index-database searching
> function really makes things simpler and now I can let a new ham take
> ownership of my paper-based copies of these issues. I've printed out a
> few pages from disc onto laser printer, and while the quality isn't
> pristine, it's good enough for what I need. Schematics are more than
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> database search, the disc called up what it thought was page 64, but in
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> scanned all the pages simply got the two switched. As long as this
> doesn't appear to be a continuous problem, I can understand a small
> error creeping into such a huge library.
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> On the whole, I am very pleased with this and plan to purchase more sets
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> eight dollars for one year's worth of QST. The digital version takes up
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>
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> it. (Which would really save my bacon, because I've got back issues for

> those going back several decades.) They plan on issuing the most recent
> five years' worth of _PE_ and _EN_, and work backwards from that.
> Hallelujah! :)
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> database-search function on those, but what the heck.
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> No one is paying me to say this, I'm not getting my arm twisted, and
> there's nothing backhanded about my stating my opinion here. I'm simply
> a ham trying to spread the word about what I think is a good product.
> If you want a good chunk of your shack back, try the CD-ROM-based
> version of _QST_ and you won't be disappointed.
>
> 73 DE KJ5BA
> Matt J. McCullar
> Arlington, TX

2941. wtd: Info on Neophyte receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: GREGORY HEATH <kb2qqm@email.msn.com>
Message-ID: <#vJdAB9b#GA.307@upnetnews03>
Source record: 72376

Anybody out here build one of the Neophyte Receivers for 40 or 80 meters
from "Dans Small Parts and Kits"? He offers a shortwave radio kit for $32.
What is the quality and how well does yours perform? thanks. Greg.

www.fix.net/dans.html

2942. FS: RFC Concepts 2/70 High Power Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36ee8813.188762@207.217.77.140>
Source record: 72377
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Have RF Cocepts 2/70 dual band amp. Output is 200 watts on 2 and 125
watts on 440. This is a FM amp only. In-put range is from 20 to 50
watts
to drive. The amp is in excellent condition. Has build in RF/SWR
indicators. Complete with power cables, manual and original box. This
is a very duty amp. Not for 100% duty cycle for repeater operation.
Works and looks GREAT!!!
Non Smoker.
Price: 360.00 Plus Shipping.
Reply Email.Rich.

2943. FA: Icom Dualband HT..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f3887f.296577@207.217.77.140>
Source record: 72378
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Icom W21AT dualband HT with acc.
Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78285467

2944. FA: Mirage Preamp Plus two Mics.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f588ce.375317@207.217.77.140>
Source record: 72379
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
VHF Mirage Preamp.
Also two mics with the deal.
One is a turner and other is cobra power mic.
No Reserve
Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78297589
```

2945. FA: Bird 43 With Slugs.,,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f488a8.337758@207.217.77.140>
Source record: 72380
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Real nice!!
Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78288225

2946. FA: Kenwood 742 10 Meter Module,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f88902.427568@207.217.77.140>
Source record: 72381
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78314530

2947. FA: 10Amp. Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f98910.441733@207.217.77.140>
Source record: 72382
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78312673

2948. FA: Motorola Touch Tone Mic &Plain One,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f688e3.396707@207.217.77.140>
Source record: 72383
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78300403

2949. FA: Triplexers & Duplexers ,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36f788f5.413979@207.217.77.140>
Source record: 72384
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I have a bunch of Triplexers and duplexers for your mobiles
All for one price. No reserve.
Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78306393

2950. FA: Collins Log Book

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <37008f23.1996192@207.217.77.140>
Source record: 72385
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78293260

2951. FA: two keyers/paddels

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370291db.2692522@207.217.77.140>
Source record: 72386
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
One of them is a Brown Bros Keyer
Real Sharp and clean looking.
The other has no brand name on it.
Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78291236
```

2952. Re: FA: Icom Dualband HT..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36EE9C5B.DFAB46DC@teleport.com>
Source record: 72387
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Why are you posting items like this on rec.radio.amateur.homebrew and rec.radio.amateurs.boatanchors? For the same reason that telephone solicitors call thousands of people, interrupting whatever they're doing, to make one sale?

Roy Lewallen, W7EL

richcom wrote:
>
> Icom W21AT dualband HT with acc.
> Go to:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78285467

2953. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: herbs@islands.vi
Message-ID: <7cmbq9$n71$1@nnrp1.dejanews.com>
Source record: 72388
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

F.Y.I KV4FZ is still on the air and has *not* lost his appeal.
Dick, Carroll wrote:
> Servend wrote:
> >
> > Ya gotta admit, when you mention Herb, all the bravado
> > and boasting about mighty enforcement teams working
> > "harder & smarter" suddenly ceases.
>
> Yep. They don't talk much about cases that are in the appeal
> process, but from reading, that has just ended. Herb lost.
>
> Even if ya don't
> > agree with Herb, ya kinda gotta admire the guy. He's
> > frustrated and held the commission at bay for 25 years!
> > He's beat them so much to a pulp that they won't even
> > discuss his case.
> >
>
> Shows what you know. Herb just knows his way around the
> legal sysgtem and is spending the bucks to take it the full
> route. You can bet it's costing him plenty.
>
> > Wanna bet he's around for another 25 years?
>
> Today anything's possible but I don't expect he'll be on the
> air as KV4FZ.
>
> > BTW, we could care less one way or another, but
> > the guy IS unique in the annals of FCC enforcement!
>
> Not really. Evidently you never heard of W4EBG back in the
> 50's-60's
>
> Dick C
>
> >
> > Calvin Gordon wrote in message ...
> > > VERY impressive credentials and a sweeping
> > >enforcement statement!
> > >
> > > You are more than qualified to enlighten us
> > >neophytes then as to how, given this massive enforcement
> > >army, that KV4FZ has managed for over 25 years to

> > >elude and frustrate the commission? Perhaps he has
> > >"thought harder and worked smarter" than this mighty
> > >enforcement army which has mobilized against him?
> > >
> > >
> > >
> > >Phil Kane > wrote in message ...
> > >>>
> > >> Believe me, when the Commission needs to do something, it
> > >> has a way of finding the troops to do it. "Think harder, work
> > >> smarter...."
> > >>
> > >> I should know - my job there was finding and coordinating
> > >> troops for special targeted operations (I was chief of
> > >> enforcement in San Francisco for 18 years). Some involved
> > >> the amateur service, most involved other services.
> > >>
> > >> 73 de Phil Kane - K2ASP
> > >>
> > >>
> > >>
> > >>
> > >>
> > >
> > >
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2954. WTB: HF Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36ee9921.4554894@207.217.77.140>
Source record: 72389
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
Wanted: HF Rig
Old or new.
Reply E-Mail with price and condition.
Either Base or Mobile.
Rich
```

2955. Re: 10 meter rig or conversions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Peter Rachow <peter.rachow@metronet.de>
Message-ID: <7cmd32$m1g$1@news.dnsg.net>
Source record: 72390

Hello Michael,

I did convert some of these old CB-Rigs of the PRESIDENT brand some years ago from 11m to a very well operating 10m ham radios. These rigs were called President "Jackson", "Grant" and "JFK". I don't know wether they're still on the market. But you should be able to find them at flee markets for bargaining prices. They offer about 120 to 200 channels including ssb mode with RIT and XIT.

These radios are very easy to convert to 10 mtrs. because they use mixers to generate the operating frequency beyond the PLL stages. These wixers work with frequencies around 15 MHz and are fed by crystal controlled oscillators. By simply changing these crystals to some with a freqency about 1 MHz higher and a subsequent easy and simple readjustment procedure (tx and rx) you have got a fine radio for ssb operation around 28500 Mhz.

Modern CB rigs often have the shortcoming that they use PLL-circuits that can't be converted in their frequency range because they consist of PLL circuits that detect the generated frequency and refuse operation if you try to switch to an "illegal" channel. So it is recommendable to try to get a rig at least 10 years old not equipped with microprocessors or equivalent stuff.

Hope I could help you!

73 de

Peter
DK7IH - 8P9FW

--
Peter Rachow
Belchenstr. 60
76199 Karlsruhe
Phone: -xx49-721-886184
e-mail: peter.rachow@metronet.de
www: http://home.t-online.de/home/peter.rachow

2956. CAD & Radio Designer: It works!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: ben / aa7hk <harp@pell.net>
Message-ID: <7cmhaasih1@nnrp1.dejanews.com>
Source record: 72391

Third time's the charm!:

1. ARRL Radio Designer does circuit analysis, won't draw or read schematics. 2. TinyCAD: small, cheap, >good< CAD for drawing schematics, no analysis. 3. Tiny2ARD, W95 utility,translates TinyCAD netlists into Radio Designer netlists quick and slick, produces a complete RD circuit-description (BLK-END) block from a TinyCAD design, appends any number of blocks into a *.ckt file.

&10.00 buys Tiny2ARD, with ARD symbol library, and (full version.) shareware TinyCAD. [You still have to pay UKP 10.00 to TinyCAD's author, Matt Pyne.]

email: harp"AT"pell.net --> replace "AT" with @

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2957. Band Plan?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: "Russell C. Nixon" <rc9nixon@mindspring.com>
Message-ID: <36EED2E7.A59DF955@mindspring.com>
Source record: 72392

I'm a new Tech Plus and I've built a QRP transmitter. Seems to work too! At least no magic smoke came out. Unfortunately it came with a colorburst crystal on 3.579 Mhz. This is not within the Novice/Tech part of the band. Is there a band plan (formal or informal) for calling frequencies and QRP working frequencies? I've tried the Handbook and the ARRL web page but they just give the allocation, no information such as I've requested. I'm going to get some xtals cut for me and a friend to do a low speed CW net to build speed for our 1B test, but I need to know what freqs to get them on.

Russ Nixon - KF4WXD

Possibly subtract 9 to e-mail

2958. Re: CAD & Radio Designer: It works!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <7HAH2.338$iS6.1258@news3.voicenet.com>
Source record: 72393

Where can you get TinyCAD or Tiny2CAD?

73, Harry, W3IIT

ben / aa7hk wrote in message <7cmhaasih1@nnrp1.dejanews.com>...
>Third time's the charm!:
>
>1. ARRL Radio Designer does circuit analysis, won't draw or read
>schematics. 2. TinyCAD: small, cheap, >good< CAD for drawing schematics, no
>analysis. 3. Tiny2ARD, W95 utility,translates TinyCAD netlists into Radio
>Designer netlists quick and slick, produces a complete RD
circuit-description
>(BLK-END) block from a TinyCAD design, appends any number of blocks into a
>*.ckt file.
>
> &10.00 buys Tiny2ARD, with ARD symbol library, and (full version.)
>shareware TinyCAD. [You still have to pay UKP 10.00 to TinyCAD's author,
>Matt Pyne.]

2959. TOYOCOM Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Chris Price <c.price@virgin.net>
Message-ID: <7cmokr$t0m$1@nclient1-gui.server.virgin.net>
Source record: 72394

I have a surplus TOYOCOM 68.545MHz crystal filter, model number TQF-456C.
Can anybody provide me with any technical data on the unit.

Regards

Chris G4AGJ

2960. Re: DDS all mode receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Chris Price <c.price@virgin.net>
Message-ID: <7cmpbf$s$1@nclient1-gui.server.virgin.net>
Source record: 72395

Craig

There has been a series of articles written by G3XJP and published in the Jan to Mar 1999 RSGB Radio Communications magazine for a 10.7-40.7MHz DSS system based on the Analogue Devices AD9850BRS. The article only describes the synthesiser element of a single conversion, general coverage HF receiver / transceiver. It maybe of some interest ??

Regards

Chris G4AGJ

Craig Gibson wrote in message <36ed122b.8418214@news.icon.co.za>...
>Hi all
>
>I was talking to a contractor here at work who is also a ham and he
>mentioned that not so long ago, there was an article in one of the ham
>magazines detailing a all mode receiver using one of the Analog
>devices chips - I presume probably a DDS chip. Does anyone know about
>such a project? Unfortunately he cannot seem to find the article.
>
>Kind regards
>Craig Gibson
>ZR6CG

2961. FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: napoli@i-2000.com
Message-ID: <36f6ea31.23494141@news.i-2000.com>
Source record: 72396

F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
with rectangular face 0--10 amp- scale..brand new..pse remove the
(ns) from my address..thanks..Bob ..on Long Island....$40.00

2962. Re: FM Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-16 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36EEC971.1899@pop.valley.net>
Source record: 72397

Jim wrote:
>
> Theoretically you could have a 'direct conversion' FM receiver.
>
> What I am thinking of is a wide range phase locked loop covering, for
> example, 144 to 148 MHz. The point that is normally connected to a
> reference oscillator would instead go to an antenna, perhaps with some gain
> stages. It would then lock on to the strongest signal. Gain would have to
> be such that the strongest signal would be yours.
>
> The control voltage could then be amplified to recover the audio.
>
> There are a lot of details to be worked out, and most likely a few 'gotchas'
> lurking in the background.
>
> I also remember seeing an idea for a wide band FM demodulator that used
> nothing but pieces of coax. The basic idea was to split the signal with a
> power splitter. This was followed by two pieces of coax whose lengths
> differed by a quarter wavelength at the frequency of interest. Finally the
> two signals were subtracted from each other, which resulted in the FM being
> demodulated.

Hello--
IIRC, this circuit is called a "Pound discriminator", presumably named
after its inventor.

Can anyone confirm this?

73,
Brad AA1IP

2963. Re: FA: 10Amp. Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: Charley Harp <charley_harp@my-dejanews.com>
Message-ID: <7cmrr0$6ca$1@nnrp1.dejanews.com>
Source record: 72398
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <36f98910.441733@207.217.77.140>,
richcom@earthlink.net (richcom) wrote:

> Go to:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78312673

Rich, you are obviously aware that rec.radio.swap exists for the purpose of selling radio equipment. You should also be aware that cross-posting to the other four groups is not appropriate.

For those not familiar with eBay, it encourages the leaving of feedback. Six people with whom Rich has participated in auctions have left negative feedback, cut and paste below. Rich bent the rules to argue his side a couple of times by improperly giving himself positive feedback. These are included.

Rich, anyone can have one or two disagreements customers, but your record demonstrates that you have a problem.

Cut and paste from eBay:

User: 1rich (richcom@earthlink.com) (34) Date: 12/20/98
14:50:51 PST
Praise: risd below,made complaint,but blue52 won bid
#42357582 He uses two Id's. Why???
User: risd (risd@flash.net) (11) Date: 12/20/98
13:07:40 PST
Complaint: I paid Rich $325 for a DOA radio and he
leaves negative feedback on me. ??
User: 1rich (richcom@earthlink.com) (34) Date: 12/20/98
07:17:39 PST
Praise: risd claimed radio didn't work and tried to fix
it, No warranty when played with
User: risd (risd@flash.net) (11) Date: 12/19/98
14:51:05 PST
Complaint: Bought 2 radios from Rich. One OK. Other DOA
Rich accused me damaging radio.
User: 1rich (richcom@earthlink.com) (34) Date: 12/10/98
08:55:50 PST
Praise: It gets frustrating when some people with
0feedback win bid,don't buy and lie.
User: 1rich (richcom@earthlink.com) (34) Date: 12/09/98
16:57:03 PST
Praise: Radio4U won#39315430 and never bought, my

discription on it was 100 percent
User: radio4u (firenote@aol.com) (2) Date: 12/08/98
23:06:28 PST
Complaint: Told him not happy with description of item,
left bad feedback on me, bad apple
User: 1rich (richcom@earthlink.com) (34) Date: 12/05/98
15:32:02 PST
Praise: Won bid41447444 awhile ago,never bought now
falsifies stories TROUBLEMAKER!!
change.User: scottbj (sskdr@softcom.net) (4) Date:
12/05/98 14:57:15 PST
Complaint: This person will use Aliases to reduce your
rating, Ebay is investigating him.
User: 1rich (richcom@earthlink.com) (34) Date: 12/04/98
14:57:52 PST
Praise: Scottbj won bid 41447444 and same day said he
found a better deal. Bad Apple!!
User: scottbj (sskdr@softcom.net) (4) Date: 12/04/98
12:59:45 PST
Complaint: He Mis-Represented the product. Make sure you
do your homework before dealing.
User: 1rich (richcom@earthlink.com) (34) Date: 11/22/98
06:05:07 PST
Praise: Waited 6weeks for paid item from uyc@juno.com
and then she says I'm impatient.
User: uyc@juno.com (725) Date: 11/21/98 17:03:52 PST
Complaint: VERY IMPATIENT. Told him I sent, doesn't
believe me. He wants his items NOW.
User: phillij1 (phillij1@bellsouth.net) (0) Date:
10/19/98 19:52:44 PDT
Complaint: Once you make a deal, you stick with it, you
don't sell for more
User: phillij1 (phillij1@bellsouth.net) (0) Date:
10/19/98 18:47:37 PDT
Complaint: Once you agree to buy something from him, he
sells to others. Unprofessional!
User: 1rich (richcom@earthlink.com) (34) Date: 10/19/98
14:33:33 PDT
Praise: This user phillij1 left a complaint on me, He
didn't meet my reserve,sore head.
User: phillij1 (phillij1@bellsouth.net) (0) Date:
10/19/98 14:02:03 PDT
Complaint: (Item #35221037)
User: cw-man (tje@usol.com) (293) Date: 06/24/98
03:25:13 PDT
Complaint: Made winning bid, auction ended, emailed me &
said his brother bid on wrong item

As Ebay says, "caveat emptor."

Charley charley_harp@my-dejanews.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2964. Looking for a Simple 300 MHz "OOK" Transmitter for PIC Telemetry App.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: cygnus@penn.com
Message-ID: <7cmt5d$7im$1@nnrp1.dejanews.com>
Source record: 72399

Hello All, I am looking for a very simple, 300 MHz "OOK" (on - off keyed) transmitter. I want to send telemetry using a AVR microcontroller in a battery powered application. Any ideas would be greatly appreciated. Thank you for your time..

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2965. Re: Simple & Folded Dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36EFFDD0.3FFDDD0B@teleport.com>
Source record: 72400

Harry lythall wrote:
>
> The impedance along the length of a dipole is low at the feedpoint
> but rapidly increases towards the ends. After something like 10% of
> the distance after feedpoint the thickness can be dramatically
> reduced since the current is becoming less and less. The application
> of this is therefore common sense.

It sounds like you're describing an increase in diameter as a way to reduce loss. This isn't usually a problem with a dipole, and isn't usually the reason a larger diameter is recommended. The advantage most see in it is increased bandwidth. To get the maximum bandwidth increase, it's the thickness toward the dipole ends (where increased capacitance has more effect) rather than the center that counts. Taking this to an extreme leads to designs like the "bow-tie" antenna.

You can easily see the effect of wire diameter on bandwidth (and loss) with any of the available modeling programs. The free ELNEC demo is adequate for analyzing a simple antenna like a dipole. It's available at http://www.teleport.com/~w7el.

Roy Lewallen, W7EL

2966. Enforcement was (Bypassing cellular?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7covfb$mc8$1@sunhub-tulsa.onenet.net>
Source record: 72401
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <7cmbq9$n71$1@nnrp1.dejanews.com>, It was written:
>> Not really. Evidently you never heard of W4EBG back in the
>> 50's-60's

Wow! That call sign brings back a bunch of memories. I used to hear that guy on night after night in the mid sixties on or around 3850. He formed the nucleus of the same programming format which can be heard on 14.313 during the day and on several frequencies on 80 meters at night. In the sixties, the big racket was the sidebanders against the AM users. W4egb, who went by the name of Kahn or maybe Con which is what it sounded like lived in Paduka, KY and had a fabulous signal almost any night. He ran the full gallon and maybe a bit more for all I know on 80 and was, to say the least, a character. Just as is the case today, he and a large group of folks would feed on each other's pathology and scream insults, jam, and curse one another as long as propagation and the blood ethyl alcohol contents allowed them to transmit. Maybe somebody is familiar with the details, but I just remember hearing W4EBG and hearing about him around 1965 when I got a short wave receiver and began listening to ham radio. Just as now, the comments were pretty much the same such as, "Can't somebody do something?" "Man! such language!", etc.

I can't remember a time when there hasn't been a bunch of hot-heads hanging out on one or two frequencies on 80 after dark and making lots of noise.

I'm not even sure there is more of it today, but it seems to go on longer but I wouldn't swear to even that.

It takes at least two to tango and none of these famous or rather infamous souls would have gotten the notoriety they have gotten without others to fan the flames. Last weekend, I was listening to an almost sensible QSO on 14.313 when somebody started up the anonymous cat calling and whispering of obscenities. The two people who were having the QSO said not one single word about the racket and the whisperer finally got tired and went back to telemarketting or whatever it is he does when not on the air. I think that's the secret to stopping a lot of that stuff. Silence is a show-stopper for the weirdos because they can't gauge their audience and are not even sure they have one. Nobody likes to play to an empty house.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

2967. FS: 90 volt c.t. 25 amp transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: worley@48hill.com
Message-ID: <36F02B8A.5ADD@48hill.com>
Source record: 72402
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

FS: one 90 volt, center-tapped 25 amp power transformer, input 120 v
Good for a +/- 40 volt 25 A supply for high powered audio amp or for a
50 amp supply up to 40 v. May be usable as an isolation transformer if
you can find a 20 or 30 volt high current transformer to place in series
with the output. Unit is unused, in original box, 7-1/2" x 7-1/2" x 6"
tall and weighs 60 lbs. $75 plus shipping (unless you pick up) from
36330 zip (Alabama). NOTE: Please REPLACE the "48" in my email with
"snow" to spell "snowhill" to repy or call 334-347-5281 day/eve/wknd.

2968. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <36F005C9.24F2@ixpres.com>
Source record: 72403
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Jim wrote:
>
> "RazorSaw" <razorsaw@usa.net> wrote:
>
> >Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
> >razorsaw@usa.net
>
> >Dan
>
> I don't know, post your resume here and we'll take a vote to see if we
> think you are qualified to homebrew a 2 meter amp. But why would
> you want to, you can buy one for $40. Homebrew a 20 meter quad,
> you'll get more enjoyment from it.
>
> 73, Jim KH2D

AMEN!

Don, W6JL

2969. Re: 1/4 antenna formual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990217115727.OUI78.ejune@intuitive-data.com>
Source record: 72404

Reg,

You're technically correct of course, but someone just getting started with antenna experimentation is more likely to cut the antenna element a little long and trim to resonance, rather than mastering the theory behind adjusting a radiator length for the effects of dielectric and conductor size. After all, the final length of the antenna might also be affected by environmental considerations (coupling with other nearby metal objects, etc.) and trimming/tuning is the only way to determine that final length.

--
Regards,

Eric June
KU6J

2970. Re: 1/4 antenna formual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be70f8$73bcb5a0$LocalHost@default>
Source record: 72405

The resonant height of a 1/4-wave vertical antenna.

First calculate K = 0.225 / (Ln (Lambda / diameter)
- 1)

then Height = 0.25 * Lambda * (1 - K) metres.

where Lambda is free space wavelength in metres, diameter
is antenna conductor diameter in metres.

I metre = 39.37 inches = 3.28 feet.

But if your pocket calculator does not have Logs to the
base e, then download program SWR_FREQ from my website.
Takes only a few seconds.

The height of the vertical is exactly half of the computed
length of the dipole.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Brian or Wayland <phantomx@integrityonline.com> wrote in
article <36ed8eb9.0@205.238.18.7>...
> Hello
> I'm looking for the formula for the length of a 1/4
antenna. I want to
> make a 1/4 vertical for 10m so I can have a cheep
vertical for 10M. Any info
> is good. Please mail responses to
phantomx@integrityonline.com Thanx
>
> Brian
> KD7BJF
>
>
>
>

2971. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <36F03B93.FF23049@ameritech.net>
Source record: 72406
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Geesh guys, I hope this doesn't sound too demeaning to us hams as technocrats but here is my answer;
The cost of a used HT amp right here on the newsgroups is around $50. By the time you purchased a 10dB transistor, new mounting hardware and insulator, heat sink, resistors, fixed and compression trimmers, a bit of coil winding wire, relays, a couple diodes, switching transistor, and a relay, you would exceed this amount, 'unless you had an excellently stocked junque box. . . if that is the case do a search on MRF transistor amplifiers and in about an hour you will have a schematic and PC etching template. Motorola has application notes for power transistors. You could also check the ARRL manuals at the library.
73 and email me direct if you do take this on and get in a bind,
Art k9xf

Don W6JL wrote:

> Jim wrote:
> >
> > "RazorSaw" <razorsaw@usa.net> wrote:
> >
> > >Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
> > >razorsaw@usa.net
> >
> > >Dan
> >
> > I don't know, post your resume here and we'll take a vote to see if we
> > think you are qualified to homebrew a 2 meter amp. But why would
> > you want to, you can buy one for $40. Homebrew a 20 meter quad,
> > you'll get more enjoyment from it.
> >
> > 73, Jim KH2D
>
> AMEN!
>
> Don, W6JL

2972. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: JD <jdyer@eastland.net>
Message-ID: <7cplh8mkv1@remarQ.com>
Source record: 72407
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc,razorsaw@usa.net

Hello Dan
Read your post and and some of the answers. As you are discovering, most of the ham population is old, but we are not all crotchety. Congratulations on getting your general at 14 years old. I was still swl'ing at 14. If you give us some idea of what you are wanting to do, I am sure you will get a few more specific answers. You probably can pick up something at swapmeet at a better price then buying new parts. That is one of the disadvantages of being a new ham--you do not have a garage full of "junk" that you have accumulated over the years that can be used for projects. Why not sidle up to one of the old timers with a known junkbox in the Tristate club and tell him what you would like to build. Ask him for some ideas--if you are lucky you might just strike a goldmine in parts and advice at the same time. Cross posting to so many groups is usually not productive.

John
AE5B
RazorSaw wrote in message <36eefc49.0@207.227.203.4>...
>Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
>razorsaw@usa.net
>
>Dan
>
>

2973. Saturn car radio pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: - <SciCon@ix.netcom.com>
Message-ID: <7cpmv7$hfh@dfw-ixnews6.ix.netcom.com>
Source record: 72408

I replaced the stereo in my Saturn, and now I want to use the old
unit for an emergency radio, hooked up to my battery supply.

Anyone know where I can find the pinout diagram?
It's a factory radio from a 1992 Saturn SL2.

Thanks, de KE6LBX

2974. visit KB9HGI'S Swap Board

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: Steven Baker <pacman@bcl.net>
Message-ID: <36F02D98.61DAC7AB@bcl.net>
Source record: 72409

```
Visit KB9HGI'S Swap Board! Post your radio items forsale, trade or
wanted
for free!!! Just click on link below.
KB9HGI'S Swap Board
```

2975. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: brians@opus.hpl.hp.com
Message-ID: <7cn058$1ue$1@hplms2.hpl.hp.com>
Source record: 72410

These comments also made me curious. I went through a
simple back-of-the-envelope calculation and found some
very different results.

Perhaps someone can help me see what I'm missing here?

For purposes of the analysis, I made the questionable
assumption that we have a plane wave.

A 30 uV/m field strength corresponds to a power density
of approximately 2.4 picowatts/m^2. Assume for the moment
that the source is radiating equally in all directions.
(This is because I'm lazy and it's simple to compute the
surface area of a sphere with a 30 m radius.) Hence, I
compute a source power of:

(2.4 picowatts/m^2)*(4*pi*(30 m)^2) = 27 nW.

In other words, my hypothetical isotropic radiator will reach
the 30 uV/m field strength limit with a power of only
27 nanowatts. This is approximately 83 dB below 5 Watts.
As Roy pointed out, we also need to include the gain of a
real antenna as well as ground reflection effects. Thus, my
simple analysis predicts that we would need to be somewhere
in excess of 90 dB below 5 Watts to meet the requirements for
an unlicensed intentional radiator in the HF bands.

So why did my analysis deviate so far from Roy's?

The plane wave approximation is suspicious, but 40 dB seems
like a pretty large discrepancy. Basic arithmetic sometimes
causes me problems, so the answer may be obvious to everyone
else...

Brian Setterberg
N7FMF

Roy Lewallen (w7el@teleport.com) wrote:
: Sorry for quoting you, Monty, in spite of your request. Your comments
: made me curious, so I did some checking.

: The limit for unlicensed operation of an intentional radiator in the
: HF range is a field strength of 30 uV/m at a distance of 30 meters. At
: 30 meters from and broadside to a 40 meter dipole in free space, you
: hit the maximum allowable field strength at a power of 186 uW. This is
: 44 dB below 5 watts. If you wanted to be on the safe side, you'd add
: another 6 dB to account for ground reflection. Of course, any antenna

: gain over a dipole also increases the field strength.

: Roy Lewallen, W7EL

: Monty Northrup wrote:
: >
: > Hi Zorn!
: >
: > IMHO, DDS's are excellent for QRP transmitter designs. FCC Rules
: > [97.307(d)] state that for transmitted signals below 30 MHz, spurious
: > responses must be at least 40 db down, but they relax that to 30 db
: > down for output powers of 5 watts or less.
: >
: > These are very reasonable goals. A 5 Watt QRP transmitter with
: > spurious responses 30 dB down has 5mW of spurious output. At 60 db
: > down, 5 micro-watts. [10 log P1/P2] Unlicensed transmitters can
: > operate with 15mW (don't quote me). There are tens of thousands of
: > incidental radiating devices with these kinds of transmitting levels,
: > contributing to a general rise in broadband noise floor, especially in
: > urban areas. And the average class B computing device probably is
: > somewhere around 1 mw of lotsa spurs... of course, you don't hook your
: > computer up to an antenna... hi... unless you consider the power line
: > an antenna ;-\ I hate to think what an average TV radiates, but you
: > can frequently hear in it the HF bands in metropolitan areas.
: >
: > Keep in mind that the FCC is talking about aggregate levels of
: > spurious emissions, not a single spur, while the DDS manufacturer's
: > are touting the levels of any one single spur. Nonetheless, for QRP
: > transmitting, your AD9850 will do admirably, with plenty of spurious
: > "margin", and no harm will come of it.
: >
: > >The 9850 data shows an AM modulation method as well. Would this
: > >design be good enough for Amateur band use?
: >
: > I'll leave this to someone else...
: >
: > 73,
: > monty, N5FC

2976. Re: CAD & Radio Designer: It works!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-17 00:00:00 UTC
From: "KC Ferguson [System Analyst]" <name@mail.dom>
Message-ID: <7cph82$i28$1@news.onramp.net>
Source record: 72411

```
--------------------8<--------------------8<----------------------
Recognizable as a post as far as "eye" can C
Wishing you calm water Black Captain.....
byron igelf
--------------------8<--------------------8<----------------------
```

2977. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Matt Meola <mmeola@uswest.com>
Message-ID: <p6alnguiu5a.fsf@ima2wk6.uswc.uswest.com>
Source record: 72229
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

f117ab@ameritech.net writes:

> Geesh guys, I hope this doesn't sound too demeaning to us hams as
> technocrats but here is my answer;
> The cost of a used HT amp right here on the newsgroups is around $50. By the
> time you purchased a 10dB transistor, new mounting hardware and insulator,
> heat sink, resistors, fixed and compression trimmers, a bit of coil winding
> wire, relays, a couple diodes, switching transistor, and a relay, you would
> exceed this amount, 'unless you had an excellently stocked junque box. . .

Now, now, cost-effectiveness isn't the only reason to homebrew, is it?
Without wanting to start a thread on the philosophies of homebrewing,
it must nevertheless be stated that the desire to build need not come
solely from a desire for economy. Such a view, stated alone, reflects
an egocentrism on the part of the speaker/writer.

> if that is the case do a search on MRF transistor amplifiers and in about an
> hour you will have a schematic and PC etching template. Motorola has
> application notes for power transistors. You could also check the ARRL
> manuals at the library.

Now, here is the egocentrism-destroying part! Well written, Art.
Don't forget that the 1998 version of the ARRL handbook has an article
in it on a 2m amp using one of those RF power modules.

There's also a guy on qsl.net who parallelled 4 (count 'em, 4) 70cm
power modules to make a 100-watt power amp. Go to www.qsl.net and
perform a search for "amplifier" to find it... Interesting stuff!

> 73 and email me direct if you do take this on and get in a bind,

--
Matt Meola (matt.meola@usa.net) kc0dxw
Bailey, Colorado
"Gun control means using two hands."

2978. Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Brett Hall <bhall@emerald.tufts.edu>
Message-ID: <7crcq2dso1@news3.tufts.edu>
Source record: 72230

I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave receiver. I understand a mixer and local oscillator circuit(s) should accomplish this end.

Though I have found a few general circuit schematics - I am finding a lack of information on procedures for actual component selection and calculation, JFET biasing, etc...

Any suggestions on what steps to take next would be greatly appreciated. Thanks in advance for your help.

Best wishes,

Brett
KB2IBD

2979. Re: FM Monitor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990318140825.3696B-100000@Ocean.CAM.ORG>
Source record: 72231

On Tue, 16 Mar 1999, Brad Thompson wrote:

> Jim wrote:
> >
> > Theoretically you could have a 'direct conversion' FM receiver.
> >
> > What I am thinking of is a wide range phase locked loop covering, for
> > example, 144 to 148 MHz. The point that is normally connected to a
> > reference oscillator would instead go to an antenna, perhaps with some gain
> > stages. It would then lock on to the strongest signal. Gain would have to
> > be such that the strongest signal would be yours.
> >
> > The control voltage could then be amplified to recover the audio.
> >
> > There are a lot of details to be worked out, and most likely a few 'gotchas'
> > lurking in the background.
> >
> > I also remember seeing an idea for a wide band FM demodulator that used
> > nothing but pieces of coax. The basic idea was to split the signal with a
> > power splitter. This was followed by two pieces of coax whose lengths
> > differed by a quarter wavelength at the frequency of interest. Finally the
> > two signals were subtracted from each other, which resulted in the FM being
> > demodulated.
>
>
> Hello--
> IIRC, this circuit is called a "Pound discriminator", presumably named
> after its inventor.
>
> Can anyone confirm this?
>
I don't know whether this is the same thing being described, but the
ARRL's "FM and Repeaters" handbook from 1972 has something like that. The
section on discriminators came from a 3 or 4 part series on FM reception
in QST at the beginning of 1971.

It doesn't call it anything other than a "bridge discriminator" and there
is no reference for the original circuit.

The incoming signal is split with a pair of resistors, and each feeds a
1/8 wavelenght piece of coax. One piece has the far end open, and the
other has the center conductor grounded. It makes up a wheatstone bridge.
The voltage at the junction of the resistors and coax varies with
frequency, "in such a way that the difference between the two is a
straight-line function". Those points are detected by voltage-doubling

Am detectors, and then combined.

It mentions that because of the physical length of coax that was needed its operation is limited to the mid and upper VHF region.

The problem is that the higher in frequency it operates, just like any discriminator, the wider it becomes. The deviation becomes less and less a percentage of the center frequency as the center goes up, and thus the recovered audio becomes less and less. I would think this coax discriminator is really intended for wideband deviation.

Michael VE2BVW

2980. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Mike Dickman <mdickman@alaska.net>
Message-ID: <36F15576.497D@alaska.net>
Source record: 72232
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

RazorSaw wrote:
>
> Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
> razorsaw@usa.net
>
> Dan

You might be better off "homebrewing" a beam antenna. Much less work
and cheaper too.
--
---
12 hours 1 minutes of possible sunshine
*** gain of 7 minutes per day! ***

Mike (KD4LLA)
Fairbanks, AK

I believe no problem is so large or so difficult that it can't be blamed
on somebody else.

2981. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7crosf$87d$1@nnrp1.dejanews.com>
Source record: 72233
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

Another approach would be to salvage the PA stage from a
defunct VHF commercial radio (unless that's why the radio
was scrapped...) and rig up some switching. One particularly
slick no-moving-parts approach I've seen involves quarter-
wave transmission lines (practical at 2m) and diodes.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2982. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Mark Fraser <mfraser@helix.net>
Message-ID: <36F166B0.BD45D871@helix.net>
Source record: 72234

Hey, I hope you don't have to take as long to learn that you aren't likely to
"get there from here" as it's taking you to learn about multiple posting.....
We've seen your request, and the answer you don't want to hear is:
"You could, but it isn't likely to be much good for anything".

I'll sell you an "inexpensive AM/FM/SW" receiver for $10.00 that will outperform

anything you could do by butchering an am/fm....
/mark

Brett Hall wrote:

> I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave
> receiver. I understand a mixer and local oscillator circuit(s) should
> accomplish this end.
>
> Though I have found a few general circuit schematics - I am finding a lack
> of information on procedures for actual component selection and calculation,
> JFET biasing, etc...
>
> Any suggestions on what steps to take next would be greatly appreciated.
> Thanks in advance for your help.
>
> Best wishes,
>
> Brett
> KB2IBD

2983. Re: Looking for a Simple 300 MHz "OOK" Transmitter for PIC Telemetry App.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7crtpdcts1@nnrp1.dejanews.com>
Source record: 72235

In article <7cmt5d$7im$1@nnrp1.dejanews.com>,
cygnus@penn.com wrote:
> Hello All, I am looking for a very simple, 300 MHz "OOK" (on - off
> keyed) transmitter. I want to send telemetry using a AVR microcontroller in
> a battery powered application. Any ideas would be greatly appreciated.
> Thank you for your time..
>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>

RF Micro Devices sells some neat-looking RF Modem chips. I'll be darned if I know where you can buy them, but you could ask. (http://www.rfmd.com/)

Digi-Key sells some complete modules as well, but they're somewhat pricey. $30 range, as I recall.

I've been looking into a similar application - a wireless remote weather station. Not long rang - 20 yards or so. There is some neat information on the Web for using BPSK on LF (160-190 kHz band), which intrigues me. If I can find a hardware-only demodulator for BPSK, I'll build it. (Most hobbyists / hams seem to be using PC-based DSP software to receive BPSK, but I don't want to tie up a $200 PC as a remote display for the weather station.)

Good luck in your search!

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2984. Multiple Posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Brett Hall <bhall@emerald.tufts.edu>
Message-ID: <7crs44$5q5$1@news3.tufts.edu>
Source record: 72236

My apologies to the newsgroup for the multiple posts regarding "Shortwave Receiver Project". With each attempt I made at posting my message last night, MS Outlook had declared "server error - message couldn't be sent" - I gave up in the end in frustration.

Imagine my surprise today then to have four posts listed that supposedly hadn't been sent at all! The annoyance for you was unintentional.

Thanks again for the help.

Brett
KB2IBD

If this message "fails to be posted", I promise to hold off on further attempts until I know for sure:)

2985. FS: 250TH Lewis and Kaufman, brand new

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <36f182dd.772904@news1.telia.com>
Source record: 72237
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.equipment

I have 6 pcs 250TH Lewis and Kaufman for sale. They are probably made
on license from Eimac. These are brand new, in original super heavy
duty military boxes. Never been used. A very nice valve, indeed.
E-mail me if you are interested.

Best regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

2986. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F1B7C9.D8A22062@teleport.com>
Source record: 72238

Mark D. Braunstein wrote:
>
> Do a web search on a kit manufacturer called Kanga. They may something
> you could use.
>
> Mark

I was going to recommend Kanga also, but their web site (in the U.K.) seems to be down. I suggest emailing Bill Kelsey. He's the U.S. Kanga dealer. His email address is kanga@bright.net.

Bill and I share a booth at Dayton. (I sell antenna modeling software.) We'll be there again at booth 504. Drop by if you're coming.

Roy Lewallen, W7EL

2987. Looking for Icom IC901A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: glennh <glennh@ecom.net>
Message-ID: <7cskpi$745$2@la-mail4.digilink.net>
Source record: 72239

Looking for IC901A working or not

Glenn K6YTY

2988. Help!! need to attach ext antenna to 2m HT that has a fixed antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Ryan Ashline <Ashline@sprintmail.com>
Message-ID: <7cskqf$e0f$1@ash.prod.itd.earthlink.net>
Source record: 72240

I was givin an old 2meter radio that works great on simplex with 500mw out. The flex antenna is attached at only one piont to the circuit board. I was wanting to attach a bnc connector so I can hook it up to an ext anntenna. I am guessing that the piont where it attaches is the positive or center feed of the coax but what is the neg or braid? My friend an I talk simplex all the time from our homes and I would like to make this rig dedicated to the freq we use. But the power is not enough unless I am on the roof so I would really like to be able to attach and external to it

Any help would be great.
Thanks
Ryan KB5UUS

2989. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F1F6C1.7AF4E761@teleport.com>
Source record: 72241

I just got the Kanga U.S. web site info. It's
http://www.bright.net/~kanga/kanga.

Roy Lewallen, W7EL

2990. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: adam@onramp.net
Message-ID: <MPG.115b066fe87cd9579896a5@news.onramp.net>
Source record: 72242
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In article <qxYH2.50$nx5.250445@NewsRead.Toronto.iSTAR.net>,
LavoiedNOSPAM@iSTAR.ca says...

> What if someone was to use spread spectrum? It's legal yet 99.99% of
> amateur radio operators can't copy spread spectrum.

SS would do a fairly effective job of securing transmissions, I
would think. The problem is that there is very little (none?) SS
equipment generally available on the open market, so unless you wanted to
do it all yourself, it would be cumbersome. Also, if you don't get a
waiver, you have to use 23 cm or higher wavelength, and document each
transmission and save the records for a year.
A neat idea, but I think not quite ready for prime time.

Adam, KM5SS

2991. 10 Meter Conversion Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: MisterPJP@aol.com
Message-ID: <7cpib4eur1@nnrp1.dejanews.com>
Source record: 72412

I have an old Royce 23 channel SSB CB transceiver (Model 10640) that I want to modify to operate on the 10 meter ham band. Does anyone know of a web site that would list the specific modification that they would pass along to me? Thanks for your help. Paul in Chattanooga WA4AA

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

2992. HF antenna mount on Saturn wagon?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: jpardue@jep.com
Message-ID: <36f14af7.12437754@News.Communique.net>
Source record: 72413

All,

A friend in a local ARC has asked me to solicit help for him concerning installation of a HF antenna on a Saturn wagon. I'm not sure whether he wants to install a Bugcatcher, Screwdriver, Ham Stick, or whip but he is looking for something substantial. If not for the tailgate swing he would install a Class A trailer hitch. Can anyone advise us from their own trials or successes?

Tks es 73,
Joe, K5HLR

K5HLR@jep.com

2993. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Daniel Lavoie <LavoiedNOSPAM@iSTAR.ca>
Message-ID: <qxYH2.50$nx5.250445@NewsRead.Toronto.iSTAR.net>
Source record: 72414
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

What if someone was to use spread spectrum? It's legal yet 99.99% of
amateur radio operators can't copy spread spectrum.

>Hams can order pizza over the air now.
>You could not do what you want to do anyway ... most 2m repeater pairs
>are already in use ... you would need to have a way to control the
>home system by remote control or be no more than 5 minutes from it.
>It is illegal to transmit a voice encryted signal ... must be in the
>clear and able to be understood by listeners. Anyone with a scanner or
>radio can listen to a phone patch.
>
>W4SCO

2994. ebay- "doorknob caps" 500 mfd x 30kv, NEW!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990317205057.16997.00000061@ng99.aol.com>
Source record: 72415

Hi Homebrewers;
Heres a dutch auction for 6 NEW, 3sets of 2ea, of ERIE DoorKnob caps, rated at 500 mfd x 30kv. This is a popular value and very very expensive if bought at a supplier.
So Far they are at $8.00 per pair and only three days left.
URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=77965473
Thanks es 73.....RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

2995. FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Daniel Lavoie <LavoiedNOSPAM@iSTAR.ca>
Message-ID: <_3ZH2.65$nx5.268957@NewsRead.Toronto.iSTAR.net>
Source record: 72416
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

Does anyone know how to modify the Yaesu FT-470 HT for 9600bps?

73 de VE3DCL

2996. MEANT 500pf, not 500mfd

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990317205514.16997.00000064@ng99.aol.com>
Source record: 72417

Doorknob caps.......Sorry
Thanks es 73...........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

2997. HELP...No Tx on IC-706 on FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: tim <tvendt@kear.tds.net>
Message-ID: <01be7111$220099c0$1d9347cc@default>
Source record: 72418

I have an Icom 706 (original model) that has all of a sudden stopped transmitting on any
frequency that is in the FM mode. When I key the mike, the power out spikes up and
then drops to only a few watts out.... when I monitor the sig on a scanner, it sounds very off freq.... I suspect that the VCO is unlocked...
unfortunately I don't have a service manual for this and besides the unbelievable price, it will take 4-6 weeks to get! does anyone have the FM alignment procedures and test points, etc for this radio that I could get a copy of?? I'm not a "hack" at this stuff. I repair and restore vintage guitar amps for a living and I don't pay anywhere near what Icom wants for a manual when I need to get a manual from Fender or Marshall, etc etc. As a matter of fact, I can buy a notebook of schematics (75-100 of them) for the same price that Icom charges for just one radio.
Anyway... enough bitchin'.... any help would be appreciated. I would be glad to reimburse any costs incurred in getting copies, etc to me.
thanks..... Tim (Pro Sound
Technica)
tvendt@kear.tds.net

2998. Re: FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Brad Kellison <KA8TOK@four-way.net>
Message-ID: <36F08E0B.DA64FEA3@four-way.net>
Source record: 72419
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

the HT won't handle the speed.. you need to get a radio that is already
set for it.

Daniel Lavoie wrote:

> Does anyone know how to modify the Yaesu FT-470 HT for 9600bps?
>
> 73 de VE3DCL

2999. ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Fredrik &#65533;berg <fredrik.oberg@telia.com>
Message-ID: <36F0975C.E608373B@telia.com>
Source record: 72420

is someone doing eternet (10mbit) on 10ghz ?

3000. Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Brett Hall <bhall@emerald.tufts.edu>
Message-ID: <7cq82i$h51$1@news3.tufts.edu>
Source record: 72421

I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave receiver. I understand a mixer and local oscillator circuit(s) should accomplish this end.

Though I have found a few general circuit schematics - I am finding a lack of information on procedures for actual component selection and calculation, JFET biasing, etc...

Any suggestions on what steps to take next would be greatly appreciated. Thanks in advance for your help.

Best wishes,

Brett
KB2IBD

3001. Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Brett Hall <bhall@emerald.tufts.edu>
Message-ID: <7cq8gjdgg1@news3.tufts.edu>
Source record: 72422

I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave receiver. I understand a mixer and local oscillator circuit(s) should accomplish this end.

Though I have found a few general circuit schematics - I am finding a lack of information on procedures for actual component selection and calculation, JFET biasing, etc...

Any suggestions on what steps to take next would be greatly appreciated. Thanks in advance for your help.

Best wishes,

Brett
KB2IBD

3002. Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Brett Hall <bhall@emerald.tufts.edu>
Message-ID: <7cq8a6ecv1@news3.tufts.edu>
Source record: 72423

I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave receiver. I understand a mixer and local oscillator circuit(s) should accomplish this end.

Though I have found a few general circuit schematics - I am finding a lack of information on procedures for actual component selection and calculation, JFET biasing, etc...

Any suggestions on what steps to take next would be greatly appreciated. Thanks in advance for your help.

Best wishes,

Brett
KB2IBD

3003. Re: FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Daniel Lavoie <LavoiedNOSPAM@iSTAR.ca>
Message-ID: <zl2l2.95$nx5.445728@NewsRead.Toronto.iSTAR.net>
Source record: 72424
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

I read an article once where someone had converted his FT-470 for 9600 bps.
I just hope someone else has seen it and he/she can help me. Imagine if it
could be done, I could connect to any of the 2M/440 FM 9600 FSK satellite
with a small portable TNC and a palmpilot or WindowCE as a terminal.

Daniel

Brad Kellison wrote in message <36F08E0B.DA64FEA3@four-way.net>...
>the HT won't handle the speed.. you need to get a radio that is already
>set for it.
>
>Daniel Lavoie wrote:
>
>> Does anyone know how to modify the Yaesu FT-470 HT for 9600bps?
>>
>> 73 de VE3DCL
>

3004. Re: CAD & Radio Designer: It works!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: harp@pell.net
Message-ID: <7cqgf7$7bl$1@nnrp1.dejanews.com>
Source record: 72425

shareware TinyCAD alone: search InfoSEEK: +TinyCAD
Tiny2ARD with shareware
TinyCAD: email harp"AT"pell.net ["AT" = @]

"Harry
Brown" <hbrown@voicenet.com> wrote:
> Where can you get TinyCAD or Tiny2CAD?
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3005. Re: PCB Aerosols problems

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Harry lythall <a@sm0vpo.8m.com.spam>
Message-ID: <36F0CF6E.E9CF361E@sm0vpo.8m.com.spam>
Source record: 72426

Many thanks for the info George.

I have taken a look there and it seems very interesting. I noted that the rolls are quite large, Photo-negative and minimum $150 a roll. Anyway, I will continue with my search since I now have more information to go on. Once again many thanks for the advice.

best regards Harry

G345CDE wrote:

> Try <http://www.thinktink.com/pcbfram.htm>
>
> I do not know if they have aerosol sensitizing materials, but you may want to
> consider their film products. The problem with the film is that you will need
> to roll (with heat) the film on to the pcb material. I have used a film called
> Reston for years with 90% success rate at least.
> Maybe you are already aware of this source.
> Good luck. George W3ASE
> G345CDE

3006. Re: Need info to build 137MHz turnstyle

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: scan7705@my-dejanews.com
Message-ID: <7cqpaqdsr1@nnrp1.dejanews.com>
Source record: 72427
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur

In article <7ch6dg$ouk@btc3.up.net>,
"DGC" <mqt00703@up.net> wrote:
> Sorry my friend, I can't help you with your antenna. But as far as your
> grammer and choice of word's, are more literate than a great many
> american's. So much for our education system.....but anyway that's a
> different subject. Good luck in your search.
> D. Cook
> KC8AUM/AAR5AC
>
Thank you!! Our education system is not that bad, but I DO think that
intensive practice of a foreign language helps a lot.
As far as I am concerned, I use computers since I am 11, and I am now 22.
The use of computers implies a good level of vocabulary.
Later I discovered the Internet.
Of course it helps to browse many web pages in english.
Last but not least, the HF bands are a very powerful tool, I mean you can
listen to radios broadcasting, amateur QSOs!!
(I just realized it would be cool to learn Morse code...) :)

73

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3007. Re: 1/4 antenna formual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-18 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be7189$ee973de0$LocalHost@default>
Source record: 72428

Dear Eric June,

The difference between resonant length (pure resistance input Z) and the theoretical length of 150/F metres for a half wave dipole, is so small we can usually forget all about it - because we are quite prepared to do some pruning. And because a teeny bit of twiddling with the ATU will correct it anyway. The height of the antenna above ground of the usual amateur's antenna, and the impedance and length of his feedline, has a much greater influence on what length of antenna wire he/she ends up with. How accurate is YOUR swr meter ?

So somebody just getting started with antenna experimentation can forget all about erecting an antenna 1 or 2 percent less than the free-space half-wavelength anyway. They are asking the wrong questions. Put up some wire of crudely the correct length and be prepared to do some pruning.

On the other hand, if they are asking for an arithmetical formula, they should be given the correct one and not something uncritically copied from some unreliable, error-ridden, amateur magazine/handbook's pages, full of misleading adverts, with magazine article editors just as ignorant as the authors.

Please don't confuse my directness with abuse of your contribution. Indeed, as I have done, enjoy some happy pruning !
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Eric June <ejune@intuitive-data.com> wrote in article
<09990217115727.OUI78.ejune@intuitive-data.com>...
> Reg,
>
> You're technically correct of course, but someone just getting started
> with antenna experimentation is more likely to cut the antenna element a
> little long and trim to resonance, rather than mastering

the theory
> behind adjusting a radiator length for the effects of
dielectric and
> conductor size. After all, the final length of the
antenna might also
> be affected by environmental considerations (coupling
with other nearby
> metal objects, etc.) and trimming/tuning is the only way
to determine
> that final length.
>
> --
> Regards,
>
> Eric June
> KU6J
>
>
>

3008. HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: graney1882@aol.com
Message-ID: <19990318192008.08183.00000232@ng-fc1.aol.com>
Source record: 72243

I'm new to homebrewing and I need to learn the basics ... where can I find some easy projects or kits for HF CW is fine to start with but I'd like to find one that does SSB too. Any info is helpful.

Thanks KM5TY Gary

3009. Re: PCB Aerosols problems

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: feedback@pcbmilling.com
Message-ID: <36f1a7a6.13453466@news.mindspring.com>
Source record: 72244

If you're based in the US, I can make PC boards using a milling
process. Check out my web site at <http://www.pcbmilling.com> for
details. Prices for single-sided boards start at $39.99.

Mark, WA4KFZ

On Thu, 18 Mar 1999 11:03:26 +0100, Harry lythall
<a@sm0vpo.8m.com.spam> wrote:

>Many thanks for the info George.
>
>I have taken a look there and it seems very interesting. I noted that the rolls are
>quite large, Photo-negative and minimum $150 a roll. Anyway, I will continue with
>my search since I now have more information to go on. Once again many thanks for
>the advice.
>
>best regards Harry
>
>G345CDE wrote:
>
>> Try <http://www.thinktink.com/pcbfram.htm>
>>
>> I do not know if they have aerosol sensitizing materials, but you may want to
>> consider their film products. The problem with the film is that you will need
>> to roll (with heat) the film on to the pcb material. I have used a film called
>> Reston for years with 90% success rate at least.
>> Maybe you are already aware of this source.
>> Good luck. George W3ASE
>> G345CDE
>
>
>

--
PCB Milling
http://www.pcbmilling.com
FAX: (703) 818-0071
Low cost, precision-made PC boards for electronic hobbyists & experimenters

3010. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: feedback@pcbmilling.com
Message-ID: <36f1a823.13578851@news.mindspring.com>
Source record: 72245

Do a web search on a kit manufacturer called Kanga. They may something
you could use.

Mark

--
On 19 Mar 1999 00:20:08 GMT, graney1882@aol.com (GRaney1882) wrote:

>I'm new to homebrewing and I need to learn the basics ... where can I find some
>easy projects or kits for HF CW is fine to start with but I'd like to find one
>that does SSB too. Any info is helpful.
>
>Thanks KM5TY Gary

--
PCB Milling
http://www.pcbmilling.com
FAX: (703) 818-0071
Low cost, precision-made PC boards for electronic hobbyists & experimenters

3011. FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: napoli@i-2000.com
Message-ID: <36f5b2a0.46913673@news.i-2000.com>
Source record: 72246

F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
with rectangular face 0--10 amp- scale..brand new..pse remove the
(ns) from my address..thanks..Bob ..on Long Island....$40.00

3012. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: "Tom V." <TVAC@postoffice.worldnet.att.net>
Message-ID: <36F1AC39.6020@postoffice.worldnet.att.net>
Source record: 72247
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

I was just reading about one in the '99 ARRL Handbook (p13-44). Uses a
toshiba S-AV7 or S-AV17 for 25 or 50W version respectively... wonder
where to find these, and how much? Alternatively, Radio Shack was
closing out their 2m amp for $30 a while back, if you can find one.
Tom WA2CRG

marsgal42@hotmail.com wrote:
>
> Another approach would be to salvage the PA stage from a
> defunct VHF commercial radio (unless that's why the radio
> was scrapped...) and rig up some switching. One particularly
> slick no-moving-parts approach I've seen involves quarter-
> wave transmission lines (practical at 2m) and diodes.
>
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
>
> ------------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3013. FS: Collins SM-3 Microphone

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: John Mackesy <mack@melbpc.org.au>
Message-ID: <7csmlk$om6$1@possum.melbpc.org.au>
Source record: 72248
Cross-posted to: rec.ham-radio,rec.radio.amateur,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Collins SM-3, with original curly cord, PJ 068 connector, cloth bag and original shipping box. Very good condition, but missing Collins (round) emblem - few minor marks on mic barrel & base. $350.00 shipped airmail anywhere in USA.

John Mackesy
mack@melbpc.org.au

3014. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990319010517.25850.00000350@ng118.aol.com>
Source record: 72249

I think the point is to have FUN! we all know
we can go down to the drug store and pick up
a radio that will outperform anything we can
make or modify.

My forte is building tube and solid state radios,
winding my own if transformers, rf coils, osc coils etc...

In my opinion, the poster should start first with
an old am tube type radio... all american five line up, either octal or 9 pin
miniature just to get better angle at the parts. Select a bandspread and
knowing the circuit configuration, simply re-wind your rf and osc
coil(s). I have done this, in fact the old USN
TCS series receivers were nothing but AA5
type of circuits using octal 6sk7, 6sn7 etc..with
proper band and osc coils but keeping the
455 kHz IF. They arent the best performers,
but again, the point is to have fun and learn.

As far as taking a standard modern am/fm radio,
I think you would be hard pressed to get at most of the miniature components
easily, as well you are looking at converting osc and band coil(s) which are
small enough already
and re-winding them. you wont easily find any commercially wound rf and band
coils for that
particular radio. You can buy small coil parts
and kluge new coils etc.... using wire so fine you can hardly see it..... It
might be easier to
build a converter, these are sold as kits and
introduces another level of conversion..I saw one advertised to use with a
standard am car radio. I dont think you would need to do anything to any of
the BJT or JFET biasing,
you are really only changing the osc and rf
freqs at the front end and should leave the
IF strip alone if you do attempt to modify a
modern am/fm radio.

Anyway, thats my 2 cents.

Have fun.

Your fellow radioman and marconi-man
Tony

"what good is it?"
.....it's coming from out there...

"out where?"
.....space....
"just space? You've spent thousands of dollars on
transistors..and..and..circuits
and cathode ray...what good is it?"
.....well........it's interesting.....

3015. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F2419D.BBA16F24@bellsouth.net>
Source record: 72250
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

marsgal42@hotmail.com wrote:
> was scrapped...) and rig up some switching. One particularly
> slick no-moving-parts approach I've seen involves quarter-
> wave transmission lines (practical at 2m) and diodes.

Yes, for awhile I had a Heath 1w in/10w out amp that used that
arrangement. Really pretty cute -- two quarter-wave lines, with a pair
of back-to-back diodes (in fact, I *think* they were plain ol' 1N4148s
but not certain) across the lines where they joined. One line on the
output connector, the other on the input.

No drive: the diodes don't conduct (at least as long as there's less
than 0.7V P-P of RF on the antenna!) and the lines essentially behave as
a piece of coax. Feed it some drive, and the diodes conduct -- putting
a short circuit at the junction point -- and reflecting a near-infinite
impedance at each terminal of the amp. Worked quite well. (especially
on a packet station in the room next to my bed!)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3016. Re: 1/4 antenna formual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990218165435.OUI23.ejune@intuitive-data.com>
Source record: 72251

Reg,

I completely agree! I think the 234/f(MHz) equation is really meant to get you in the ballpark so that you know about how much metal to toss up in the air and start trimming. You would want to add at least 5-10% to that number, of course.

--
Regards,

Eric June
KU6J

3017. Re: Bypassing cellular?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: c-in-c <cincpac@nightmail.com>
Message-ID: <36F21CD2.F760EA3E@nightmail.com>
Source record: 72252
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Well, suppose someone put up a tar-paper
shack on the right-of-way in front of your home. Then started selling
Tacos. Hey, he could sell Tacos in a properly zoned area you say!

Poodle or German shepherd?? Couldn't resist :)

3018. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990219030721.OUI52.ejune@intuitive-data.com>
Source record: 72253

Gary,

I use a Wilderness Radio NC40A 40m CW QRP rig for backpacking and it is a very easy kit to build, well documented and easy to align. Exceptionally low current drain, good receiver, option for a built-in frequency counter and keyer (a great option, I have one in mine). Here is the URL:

http://www.fix.net/jparker/wild.html

If you want SSB and don't mind tackling a more advanced kit, try the Elecraft K2:

http://www.elecraft.com/

Here are some links I've collected to other QRP transceiver kits, I don't know much about these:

http://qrp.cc.nd.edu/QRP-L/catalog/qrpplus/qrpplus.html

http://www.ohr.com/

http://www.fix.net/~jparker/sml.html

--
Regards,

Eric June
KU6J

3019. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7ctjpbqqi1@nnrp1.dejanews.com>
Source record: 72254
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

In article <36F2419D.BBA16F24@bellsouth.net>,
Doug Smith <w9wi@bellsouth.net> wrote:
> marsgal42@hotmail.com wrote:
> > > was scrapped...) and rig up some switching. One particularly
> > > slick no-moving-parts approach I've seen involves quarter-
> > > wave transmission lines (practical at 2m) and diodes.
>
> Yes, for awhile I had a Heath 1w in/10w out amp that used that
> arrangement. Really pretty cute -- two quarter-wave lines, with a pair
> of back-to-back diodes (in fact, I *think* they were plain ol' 1N4148s
> but not certain) across the lines where they joined. One line on the
> output connector, the other on the input.
>
> No drive: the diodes don't conduct (at least as long as there's less
> than 0.7V P-P of RF on the antenna!) and the lines essentially behave as
> a piece of coax.

Um - that's actually 0.7 volts at the diodes. The 1/4 wavelength of coax acts like an impedance matching transformer, converting a low voltage signal at the antenna terminal to a high(er) voltage signal at the diodes. The diodes clip this down to 0.7 volts, which then gets transformed back down to a tiny voltage at the amplifier input by the other 1/4 wave coax run. The impedance transformation is important - otherwise you could just hang the diodes on the amplifier output.

Even seen a glass light-emitting diode? One that projects "1N914" on the ceiling?

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3020. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: John Winward <k3aot@mail.eclipse.net>
Message-ID: <36F243FE.83AD409B@mail.eclipse.net>
Source record: 72255
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mike,
Why bother, I have a Dymark 2 Meter amp for an HT, you can have it for $20.
plus shipping.
John Winward
e-mail: k3aot@eclipse.net

Mike Dickman wrote:

> RazorSaw wrote:
> >
> > Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
> > razorsaw@usa.net
> >
> > Dan
>
> You might be better off "homebrewing" a beam antenna. Much less work
> and cheaper too.
> --
> ---
> 12 hours 1 minutes of possible sunshine
> *** gain of 7 minutes per day! ***
>
> Mike (KD4LLA)
> Fairbanks, AK
>
> I believe no problem is so large or so difficult that it can't be blamed
> on somebody else.

3021. WTB 845 TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: gbran81963@aol.com
Message-ID: <19990319080150.17228.00000446@ng34.aol.com>
Source record: 72256

Looking for a friend of mine, he is in need of two 845 tubes,please tell me condition and price if you have any.
Please e-mail me since he does not have internet connection.
73'
Gunther,K7GUN
GBRAN81963@AOL.COM

3022. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01be720a$3dc03a40$c760b6cd@cbx-nt>
Source record: 72257

>
> If you want SSB and don't mind tackling a more advanced kit, try the
> Elecraft K2:
>
> http://www.elecraft.com/

This is a phenomenal transceiver. It has better creature features than any
of the commercial rigs.

Thumbs up from what I saw.

Christopher Cox
KC8FRJ

3023. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F25695.446B@eece.maine.edu>
Source record: 72258
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

hinermad@my-dejanews.com wrote:
>
> In article <36F2419D.BBA16F24@bellsouth.net>,

> Um - that's actually 0.7 volts at the diodes. The 1/4 wavelength of coax acts
> like an impedance matching transformer, converting a low voltage signal at
> the antenna terminal to a high(er) voltage signal at the diodes. The diodes
> clip this down to 0.7 volts, which then gets transformed back down to a tiny
> voltage at the amplifier input by the other 1/4 wave coax run. The impedance
> transformation is important - otherwise you could just hang the diodes on the
> amplifier output.
>
> Even seen a glass light-emitting diode? One that projects "1N914" on the
> ceiling?
>
> Dave

Hey, I've been listening to this thread for a while, and I'm not too
sure what is happening with the two pieces of coax... Are they for
switching the amp in and out of the circuit--in effect, acting like a
T/R switch? If so, where can I find some more info on this? It sounds
interesting. Thanks.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3024. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7cts52$2dm$1@nnrp1.dejanews.com>
Source record: 72259
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

In article <36F25695.446B@eece.maine.edu>,
Shawn Upton <supton@eece.maine.edu> wrote:

> Hey, I've been listening to this thread for a while, and I'm not too
> sure what is happening with the two pieces of coax... Are they for
> switching the amp in and out of the circuit--in effect, acting like a
> T/R switch? If so, where can I find some more info on this? It sounds
> interesting. Thanks.

It's standard transmission line stuff, the way a 1/4 wave
line inverts impedances.

On receive the diodes act like an open circuit. On transmit
the diodes at the PA output conduct (short circuit), appearing
as an open at the other end of the line, disconnecting the
antenna (not to mention the PA output from both the PA input
and the HT input) from the HT. Similarly, the diodes at the
HT output conduct (short), appearing as an open at the other
end of the line, disconnecting the antenna from the HT and
sending its power to the amplifier instead. All the usual
references.

I've seen examples in the ham literature - in Ham Radio
many moons ago, and in VHF Communications/UKW-Berichte
quite recently.

Another clever application of transmission lines I saw recently
involved faking a variable inductor in a VXO by transmogifying
a variable capacitor with a lumped 1/4 wave line...

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3025. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F2BCF8.2F93162B@bellsouth.net>
Source record: 72260
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

hinermad@my-dejanews.com wrote:
> Um - that's actually 0.7 volts at the diodes.

That too..

Is not the impedance of the diodes substantially higher than 50 ohms?
(I mean, when they aren't conducting)

In that case, the 1/4wave line hooked to the antenna connector is
connected to another 1/4wave line hooked to the transceiver connector,
which in turn goes to the input of the receiver, which is in theory a 50
ohm load. (admittedly in practice not true, but presumably close enough
to make things work) So we have 1/2wave of 50-ohm transmission line,
ending in the 50-ohm load of the receiver input - essentially the same
thing as if we'd added another 1/2wave of RG-58 between the antenna and
the receiver.

Now, when we key the transmitter, these diodes (which had been just a
minor impedance bump in the middle of a 1/2wave piece of transmission
line) become something pretty close to a short circuit. Now, the two
pieces of 1/4wave line do become transformers, transforming the very low
impedance of the conducting diodes to a rather high impedance across
both the input and output of the amplifier. So the two lines have
relatively little effect on the input and output matching, and at the
same time the near-short-circuit at the midpoint prevents output RF from
getting back into the input. (and turning the whole thing into an
oscillator)

> Even seen a glass light-emitting diode? One that projects "1N914" on the
> ceiling?

--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3026. FS Radios & Stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Chuck k <chuckk@kerrlake.com>
Message-ID: <36F26D2F.4C536E58@kerrlake.com>
Source record: 72261
Cross-posted to:
rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.homebrew,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,alt.radio.scanner

Spring cleaning

1 Motorola Radius rpb 50 includes 2 key note pagers and book $225

1 Johnson 587-5900-012 dual drop in charger $30

1 Uniden APX 600B gang charger $75

1 Common wealth pot 500 paging terminal $75

3 Uniden FPS 820ts with DTMF pads need new bat $50 each

1 Standard C766L 35 Watt uhf $35

1 Regency U156B Programmable UHF $40 as is

1 CRL PMC 300A Modulation controller $100

2 Landmaster II VHF 136 to 174 $75 for 2

1 New Motorola Tel Tac cell phone never in service new in box $60

1 Heathkit IM 4180 deviation meter works great $100

1 Radius M100 VHF 2 channel mike and bracket $200

1 Science workshop " Poor Man's" Spectrum Analyzer
Includes 3 tuners tracking generator marker generator
Ramp generator digital frequency read out switched filter kit
and book all boards are built have all controls
Cost $479 in kit form will sell all for $400

All equipment is working I am open to all offers prices do not include
shipping

Chuckk
KB2AHZ
KUSTOM
C&E

3027. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: fantbb@yahoo.com
Message-ID: <7cu8bj$h8v$1@nnrp1.dejanews.com>
Source record: 72262

Try these URLs for a list of kits;

http://www.ac6v.com/pageay.html
http://www.qsl.net/k4msw/

Hope these helps!

Jeff Jones
AB6MB
NorCal QRP #65
CW Forever!!!

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3028. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Michael Anderson <michaela@qualitau.com>
Message-ID: <7cu58v$jm1@chronicle.concentric.net>
Source record: 72263
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Shame on you. There's a whole lot more to amateur radio than spending money. What Dan is wanting to do is both legal and beneficial. If he builds the amp and you buy one, he'll know a lot more about it. Find something constructive to say or move on.

Mike
Jim wrote in message <7co4ou$3rd$1@brokaw.wa.com>...
>"RazorSaw" <razorsaw@usa.net> wrote:
>
>>Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
>>razorsaw@usa.net
>
>>Dan
>
>I don't know, post your resume here and we'll take a vote to see if we
>think you are qualified to homebrew a 2 meter amp. But why would
>you want to, you can buy one for $40. Homebrew a 20 meter quad,
>you'll get more enjoyment from it.
>
>73, Jim KH2D
>
>
>

3029. Pinout for Knwd TM-V7A PG-4s cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Bruce Sawtelle <71763.3467@CompuServe.COM>
Message-ID: <#PTwUMjc#GA.295@nih2naac.compuserve.com>
Source record: 72264
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Does anyone have the pinout of the Kenwood PG-4S data cable that's
used to program the dual-band TM-V7A radio (through the packet
data port I assume)

Thanks

Bruce-W3NJ

3030. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: edh@xxxqualcomm.com
Message-ID: <7cu3qj$m2a$1@thefuture.qualcomm.com>
Source record: 72265

Here are a few good web sites:

http://www.extremezone.com/~ki7mn/parts.htm
http://qrp.cc.nd.edu/qrp-l/hints
http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

In article <19990318192008.08183.00000232@ng-fc1.aol.com>, graney1882@aol.com says...
>
>I'm new to homebrewing and I need to learn the basics ... where can I find some
>easy projects or kits for HF CW is fine to start with but I'd like to find one
>that does SSB too. Any info is helpful.
>
>Thanks KM5TY Gary

3031. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <36F2AA5A.3D84A477@netdoor.com>
Source record: 72266

If this doesn't change his mind about a "home conversion" 'nuttin will :)

Butch KF5DE

Grogancat wrote:

> I think the point is to have FUN! we all know
> we can go down to the drug store and pick up
> a radio that will outperform anything we can
> make or modify.
>
> My forte is building tube and solid state radios,
> winding my own if transformers, rf coils, osc coils etc...
>
> In my opinion, the poster should start first with
> an old am tube type radio... all american five line up, either octal or 9 pin
> miniature just to get better angle at the parts. Select a bandspread and
> knowing the circuit configuration, simply re-wind your rf and osc
> coil(s). I have done this, in fact the old USN
> TCS series receivers were nothing but AA5
> type of circuits using octal 6sk7, 6sn7 etc..with
> proper band and osc coils but keeping the
> 455 kHz IF. They arent the best performers,
> but again, the point is to have fun and learn.
>
> As far as taking a standard modern am/fm radio,
> I think you would be hard pressed to get at most of the miniature components
> easily, as well you are looking at converting osc and band coil(s) which are
> small enough already
> and re-winding them. you wont easily find any commercially wound rf and band
> coils for that
> particular radio. You can buy small coil parts
> and kluge new coils etc.... using wire so fine you can hardly see it..... It
> might be easier to
> build a converter, these are sold as kits and
> introduces another level of conversion..I saw one advertised to use with a
> standard am car radio. I dont think you would need to do anything to any of
> the BJT or JFET biasing,
> you are really only changing the osc and rf
> freqs at the front end and should leave the
> IF strip alone if you do attempt to modify a
> modern am/fm radio.
>
> Anyway, thats my 2 cents.
>

> Have fun.
>
> Your fellow radioman and marconi-man
> Tony
>
> "what good is it?"
> .....it's coming from out there...
> "out where?"
> .....space....
> "just space? You've spent thousands of dollars on
> transistors..and..and..circuits
> and cathode ray...what good is it?"
> .....well........it's interesting.....

3032. RX-320 - Free Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: mktg@ix.netcom.com
Message-ID: <3772ac3c.20582959@nntp.ix.netcom.com>
Source record: 72267

March 19, 1999

Dear RX-320 User,

Beta version C of the Flexi-Tuner software for operating
the Ten-Tec RX-320 is now available.

Many thanks to all the beta testers for their excellent
ideas. I have incorporated as many of them as possible
in this version.

The major features of the new beta version are as follows:

1. Operates the RX-320 from virtually any desktop
or laptop computer, including older 386 machines.
2. Works in either DOS or Windows (this is a DOS
program).
3. Implements 34 selectivity filters.
4. All modes: AM, USB, LSB, CW.
5. AGC implemented: Fast, Medium, Slow.
6. Tuning steps down go 1 Hz or up to 1 Mhz.
7. Adjustable squelch (operation improved).
8. Bandpass tuning (offset from center freq.)
9. Scanning using scan files. Adjustable parameters.
New! 10. Built-in scan file editor.
New! 11. S-meter.
12. Almost all parameters adjustable (great for
knob twiddlers like me).
New! 13. Improved interface (more logical).
New! 14. Tighter code for faster operation.
New! 15. Improved receiver initialization.
16. No mouse required (or supported).

I have been running the new beta version for the past
couple of weeks on an old Grid 1750 386 (25 Mhz) machine.
It is really great to put the computer on my lap or
coffee table while I sit in any easy chair and listen
to the RX-320. The program has also been tested on a
486 machine, a Pentium 166, as well as a 400 Mhz Pentium
II. It works equally well on all of them in either
DOS or windows.

I would be happy to supply free of charge this Beta version
to anyone interested who has an RX-320. The software will not
function without an RX-320.

The program is supplied along with several scan files in a single zip file. Installation and removal are simple, as the program does not affect any system settings either in DOS or windows (it does not mess with your registry, DLL's, or other system programs).

The program is easy to use - just press various keys to engage the different functions.

Installation, removal, and operating instructions are included.

If there is enough interest, the Beta version may advance into a final version. In any event, I am not aware of any major bugs in the program.

This has been a very fun project - sort of like homebrewing your own ham equipment used to be in the days of tubes and discrete components!

If you would like to receive the latest beta version, send me an e-mail at mktg@ix.netcom.com and I will send you the zip file by return e-mail.

Regards and 73,

David
W7HTJ

3033. FS: MILITARY GRA-39 REMOTE CONTROL SET

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-1903991216120001@murphy1.cts.com>
Source record: 72268
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,alt.military.collecting

AN/GRA-39 REMOTE CONTROL SETS, USED COND, WITH CARRY CASE. $90 EA.

OPERATES MILITARY SETS OVER PHONE LINE THROUGH THE AUDIO CONN ON THE RADIO.

PICT AT:

http://209.239.34.153/murphyjunk/3_COMM_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3034. FS: SUNAIR PSA-1900A HF 1 KW AMPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-1903991214380001@murphy1.cts.com>
Source record: 72269
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

SUNAIR PSA-1900A 1 KW HF AMP, WITH PSA-1900 A POWER SUPPLY, GCU-1900A COUPLER.

USED, CLEAN COND. LESS CABLES $1950 PER SET.

PICT AT:

http://209.239.34.153/murphyjunk/3_COMM_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3035. FS: TRANSWORLD RAT7000 HF AUTO ANTENNA COUPLERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-1903991220250001@murphy1.cts.com>
Source record: 72270
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna

RAT-7000 100 WATT HF ANTENNA COUPLER IN WEATHER PROOF CASE.

USED, CLEAN COND. WITH DATA SHEET $325 EA.

PICT AT:

http://209.239.34.153/murphyjunk/3_COMM_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3036. Get your very own Callsign Mug.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7cue29$7ql$1@birch.prod.itd.earthlink.net>
Source record: 72271
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber

All mugs are made with quality control in mind. They are dishwasher safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber

If you what buy your personal callsign mug all you will have to do is send a check or money order for the amount of the mug plus $4.00 for shipping. Remember to send your callsign so I can place it on the mug.(The mug you see on my web sit is just a sample mug. Your callsign will be placed on the mug you order.) Please USA orders only. See at http://home.earthlink.net/~jawjabber

To see a picture of the Callsign Mug and to get the order forms please click on the link below.

http://home.earthlink.net/~jawjabber

3037. Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7cue66$81r$1@birch.prod.itd.earthlink.net>
Source record: 72272
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber

All mugs are made with quality control in mind. They are dishwasher safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber

If you what buy your personal callsign mug all you will have to do is send a check or money order for the amount of the mug plus $4.00 for shipping. Remember to send your callsign so I can place it on the mug.(The mug you see on my web sit is just a sample mug. Your callsign will be placed on the mug you order.) Please USA orders only. See at http://home.earthlink.net/~jawjabber

To see a picture of the Callsign Mug and to get the order forms please click on the link below.

http://home.earthlink.net/~jawjabber

3038. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Joseph Mowery <jmowery@nswc.navy.mil>
Message-ID: <36F2B4C5.EC51D8D3@nswc.navy.mil>
Source record: 72273
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

marsgal42@hotmail.com wrote:

> In article <36F25695.446B@eece.maine.edu>,
> Shawn Upton <supton@eece.maine.edu> wrote:
>
> > Hey, I've been listening to this thread for a while, and I'm not too
> > sure what is happening with the two pieces of coax... Are they for
> > switching the amp in and out of the circuit--in effect, acting like a
> > T/R switch? If so, where can I find some more info on this? It sounds
> > interesting. Thanks.
>
> It's standard transmission line stuff, the way a 1/4 wave
> line inverts impedances.
>

At 1/4 electrical wavelength a transmission line will act like a short
circuit.
Thus it is called a shorting stub. This is the basis of waveguide.
Waveguide
is basically two 1/4 wave shorted stubs joined. The shorted end is the edge
of the wave guide. This makes it easy to guess the transmission frequency
of some equipment by the size of the wave guide.

>
> On receive the diodes act like an open circuit. On transmit
> the diodes at the PA output conduct (short circuit), appearing
> as an open at the other end of the line, disconnecting the
> antenna (not to mention the PA output from both the PA input
> and the HT input) from the HT. Similarly, the diodes at the
> HT output conduct (short), appearing as an open at the other
> end of the line, disconnecting the antenna from the HT and
> sending its power to the amplifier instead. All the usual
> references.
>
> I've seen examples in the ham literature - in Ham Radio
> many moons ago, and in VHF Communications/UKW-Berichte
> quite recently.
>
> Another clever application of transmission lines I saw recently
> involved faking a variable inductor in a VXO by transmogifying
> a variable capacitor with a lumped 1/4 wave line...
>
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte

>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3039. Re: Help!! need to attach ext antenna to 2m HT that has a fixed antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f2bca7.0@news.netwalk.com>
Source record: 72274

Ryan Ashline wrote in message <7cskqf$e0f$1@ash.prod.itd.earthlink.net>...
>I was givin an old 2meter radio that works great on simplex with 500mw out.
>The flex antenna is attached at only one piont to the circuit board. I was
>wanting to attach a bnc connector so I can hook it up to an ext anntenna.
I
>am guessing that the piont where it attaches is the positive or center feed
>of the coax but what is the neg or braid? My friend an I talk simplex all
>the time from our homes and I would like to make this rig dedicated to the
>freq we use. But the power is not enough unless I am on the roof so I
would
>really like to be able to attach and external to it
>
>Any help would be great.
>Thanks
>Ryan KB5UUS
>
>
>
>
>

Not knowing any details on the radio I can only speak in general terms.

A good guess would be the negative side of the battery connections. Is there an earphone jack? The outer connection of that would be another place.

What type of radio is it that does not have a removable antenna?

Jim
N8EE

3040. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: "D.Pearce" <depearce@netscape.net>
Message-ID: <36F2B745.C11A00CF@netscape.net>
Source record: 72275

The TenTec company also sell QRP transcievers. I have a 40 meter one I use. There are some nice things and some minor aggrivations. Basically you need to borrow a digital frequency readout HF rig for alignment purposes.

David
KC0DQA

3041. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f2bef7.0@news.netwalk.com>
Source record: 72276

Why not just build a converter from a shortwave band to the AM broadcast band?

Let's see...530 to 1600KHz on the BCB. Using a 10 MHz crystal would give you 10.53 to 11.6 MHz reception.

Better yet, use a VFO for the conversion oscillator and you can select whatever band you want. I used to have one of these for SW use with my Drake B line (receive only!) and it worked fine--just plug it into one of the spare band select crystal sockets.

Jim
N8EE

3042. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Mark Goad 35 <ka5axv@pdq.net>
Message-ID: <iiAI2.904$BG6.1915@news12.ispnews.com>
Source record: 72277
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

You did not tell us what the price of your mug is. You only stated that it costs $4 to ship it. Are you any relation to Monty Crisco??

Jaw Jabber wrote in message <7cue66$81r$1@birch.prod.itd.earthlink.net>...
>What better way is there to start off your morning except by drinking a cup
>of coffee using your very own CALLSIGN MUG. See at
>http://home.earthlink.net/~jawjabber
>
>All mugs are made with quality control in mind. They are dishwasher safe
and
>if after you receive your mug you are unsatisfied just send the mug back in
>its original shipping container and I will refund you the cost of the mug.
>See at http://home.earthlink.net/~jawjabber
>
>If you what buy your personal callsign mug all you will have to do is send
a
>check or money order for the amount of the mug plus $4.00 for shipping.
>Remember to send your callsign so I can place it on the mug.(The mug you
>see on my web sit is just a sample mug. Your callsign will be placed on the
>mug you order.) Please USA orders only. See at
>http://home.earthlink.net/~jawjabber
>
>To see a picture of the Callsign Mug and to get the order forms please
click
>on the link below.
>
>http://home.earthlink.net/~jawjabber
>
>
>
>
>
>
>

3043. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Michael Anderson <michaela@qualitau.com>
Message-ID: <7cujfl$1rc@journal.concentric.net>
Source record: 72278
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

```
It has been difficult to tell from the discussion, but it sounds like there
is a 1/4 wavelength stub in series with two diodes (that are in parallel but
reversed with each other) then another 1/4 wavelength stub. Is my
assumption correct? or is the amplifier also between that? Thanks, Michael
Joseph Mowery wrote in message <36F2B4C5.EC51D8D3@nswc.navy.mil>...
>
>
>marsgal42@hotmail.com wrote:
>
>> In article <36F25695.446B@eece.maine.edu>,
>> Shawn Upton <supton@eece.maine.edu> wrote:
>>
>> > Hey, I've been listening to this thread for a while, and I'm not too
>> > sure what is happening with the two pieces of coax... Are they for
>> > switching the amp in and out of the circuit--in effect, acting like a
>> > T/R switch? If so, where can I find some more info on this? It sounds
>> > interesting. Thanks.
>>
>> It's standard transmission line stuff, the way a 1/4 wave
>> line inverts impedances.
>>
>
>At 1/4 electrical wavelength a transmission line will act like a short
>circuit.
>Thus it is called a shorting stub. This is the basis of waveguide.
>Waveguide
>is basically two 1/4 wave shorted stubs joined. The shorted end is the
edge
>of the wave guide. This makes it easy to guess the transmission frequency
>of some equipment by the size of the wave guide.
>
>
>
>>
>> On receive the diodes act like an open circuit. On transmit
>> the diodes at the PA output conduct (short circuit), appearing
>> as an open at the other end of the line, disconnecting the
>> antenna (not to mention the PA output from both the PA input
>> and the HT input) from the HT. Similarly, the diodes at the
>> HT output conduct (short), appearing as an open at the other
>> end of the line, disconnecting the antenna from the HT and
>> sending its power to the amplifier instead. All the usual
>> references.
```

>>
>> I've seen examples in the ham literature - in Ham Radio
>> many moons ago, and in VHF Communications/UKW-Berichte
>> quite recently.
>>
>> Another clever application of transmission lines I saw recently
>> involved faking a variable inductor in a VXO by transmogifying
>> a variable capacitor with a lumped 1/4 wave line...
>>
>> Laura Halliday VA3LDH "Que les nuages soient notre pied
>> Grid: FN03gs a terre..." - Hospital/Shafte
>>
>> ----------== Posted via Deja News, The Discussion Network ==----------
>> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>

3044. Re: ethernet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36F2CB96.30D3@pop.removethistomailme.net>
Source record: 72279

Fredrik ï¿½berg wrote:
>
> is someone doing ethernet (10mbit) on 10ghz ?

Well, I have managed to send half of a 10BaseT connection about 6'
across my workbench, using both 10 and 24 GHz Gunnplexers. :-) I still
need to build my second transceiver unit (pair of cascaded MAR-6s in the
IF amp, MC13155 discriminator, MC10116 line interface) to complete the
link. Too many other things have piled up awaiting my attention,
unfortunately....

It turns out that it is better to use the AUI port on a hub or NIC
instead of trying to interface with 10BaseT directly. Otherwise you
have to cancel the local echo that occurs with the traditional
dual-Gunnplexer arrangement.

Collision handling is another issue that needs to be figured out at some
point. At a minimum the two ends of the link need to be in separate
collision domains, unless you want to come up with a collision
signalling system on the microwave link. The original N6GN design did
not address this, but it's not likely to be important for a simple
point-to-point link that connects two PCs.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

3045. What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: "D.Pearce" <depearce@netscape.net>
Message-ID: <36F2C174.121756A@netscape.net>
Source record: 72280

Do kits count, or must it be built from plans, or must you design the circuits?

Just intrested in what the correct definition of homebrew is, not counting the food definition.

David
KC0DQA

3046. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <36F2CF02.2F6E4C48@netdoor.com>
Source record: 72281

He is a self proclaimed beginner. This is a bit advanced for a beginner
don't you think. Vectronic kits would be a better start and a lot cheaper
too! I think a 30 -50 dollar project should give him most of the
soldering, tuning, trimming, cutting and hacking and finally
sledg-hammering skills he will need!

Butch KF5DE

Eric June wrote:

> Gary,
>
> I use a Wilderness Radio NC40A 40m CW QRP rig for backpacking and it is
> a very easy kit to build, well documented and easy to align.
> Exceptionally low current drain, good receiver, option for a built-in
> frequency counter and keyer (a great option, I have one in mine). Here
> is the URL:
>
> http://www.fix.net/jparker/wild.html
>
> If you want SSB and don't mind tackling a more advanced kit, try the
> Elecraft K2:
>
> http://www.elecraft.com/
>
> Here are some links I've collected to other QRP transceiver kits, I
> don't know much about these:
>
> http://qrp.cc.nd.edu/QRP-L/catalog/qrpplus/qrpplus.html
>
> http://www.ohr.com/
>
> http://www.fix.net/~jparker/sml.html
>
> --
> Regards,
>
> Eric June
> KU6J

3047. Basic Sumer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Lauren Matheson <4ljm3@qlink.queensu.ca>
Message-ID: <01be7255$6f290b20$bbe10f82@inan.queensu.ca>
Source record: 72282

The answer to this question is probably pretty easy. I'm looking to sum the voltage of 4 signals - how do I do it? (I can't just float the grounds and connect them in series)

Lauren Matheson
4ljm3@qlink.queensu.ca

3048. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F2D28C.59E2@eece.maine.edu>
Source record: 72283

D.Pearce wrote:
>
> The TenTec company also sell QRP transcievers. I have a 40 meter one I
> use. There are some nice things and some minor aggrivations. Basically
> you need to borrow a digital frequency readout HF rig for alignment
> purposes.
>
> David
> KC0DQA

I have one of those. I accidentally powered it up wrong polarity, took out all the IC's and the final transistor. I'm not sure, butI think something else might be wrong, as when I key it at home, I seem to get some RFI (my 2m rig's squelch opens up, the FM broadcast radio gets noisy). My antenna is a 50' dipole in the attic (I'm on the second floor), with a tuner that I built from a kit from Dan's. Have you noticed similar problems?

Also, I have to admit, being a student in electrical engineering has some advantages. So far, I've been able to use some really nice equipment to tune up my Ten-Tec (o-scope, spectrum analyzer, RF generator...).

Over all, although I have barely used it, I like the radio. I plan on putting up a webpage on this radio, with some hints and kinks that I found. Next project--a cw filter for the audio output.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3049. Re: VFO recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F2E1A5.6A364F49@teleport.com>
Source record: 72284

I found the reason for the discrepancy. EZNEC uses scientific notation, and the power I had set to get 30 uW/m was 1.86E-8 W. I glanced at this and reported it as 186 W. It was, of course, not that but 18.6 nW, which is 84.3 dB below 5 watts. (Going 2 places the wrong way with the decimal point made a neat 10^4, or 40 dB, error.) Your back-of-the-envelope calculation is just fine. I ran the same analysis at 300 MHz instead of 7 (where a distance of 30 meters is well into the far field), and the result is only about 0.5 dB different. So the plane wave assumption was fine.

I could have checked my results several ways. One is to set the power at 5 watts and look at the reported field strength. It was 0.4914 V/m, which is sure enough 84.3 dB, not 44, below 30 uV/m. But the best would have been to do a reality check using just the method you did. I often rag about the tendency of younger engineers to blindly accept computed results without doing a ballpark check, and here I did it myself -- and very publicly. How embarrassing. But a good lesson and reminder. Time to polish up that glass belly-button (so I can see where I'm going when I have my head where the sun don't shine). My apology for the goof. And I'll put engineering notation on the list of future EZNEC features!

Thanks for spotting the error!

Roy Lewallen, W7EL

Brian Setterberg wrote:
>
> These comments also made me curious. I went through a
> simple back-of-the-envelope calculation and found some
> very different results.
>
> Perhaps someone can help me see what I'm missing here?
>
> For purposes of the analysis, I made the questionable
> assumption that we have a plane wave.
>
> A 30 uV/m field strength corresponds to a power density
> of approximately 2.4 picowatts/m^2. Assume for the moment
> that the source is radiating equally in all directions.
> (This is because I'm lazy and it's simple to compute the
> surface area of a sphere with a 30 m radius.) Hence, I
> compute a source power of:
>
> (2.4 picowatts/m^2)*(4*pi*(30 m)^2) = 27 nW.

>
> In other words, my hypothetical isotropic radiator will reach
> the 30 uV/m field strength limit with a power of only
> 27 nanowatts. This is approximately 83 dB below 5 Watts.
> As Roy pointed out, we also need to include the gain of a
> real antenna as well as ground reflection effects. Thus, my
> simple analysis predicts that we would need to be somewhere
> in excess of 90 dB below 5 Watts to meet the requirements for
> an unlicensed intentional radiator in the HF bands.
>
> So why did my analysis deviate so far from Roy's?
>
> The plane wave approximation is suspicious, but 40 dB seems
> like a pretty large discrepancy. Basic arithmetic sometimes
> causes me problems, so the answer may be obvious to everyone
> else...
>
> Brian Setterberg
> N7FMF

3050. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Jimmy Mac <jmacd@svn.net>
Message-ID: <36F2E367.10738EFF@svn.net>
Source record: 72285
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Ignore the spamming BS you may get here Dan,
Ofcourse you can HB an amp.. I have many of times. It's fun and a great learning experience.

It's a shame there are so many "appliance operators" hanging out on VHF but with today's ease on licence requirements I guess we get what we get if we're going to keep the hobby alive.

I have used many different sources from CCI to RF Parts Ramsey sells an OK kit at a decent price but the best performance I ever had was by using an old VFH Marine Tube rig. and converting the PA to 144 Mhz WORKED GREAT on SSB and FM.

Good luck and don't let the CB'rs get you down... <= That should stir up some interesting discussion!

Jimmy Mac - MCSE
KB6ZOP

> >"RazorSaw" <razorsaw@usa.net> wrote:
> >
> >>Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
> >>razorsaw@usa.net
> >
> >>Dan
> >

3051. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F2E610.6D76CD59@teleport.com>
Source record: 72286

I've kicked this one around some in the QRP community, where all sorts of built-at-home rigs are common. My conclusion is there's no universally accepted definition. In fact, I don't think one is possible. The problem is that there's a continuum extending from rigs built from individual components to ones assembled Heathkit-style. Lots of people modify rigs. Modifications could be as simple as changing one component, to the point where you couldn't figure out what kind of rig the person started with. At what point in this modification process, if any, does a rig qualify as "homebrew"?

Even with a "scratch-built" rig, the level of integration could be used as an argument about what makes homebrew. What if the rig is just a module or two wired together -- is that as "homebrew" as one made from 2N2222's? How about the folks who make their own boxes, dials, knobs -- or capacitors? Are they the only true homebrew rigs? Do you have to design the circuitry for it to be homebrew? If not, is it more or less homebrew if you buy a PC board for it, or copy a PC board layout from a magazine?

My personal definitions are that an unmodified rig assembled from a kit isn't homebrew. One you design and build from individual parts is. The line in between is very, very fuzzy. But -- again my opinion only -- any activity that exercises the gray matter is good, and whoever does it can be proud of the accomplishment. Fiddle with your rig, and when you feel its characteristics are more your doing than someone else's, call it "homebrew" with pride.

Roy Lewallen, W7EL

D.Pearce wrote:
>
> Do kits count, or must it be built from plans, or must you design the
> circuits?
>
> Just intrested in what the correct definition of homebrew is, not
> counting the food definition.
>
> David
> KC0DQA

3052. Re: Help!! need to attach ext antenna to 2m HT that has a fixed antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Ryan Ashline <Ashline@sprintmail.com>
Message-ID: <7cur2g$4af$1@fir.prod.itd.earthlink.net>
Source record: 72287

It is an old Icom no model number on it or even inside the case.
The antenna is a soild piece connected buy a small screw or bolt. Only one
connection. It does not have a spkr or mic input/output, but i was hopeing
i could just solder a couple connectors to the wires the run to the spkr and
mic. If that helps?

Thanks for your time.
Ryan
>Not knowing any details on the radio I can only speak in general terms.
>
>A good guess would be the negative side of the battery connections. Is
>there an earphone jack? The outer connection of that would be another
>place.
>
>What type of radio is it that does not have a removable antenna?
>
>Jim
>N8EE
>
>

3053. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <7cv3ic$chp@apple.telalink.net>
Source record: 72288
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

Michael Anderson wrote in message <7cujfl$1rc@journal.concentric.net>...
>It has been difficult to tell from the discussion, but it sounds like there
>is a 1/4 wavelength stub in series with two diodes (that are in parallel
but
>reversed with each other) then another 1/4 wavelength stub. Is my
>assumption correct? or is the amplifier also between that? Thanks,
Michael

Sure wish I was better at ASCII art<G>.. The following will probably only
make sense in a fixed-width font small enough to provide at least 80
characters to a line:

```
input connector ==============amplifier
electronics======================output connector
|
|
| 1/4wave line
1/4wave line |
====================|==============================
|
diodes (2, one
with cathode grounded & other with anode ground)
|
ground
```

I'll try to draw something more sensible in Windows Paint & post it to:
personal.bna.bellsouth.net/~w9wi/trswitch.htm

That'll take a few minutes, don't expect to see it any earlier than 2200 CST
Friday 19 March.

3054. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Matt L <sean_mac_leod.sca@mindspring.com>
Message-ID: <36F31575.6357A916@mindspring.com>
Source record: 72289
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I suspect, despite all the sarcasm, that the original poster intends to use
the HT as either a mobile, or base. I too would be interested in home-brew
2m+ amps, but I personally would prefer to hook them to a mobile/base

Don W6JL wrote:

> Jim wrote:
> >
> > "RazorSaw" <razorsaw@usa.net> wrote:
> >
> > >Hi. I was wondering if I can homebrew a 2 meter amp for an HT.
> > >razorsaw@usa.net
> >
> > >Dan
> >
> > I don't know, post your resume here and we'll take a vote to see if we
> > think you are qualified to homebrew a 2 meter amp. But why would
> > you want to, you can buy one for $40. Homebrew a 20 meter quad,
> > you'll get more enjoyment from it.
> >
> > 73, Jim KH2D
>
> AMEN!
>
> Don, W6JL

--
Matt L.

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Title 47, Chapter 5, Subchapter II, p.227, any and all
nonsolicited commercial E-mail sent to this address is
subject to a download and archival fee in the amount of
$500 US

3055. Elecraft K2?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: See sig for reply <ndema@astrax.nospam>
Message-ID: <Pine.LNX.3.95.990319231944.6188C-100000@astrax.snafu.de>
Source record: 72290

Hello *,

has anyone experience in building and using the K2?
I am considering it for QRP stationary and mobile use, and would like to
hear some comment before I decide ...

73,
Detlef, DH3DM.

+++
no archive: yes

--
Detlef Marxsen at 53 27 N 09 57 E.
Due to bad spam experience, my header is faked. To send email to me
remove the ".no" from dema@astrax.snafu.de.no
Sorry for the inconvenience.
May the bugs and computer-viruses eat the spammers alive!

3056. Re: Elecraft K2?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36F31B49.CC250560@erols.com>
Source record: 72291

I've built, tested, and operated the K2. A great QRP rig! The QSK is the best I have heard. The manual is superb! The few problems found by the field testers will be corrected in the production units which you order now. I'm waiting for the SSB and antenna tuner modules. Check out http:\\www.elecraft.com for comments from other field test builders.

See sig for reply wrote:

> Hello *,
>
> has anyone experience in building and using the K2?
> I am considering it for QRP stationary and mobile use, and would like to
> hear some comment before I decide ...
>
> 73,
> Detlef, DH3DM.
>
> +++
> no archive: yes
>
> --
> Detlef Marxsen at 53 27 N 09 57 E.
> Due to bad spam experience, my header is faked. To send email to me
> remove the ".no" from dema@astrax.snafu.de.no
> Sorry for the inconvenience.
> May the bugs and computer-viruses eat the spammers alive!

3057. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F31C5A.323DD87F@teleport.com>
Source record: 72292

As Rocci said, it depends on the equipment you have available. I have a good method using a signal generator, frequency counter, and scope if you have them.

Roy Lewallen, W7EL

Charlie T. wrote:
>
> I'm trying to measure the Q of a ferrite core inductor
> and an equivalent value air-core inductor. I know the
> Q of the ferrite may be less but so is the size!
>
> Any suggestions on Q measurement techniques
> appreciated.
>
> -Thanks,
> W5CDT
> --
> >>>Remove the X's from my email address before using<<<
>
> XctX@onr.com

3058. Can this be done??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-19 00:00:00 UTC
From: Cyberhax <cyberhax@thegrid.net>
Message-ID: <6UGI2.3055$PM2.26183@alfalfa.thegrid.net>
Source record: 72293

I'm trying to develop a means of detecting (and measuring field strength) of microwave signals around 24 Gigahertz. I wonder if anyone has some thoughts on the matter?

My objective is to use an receiver tuned to an intermediate frequency (sub-harmonic?) so that I can use a commonly available radio and an omni (yep, omni) antenna. I want to be able to observe a field strength meter to determine the presence or absence (and everything inbetween) of a 24Ghz sig that spans over a short path (<100 meters) that has a beam width of =<10 meters. Using a receiver that is capable of receiving freqs less than 1.2 gigs is prefered.

Is it plausible that I could detect the IF of the signal ? The 24 Ghz signal is AM modulated.

Any thoughts greatly appreciated.

--
Shawn WB6JWB
cyberhax@thegrid.net

3059. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36F3E0CB.C2DEF506@worldnet.att.net>
Source record: 72179

Another way that doesn't require magnetic coupling is to make your signal generator have a 'stiff' known output impedance by, say, putting a 10dB 50 ohm attenuator at the output. Then select a good quality capacitor that resonates the inductor at the frequency of interest. Put the scope or other 'non-loading' measurement device at the output of the attenuator, and hook up the LC circuit in a series configuration across the output.
Tune the generator until a resonant null is observed. The equivelent resistance (R) of the inductor can be calculated from the depth of the null. Q of the inductor then equals inductive reactance divided by equivelent resistance.
This only works if the capacitor Q is high compared to the inductor Q (which is usually true), and if the scope is usable at the frequency of interest.
At higher frequencies, a logarithmic signal level meter, a spectrum analyzer, or possibly a calibrated 'S' meter can be used.

Jim Bixby wrote:

> A reasonably quick way requires, as noted in the other replies, a
> signal generator and a scope. The trick is to not load down the coil
> with either the signal generator or the scope. What I do is take the
> signal generator, and drive it into a loop of a couple of turns of
> hookup wire, maybe 2 " in diameter, to make a 'transmitter', I put
> that a distance away (inches to yards, depending on the geometry and
> inductance -- it doesn't matter very much) from the ferrite inductor,
> with the axes arranged parallel, so that the loop will transmit to the
> inductor. With an oscilloscope and a high-z 10:1 probe, add
> capacitance across the inductor until the inductor-capacitor resonate
> at the desired frequency. Then, just vary the signal generator
> frequency to either side of resonance to find the points that the
> output signal drops 3db from the peak. The center frequency divided
> by the difference in the -3db points is the Q.
>
>

3060. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F3ED19.E2BA8E94@teleport.com>
Source record: 72180

My apology. I gave the wrong Dayton booth number for Kanga U.S. They'll be with me at booth 514, not 504. (504 is my G-QRP Club membership number, and I get it confused with the booth number.) The G-QRP Club also sells lots of inexpensive, simple kits through Kanga U.K., and they also have a booth at Dayton. They'll probably be at their usual location of booth 242. Several other QRP kit vendors are always at Dayton, so it's a great place to check out the merchandise and ask questions. There are also show-and-tell and other QRP activities at the Days Inn South all day Thursday, and on Friday and Saturday evenings, sponsored primarily by the QRP-ARCI. NorCal (Northern California QRP Club) as well as many other regional QRP Clubs are well-represented there, so Dayton is also a good place to make contact with a club.

Anyone interested in homebrewing should look into joining NorCal and/or the G-QRP club. Their excellent magazines, QRPp and Sprat respectively, are always chock full of projects, from simple modifications to popular QRP kit rigs, to full transceivers.

Roy Lewallen, W7EL

3061. HEATH VTVM meter PART NEEDED

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990320143539.10901.00000413@ng127.aol.com>
Source record: 72181

Hello, I have a Heath model IM-11 vacuum tube volt meter.
I need the clear plastic cover for the meter.
If anyone can provide one for me at a reasonable cost, please
Email me...
Thank you,
Joe Pratt, Tubecntral@aol.com

3062. Wanted: IC901

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: glennh <glennh@ecom.net>
Message-ID: <7d0tu9$t5s$2@la-mail4.digilink.net>
Source record: 72182

Looking for a IC901

Glenn Haddon
##glenn@ecom.net remove the ##

3063. Re: Basic Sumer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36F4344F.2371E4E1@home.com>
Source record: 72183

I thought that Al Gore invented the wheel, Trent Lott invented the
paperclip and Dan Quayle invented "Spell-Check".

Reg Edwards wrote:

> One way of summing N signals is to use N transformers,
> primaries across the individual signal sources and
> secondaries all connected in series with each other.
>
> If you don't mind more loss, just connect one end of a
> resistor in series with each source and connect together
> all the other ends of the resistors. Followed by an
> amplifier with negative feedback to the common point.
>
> The ancient land of Sumer was the very first on this Earth
> of ours to become civilised. Its people, the first
> engineers, invented the wheel. The modern name of that
> land is Iraq. Cruise missiles and stealth bombers have
> recently returned its inhabitants to the stone age.
> --
> Reg.

3064. HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <36F41109.75F0@snet.net>
Source record: 72184

Does anybody know what they are called or how to convert say a regular SMA or BNC to HP's connectors? These things are used all over their older generation connectors. I need to inject some RF to do some testing of a mixer and I don't know how to convert to these things.

Any help appreciated!!
Vince N1VC

3065. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: "w . roberts" <wilf.roberts@staffs.ac.uk>
Message-ID: <01be7316$a9a09220$LocalHost@entwr>
Source record: 72185

Quite , quite incredible , this ng is called <rec.radio.amateur.HOMEBREW>
isn't it ?
.....what encouragement....." Why don't you buy one....its much easier "

or " Why don't you build an ant. instead "

How about finding an ng where the folks really are interested in rolling
their own ?

Wilf Roberts G3LOE

> > > I don't know, post your resume here and we'll take a vote to see if
we
> > > think you are qualified to homebrew a 2 meter amp. But why would
> > > you want to, you can buy one for $40. Homebrew a 20 meter quad,
> > > you'll get more enjoyment from it.

3066. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F454A8.FF6@eece.maine.edu>
Source record: 72186
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

```
Doug Smith wrote:
>
> Doug Smith wrote:
> > I'll try to draw something more sensible in Windows Paint & post it to:
> > personal.bna.bellsouth.net/~w9wi/trswitch.htm
> >
> > That'll take a few minutes, don't expect to see it any earlier than 2200 CST
> > Friday 19 March.
>
> If you tried this URL Friday night or Saturday morning, it probably
> didn't work. (it returned a text page but no drawing)
>
> My error; I thought Front Page would do more than it did. I fixed it
> late this morning; the picture should be there now.
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66

Thanks for putting it up; pictures (and schematics) work really well for
explaining things to me.
--
**********************************************
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
**********************************************
```

3067. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.990320232448.29562B-100000@Stratus.CAM.ORG>
Source record: 72187

On 20 Mar 1999, w . roberts wrote:

>
>
> Quite , quite incredible , this ng is called <rec.radio.amateur.HOMEBREW>
> isn't it ?
> ....what encouragement....." Why don't you buy one....its much easier "
>
> or " Why don't you build an ant. instead "
>
> How about finding an ng where the folks really are interested in rolling
> their own ?
>
> Wilf Roberts G3LOE
>
But the original post was cross-posted to pretty much all the newsgroups
in the rec.radio.amateur.* hierarchy which surely would explain the early
answers. Someone's comment about building an antenna (that's homebrew)
is a little more understandable if you consider that the post landed in
that newsgroup. And the "buy one it's cheaper" undoubtedly came from
someone reading the post in rec.radio.amateur.misc (or
rec.radio.amateur.equipmenter where I think it landed too).

It may not say much about the state of amateur radio, but hopefully it
explains the early comments in a newsgroup that is meant to be about
building.

Michael VE2BVW

>
>
> > > > I don't know, post your resume here and we'll take a vote to see if
> we
> > > > think you are qualified to homebrew a 2 meter amp. But why would
> > > > you want to, you can buy one for $40. Homebrew a 20 meter quad,
> > > > you'll get more enjoyment from it.
>
>
>
>

3068. Re: Basic Sumer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <36F3121D.47C46293@home.com>
Source record: 72294

Isn't Sumer in ancient Syria?

Lauren Matheson wrote:

> The answer to this question is probably pretty easy. I'm looking to sum
> the voltage of 4 signals - how do I do it? (I can't just float the
> grounds and connect them in series)
>
> Lauren Matheson
> 4ljm3@qlink.queensu.ca

3069. Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: "Charlie T." <xctx@onr.com>
Message-ID: <01be727b$5f8750c0$120cc8cf@ct>
Source record: 72295

I'm trying to measure the Q of a ferrite core inductor
and an equivalent value air-core inductor. I know the
Q of the ferrite may be less but so is the size!

Any suggestions on Q measurement techniques
appreciated.

-Thanks,
W5CDT
--
>>>Remove the X's from my email address before using<<<

XctX@onr.com

3070. Autek VA1 or MFJ-259B??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: "Charlie T." <xctx@onr.com>
Message-ID: <01be727b$b28d4860$120cc8cf@ct>
Source record: 72296

Which is better for complex impedance measurements...
the Autek VA1 or MFJ-259B??

My frequency of interest is about 2 MHz.

thanks,

W5CDT

--
>>>Remove the X's from my email address before using<<<

XctX@onr.com

3071. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <36F3102F.7FEBDBF8@worldnet.att.net>
Source record: 72297

There are numerous techniques that can be used, but they depend on the instrumentation available to you and the frequency range you're working in. Do you have a signal generator? How about a spectrum analyzer or a calibrated signal level meter?

There

"Charlie T." wrote:

> I'm trying to measure the Q of a ferrite core inductor
> and an equivalent value air-core inductor. I know the
> Q of the ferrite may be less but so is the size!
>
> Any suggestions on Q measurement techniques
> appreciated.
>
> -Thanks,
> W5CDT
> --
> >>>Remove the X's from my email address before using<<<
>
> XctX@onr.com

3072. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: mervins@aol.com
Message-ID: <19990319220819.02619.00000260@ng120.aol.com>
Source record: 72298

Don't know why everyone is giving you the run-around, Brett, but there are many sites with the information you seek. Suggest you start with http://hem2.passagen.se/sm0vpo/#rx. Scotty

>I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave
>receiver. I understand a mixer and local oscillator circuit(s) should
>accomplish this end.
>
>Though I have found a few general circuit schematics - I am finding a lack
>of information on procedures for actual component selection and calculation,
>JFET biasing, etc...
>
>Any suggestions on what steps to take next would be greatly appreciated.
>Thanks in advance for your help.
>
>Best wishes,
>
>Brett
>KB2IBD

3073. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: xkmiller01x@ticnet.com
Message-ID: <B4FE03B3A2786D48.3393EB7090F1A9AE.4F58939C4D12AC1D@library-proxy.airnews.net>
Source record: 72299

Like Roy says, it depends... But if you plan on working one of the
qrp or homebrew contests, check the rules. Most of them are pretty
lenient on the topic of what is or isn't homebrew.
73,
Kerry, WD5ABC

On Fri, 19 Mar 1999 14:28:20 -0700, "D.Pearce" <depearce@netscape.net>
wrote:

>Do kits count, or must it be built from plans, or must you design the
>circuits?
>
>Just intrested in what the correct definition of homebrew is, not
>counting the food definition.
>
>David
>KC0DQA

3074. ebay-Mint NOVEX GDO @ $20 sofar!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990319234108.23388.00000232@ng-cf1.aol.com>
Source record: 72300

Hi Guys;
Theres a mint Novex S/S GDO on Ebay at this URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=78415290
It might just pay to take a look!
Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

3075. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990219204541.OUI48.ejune@intuitive-data.com>
Source record: 72301

Butch,

Not sure what you mean.&#65533; I think the NC40A is very appropriate for a beginner.&#65533; A single circuit board, good documentation, and I put it together in two evenings.&#65533; My only equipment was an old/corroded Rat Shack soldering iron, needle nose pliers, dikes, a normal pair of pliers, and a $10 Rat Shack VOM.&#65533; Didn't even have a second radio or a frequency counter, I just used the built-in KC-1 counter to align the VFO and tuned for max power using the sidetone amplitude, which is directly derived from the RF output.

--
Regards,

Eric June
KU6J

3076. Re: Elecraft K2?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990219205035.OUI05.ejune@intuitive-data.com>
Source record: 72302

Detlef,

I am thinking about getting one myself. I have seen a lot of very good reports about the rig on the qp-l mail reflector. I have never seen a bad comment about the rig. You might search the archives at http://listserv.lehigh.edu/lists/Archives/qrp-l for more info.

--
Regards,

Eric June
KU6J

3077. Re: Basic Sumer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990219205348.OUI03.ejune@intuitive-data.com>
Source record: 72303

Lauren,

See if you can find a basic book on Op-Amp design. If you have Radio Shack stores in your country, I think they even sell a small booklet on the subject which will do just fine. Summing signals is easy to do with a single op-amp, and such a circuit will be listed early on in the book. I refer you to a book because I don't think I could draw you the circuit with just the ASCII characters.

--
Regards,

Eric June
KU6J

3078. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990219210249.OUI51.ejune@intuitive-data.com>
Source record: 72304

David,

There is no consistent definition. My personal definition is that kits don't count, nor do things that you construct directly from articles in QST, 73, ARRL Handbook, or the like. In my personal definition, you have to *design* from scratch at least one significant module in your project. Preferably, you design them all. Then you have a true homebrew rig. I'm an electronic engineer by training, so I have a certain bias here. :-)

I certainly don't disdain the use of kits. They are a good way to gain experience in the area, and it will usually be more economical to build a kit vs. a true homebrew. When you go from an original design to a completed project, you go through a lot of parts experimenting and tweaking your design. Unless you have a great junkbox, that will cost you more than the complete set of parts that you get in a kit. The kit might even outperform your own design! My NC40A QRP kit transceiver runs circles around the true homebrew QRP rig I designed/built while in engineering school.

Note that most of the QRP contests that have a "homebrew" class define homebrew to include kits.

--
Regards,

Eric June
KU6J

3079. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990320022250.24556.00000288@ng90.aol.com>
Source record: 72305

>If this doesn't change his mind about a "home conversion" 'nuttin will :)
>

Im not trying to discourage him, just suggesting a starting point. It might
build
the confidence needed to actually then go
in and perform surgery on a modern solid
state radio.

Most of your average hams dont have the
skill or knowledge to do the conversion of
an AA5 which means using some basic RF math too. If you can figure that out,
you
shouldnt have any problems doing it to a
kmart am/fm assuming you have the manual
dexterity to pull coils/rebuild them in such
cramped quarters but then thats what separates those of us who can call
ourselves
radiomen and those who never open and attempt modifications, fixes etc. Never
learn
cw, operate uhf/vhf exclusively and give others here a generally bad time. Oh,
but
they are 'hams'. I proud of the guy for even
comtemplating something like that, more hams
should learn how their radios work and maybe even MAKE one... a direct
conversion, simple superhet, rock bender..
qrp xmtr... all he gets from you guys is 'give up' 'suicide, jimmy'. I meet
so many younger
hams that just dont have a clue and I dont understand how just talking on
vhf/uhf or packet and never actually figuring out or even wondering and
pondering about the
eloquent mathmatics behind it all can give them any pleasure. But then, I
never understood the attraction to CB radio either.

Yep, to me... fun is listening/talking to a far distant HF station on radios
you built/designed
yourself (and maybe even the dipole or yagi)
on a cold star-filled winter's night.

The wonders of the universe around us.
It's interesting, isn't it?

"what good is it?"
.....it's coming from out there...
"out where?"
.....space....

"just space? You've spent thousands of dollars on
transistors..and..and..circuits
and cathode ray...what good is it?"
.....well.....it's interesting.....

3080. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F3BAD0.182EA41@bellsouth.net>
Source record: 72306

Roy Lewallen wrote:
> My personal definitions are that an unmodified rig assembled from a
> kit isn't homebrew. One you design and build from individual parts is.
> The line in between is very, very fuzzy.

Very well put.

I've operated with a store-bought rig; with an unmodified Heathkit; with someone else's design built to spec; and with a rig totally designed & built by me.

Each offered its own results & thrills. I would call both of the latter two "homebrew", but the thrill levels were very different!
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3081. Mods for FT847

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7cvs5jfss1@lola.ctv.es>
Source record: 72307
Cross-posted to:
alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

You will find the mods for the FT847 on my Webpage

The URL is http://web.jet.es/colinlowe/index.htm

73 de Colin
EB/G1IVG

3082. Kenwood TM732 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7cvs9pfuo1@lola.ctv.es>
Source record: 72308
Cross-posted to:
alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

You will find the mods for the Kenwood TM732 on my Webpage

The URL is http://web.jet.es/colinlowe/index.htm

73 de Colin
EB/G1IVG

3083. Motorola GP300 & GM300 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7cvsch$g1u$1@lola.ctv.es>
Source record: 72309
Cross-posted to:
alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

You will find the mods for the Motorola GP300 and the GM300 on my Webpage

Also there is a design for a Homebrew RIB for programming the radio.

The URL is http://web.jet.es/colinlowe/index.htm

73 de Colin
EB/G1IVG

3084. Kenwood TH48 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7cvs8gfug1@lola.ctv.es>
Source record: 72310
Cross-posted to:
alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

You will find the mods for the Kenwood TH48 on my Webpage

The URL is http://web.jet.es/colinlowe/index.htm

73 de Colin
EB/G1IVG

3085. Standard C510 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7cvs70fti1@lola.ctv.es>
Source record: 72311
Cross-posted to:
alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

You will find the mods for the Standard C510 on my Webpage

The URL is http://web.jet.es/colinlowe/index.htm

73 de Colin
EB/G1IVG

3086. Re: Input impedance of 2 x Q 450-1 tetrodes in GG ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: ct1hjo <mop69975@mail.telepac.pt>
Message-ID: <7cvuqs$4qj$1@duke.telepac.pt>
Source record: 72312

Can anyone tell me to calculate the input impedance of above tubes to match a 50 Ohm TX output via Collins Filter switchable for 8 bands to the cathode driven
tubes. ??

Will run the tubes at abt. 3500 V Ua.
And bias abt. -7.5 V for grid.

Thanks in advance.

73 s fr ct1hjo.

Wolfgang.

contact me: surfgang@mail.telepac.pt

3087. Re: Basic Sumer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be7309$c37b7320$e7eaabc3@default>
Source record: 72313

One way of summing N signals is to use N transformers,
primaries across the individual signal sources and
secondaries all connected in series with each other.

If you don't mind more loss, just connect one end of a
resistor in series with each source and connect together
all the other ends of the resistors. Followed by an
amplifier with negative feedback to the common point.

The ancient land of Sumer was the very first on this Earth
of ours to become civilised. Its people, the first
engineers, invented the wheel. The modern name of that
land is Iraq. Cruise missiles and stealth bombers have
recently returned its inhabitants to the stone age.
--
Reg.

3088. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7d070d$bq6$1@winter.news.rcn.net>
Source record: 72314

Pretty much what I would have said,

Pete

Roy Lewallen wrote in message <36F2E610.6D76CD59@teleport.com>...
>?
>
>My personal definitions are that an unmodified rig assembled from a
>kit isn't homebrew. One you design and build from individual parts is.
>The line in between is very, very fuzzy. >Roy Lewallen, W7EL
>
>D.Pearce wrote:
>>
>> Do kits count, or must it be built from plans, or must you design the
>> circuits?

3089. FS NOS tubes.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: KEN CHAIT <atsi@herald.infi.net>
Message-ID: <36F3A156.B916AD2A@herald.infi.net>
Source record: 72315
Cross-posted to: rec.audio.tubes,rec.audio.marketplace,rec.radio.swap,rec.radio.amateur.homebrew

The following tubes are for sale and are all new GE boxed tubes.
6GH8A $2.25 ea.
6JH6 $2.25 ea.
6AW8A $2.25 ea.
11MS8 $3.25 ea.
6FM7 $2.50 ea.
10CW5 $2.25 ea.
34CE3/34CD3 $2.00 ea.

Minimum order is $35.00 + shipping.

Ken Chait
ATSI

3090. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <36F3A783.397@ix.netcom.com>
Source record: 72316

GRaney1882 wrote:
>
> I'm new to homebrewing and I need to learn the basics ... where can I find some
> easy projects or kits for HF CW is fine to start with but I'd like to find one
> that does SSB too. Any info is helpful.
>
> Thanks KM5TY Gary

Hi Gary -- see Ham radio Kits A Bunch at URL:
http://www.ac6v.com/pageay.html

73
Rod in San Diego
--
AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 320,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3091. Tuning knobs for HB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: paz@anti.spam.shore.net
Message-ID: <ZiOI2.189$Yk5.30953@news.shore.net>
Source record: 72317

I'm in the process of homebrewing a few radios and am in need of some nice flywheel-like (weighted) tuning knobs for the VFO. Anyone know of a good source?

My alternative is hacking some 3" dia. steel rod, drilling, tapping, etc. Nasty, and not bound to be too pretty when done.

paz at apriori dot net

3092. Re: Turning a single-ended DC Supply into a Duel-ended one

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: "Richard F. Gillette, P.E." <r.f.gillette@ieee.org>
Message-ID: <36F3B41A.A2ACD8FD@ieee.org>
Source record: 72318
Body handling: Binary attachment payload not displayed: r.f.gillette.vcf

```
Increase cap value as
I increases.
|----|<------------------------ Add regulators for + and - as
required.
| |
| ---->|------o +V. o -V.
| |+ 100 mf |- 100 mf
--- = =
transformer | |
---------------------------------
```

Roland Burgan wrote:

> Try Maxim, they have a line of single supply opamps
> that should take care of it...also will supply samples.
> http://www.maxim-ic.com/
>
> Martin McCormick wrote:
>
> > I am looking for a cheap way to turn a single-ended
> > unregulated wall transformer output in to something that looks like a
> > dual-ended power supply for powering op-amps. I could use a charge
> > pump and get +- supply but this is an audio project and I can stand to
> > use + and - half the full supply voltage and I am not sure I can stand
> > the crosstalk from the switching circuit that might show up. What I
> > am thinking of is using one op-amp set to unity and driven at its
> > positive input from a resistive divider. The output of that op-amp
> > would be the common or zero-reference point of the rest of the
> > circuit. I have a hand full of 741's but I am wondering if there are
> > any chips that are actually optimized for such service. There won't
> > be much current involved at all, but I don't get much more than 50 to
> > 100 mills out of the wall transformer so I don't have any to waste on
> > a low-value resistive divider. My ref output needs to look like a
> > solid ground like one gets out of a true dual-ended supply with the
> > positive and negative voltages taken between it and the positive and
> > negative leads of the DC wallwrt.
> >
> > Martin McCormick WB5AGZ Stillwater, OK
> > OSU Center for Computing and Information Services Data Communications Group

[One or more binary attachments are retained only in the source text.]

3093. Modification for Operation-9600 in DSP-2232

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: chondeville@hotmail.com
Message-ID: <36F388BC.1620D079@hotmail.com>
Source record: 72319
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.equipment

Does anyone know how to modify the AEA DSP-2232 in order to get the best of it when you operate the birds at 9600??. I've heard there is something I can do to enhance it.
Please, make your comments to chondeville@hotmail.com

73,
Christian

3094. linear amp. 2xQ450 II in gg.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: ct1hjo <mop69975@mail.telepac.pt>
Message-ID: <7d0c40$nc4$1@duke.telepac.pt>
Source record: 72320

How to estimate, calculate the accurate input impedance of above Brown
Boveri
tubes in parallel in grounded grid design.
Tubes are similar to Valvo QB 4/1100 (Tetrodes)

Will use a simple Pi - Filter design for 8 SW Bands.
Input 50 Ohms from exciter Z output= ? into cathodes-

Any hints are welcome.

regards Wolfgang.

please reply to:
mop69975@mail.telepac.pt

many thanks...

3095. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: chris@orpheus.in-berlin.de
Message-ID: <36f2becc.2030637@news.vr.in-berlin.de>
Source record: 72321

On 19 Mar 1999 00:20:08 GMT, graney1882@aol.com (GRaney1882) wrote:

>I'm new to homebrewing and I need to learn the basics ... where can I find some
>easy projects or kits for HF CW is fine to start with but I'd like to find one
>that does SSB too. Any info is helpful.
>
>Thanks KM5TY Gary

Hi Gary,

I am also new in homebrewing. I bought the Sudden RX from Kanga. It
works fine, and now i try to modify it :) (hopefully it works ...)

(My first electronic project ever...)

Also it is worth to visit the page http://hem2.passagen.se/sm0vpo
(on this page there is an 80 meter frame antenna from SM0VP0, I try to
build and use it for the Sudden RX).

If you find also usefull information on the Internet for homebrew
beginners, please send a short reply to me.

Chris

3096. Wanted: 5-25pf 3500v air variable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19990320104857.14563.00000069@ng-cc1.aol.com>
Source record: 72322

Hello,
I am building a 6m amp from my sb200 and need
an air variable for plate tuning. Similar to
6m 3cx800 amp in ARRL handbook.

Voltage 3000v or so.
ideally 5-15pf, but can use
25pf or little larger if plates are screwed together,
so I can remove plates.

Any help would be appreciated.
Thanks,
Bennett ko2ok,
in NJ

3097. Tube Tester Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Richard Hernandez <sfzgznuc@scfn.thpl.lib.fl.us>
Message-ID: <Pine.SUN.3.95.990320101805.26900A-100000@scfn>
Source record: 72323

Greetings,

I need some help in choosing a tube tester to purchase. Does anyone have any suggestions as to which are the best ones/one to consider. I want one that really checks them. Please repond via e-mail. Any help would be greatly appreciated.

Thanks,

Rich

e-mail: sfzgznuc@scfn.thpl.lib.fl.us

3098. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: bix@san.rr.com
Message-ID: <36f3c4da.5392171@news-server>
Source record: 72324

"Charlie T." <xctx@onr.com> wrote:

>I'm trying to measure the Q of a ferrite core inductor
>and an equivalent value air-core inductor. I know the
>Q of the ferrite may be less but so is the size!
>

I'm assuming you are talking about an inductor wound on a slug, not a pot core or toroid. If so, you can think of the inductor as a loopstick antenna.

A reasonably quick way requires, as noted in the other replies, a signal generator and a scope. The trick is to not load down the coil with either the signal generator or the scope. What I do is take the signal generator, and drive it into a loop of a couple of turns of hookup wire, maybe 2 " in diameter, to make a 'transmitter', I put that a distance away (inches to yards, depending on the geometry and inductance -- it doesn't matter very much) from the ferrite inductor, with the axes arranged parallel, so that the loop will transmit to the inductor. With an oscilloscope and a high-z 10:1 probe, add capacitance across the inductor until the inductor-capacitor resonate at the desired frequency. Then, just vary the signal generator frequency to either side of resonance to find the points that the output signal drops 3db from the peak. The center frequency divided by the difference in the -3db points is the Q.

After doing that, you really need to check that the scope probe did not load down the coil. To do that, you should have an idea of the inductance. If you don't know it already, you can find it (approximately) by adding another capacitor across the resonating capacitor and then finding the new resonant frequency. Armed with the values of the resonating capacitor and the additional capacitor, and the two frequencies, you should be able to solve for both the inductor's inductance and its distributed capacitance.

From the inductance, calculate the reactance at the resonant frequency, and then multiply by the Q you measured. That result should be much much less than the scope probe impedance (like a factor or five-ten or more). If it is not, then you will need to go to the trouble of making a little jfet or mosfet preamp to use in place of the scope probe.

Depending on the ferrite and frequency, don't count on the ferrite Q being lower. Q's of more than 200 for low frequency ferrite loop antennas are not uncommon, and these are, after all, just ferrite slug inductors.

If you are in fact using a magnetically closed structure, like a pot core or a toroid, you can do the above, but you will need to couple the signal generator to the inductor in a way which does not load the inductor. For a toroid, its pretty easy -- put one turn through the toroid and then use a very high value resistor in series, to the signal generator. This won't work for the pot core, so you have to connect directly to the coil winding, with a resistor much larger than the reactance times the Q you are looking for.

Jim Bixby
bix@san.rr.com
http://home.san.rr.com/bix

3099. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be733c$01ad01e0$d83e63c3@default>
Source record: 72325

Yes Jim, it is a very simple and accurate method.

If you havn't a digital signal generator then use your transmitter on low power connected to its antenna. The coil under test with its tuning capacitor on the bench will pick up sufficient signal. If the coil core is a closed ferrite ring it may need a foot or so of wire to act as an antenna.

To make sure the scope or other RF voltmeter does not load the coil, use a 1 or 2-turn link coupling to the scope.

When varying transmitter frequency looking for the +/- 70.7 percent voltage points, don't move anything except the Tx tuning knob and your eyeballs.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

3100. Re: Tube Tester Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <36F3DD17.1FF8@ix.netcom.com>
Source record: 72326

Richard Hernandez wrote:
>
> Greetings,
>
> I need some help in choosing a tube tester to purchase. Does anyone have
> any suggestions as to which are the best ones/one to consider. I want one
> that really checks them. Please repond via e-mail. Any help would be
> greatly appreciated.
>
> Thanks,
>
> Rich
>
> e-mail: sfzgznuc@scfn.thpl.lib.fl.us

Hi Rich -- I vote for the Hickok Tube Checkers -- measures Gm
(Transconductance) of tubes.

See URL:
http://www.freivald.org/~padgett/index.htm

AND URL:

http://www.geocities.com/SiliconValley/6992/tv7.htm

Lots more on Vacuum Tubes at URL:

http://www.ac6v.com/pagex.html#VT

Regards

Rod in San Diego
--
AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 320,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3101. Re: Tuning knobs for HB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be733c$ae351920$d83e63c3@default>
Source record: 72327

Obtain one of those tin lids - one with a deep rim.

Fill with molten lead or solder.

Reg

3102. Re: [Fwd: Choice of 455 kc and 10,7 mc as IF frequencies]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-20 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7d0mjv$6i3@news.Hawaii.Edu>
Source record: 72328
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

Reg Edwards <G4fgq.Regp@btinternet.com> wrote:
>International, commercial and military and amateur
>transmitters, after many years of gentlemen's
>undersatanding and agreement, don't transmit on frequencies
>reserved for receiver intermediate frequencies. It makes
>for less expensive receiver design.
>
>455 and 465 came about because they lie between the long
>wave and medium wave broadcast bands. They are high enough
> to make second-channel interference not to difficult to
>get rid of.

454 and 468 kHz were ship working frequencies for some 75
years. One would think that 454 would especially be troublesome
for a 455 IF. The MF maritime band ran from 405 to 535 kHz.

Jeff WH6U / 7

3103. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F4922C.72D675A2@bellsouth.net>
Source record: 72188
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew

Doug Smith wrote:
> I'll try to draw something more sensible in Windows Paint & post it to:
> personal.bna.bellsouth.net/~w9wi/trswitch.htm
>
> That'll take a few minutes, don't expect to see it any earlier than 2200 CST
> Friday 19 March.

If you tried this URL Friday night or Saturday morning, it probably
didn't work. (it returned a text page but no drawing)

My error; I thought Front Page would do more than it did. I fixed it
late this morning; the picture should be there now.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3104. UHF divider chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: wizard@eskimo.com
Message-ID: <36f43dff.346056020@eskinews.eskimo.com>
Source record: 72189

Is anyone aware of where I may find a "frequency divide-by-2" I.C.
which will operate up to a 400MHz input and isn't in a surface mount
package?

Technofreak

3105. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be7388$512e7c20$5ce6abc3@default>
Source record: 72190

Moonshine.
Reg.

3106. screwdriver h.f. mobile antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: pitts5051@aol.com
Message-ID: <19990320215937.00439.00000630@ng-ca1.aol.com>
Source record: 72191

Appreciate any info.on a screwdriver type antenna text,pictures,plans etc.
thanks Marvin AC5QW.

3107. using USB filter on LSB ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: kargokult@proaxis.com
Message-ID: <36f47aef.76480931@news.proaxis.com>
Source record: 72192

Situation: most of the commone xtal controlled SSB boat radios bot at hamfests have only the USB filter installed. some have an additional socket or spot on board for installing an LSB filter. but, there shouldn't be any problem with moving the carrier osc to the other side, right? and not having the filter specs, just setting this by trial with a vfo, right?
tnx, hue ka7lxy

3108. Gold-bonded Ge diodes for crystal radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: kargokult@proaxis.com
Message-ID: <36f47c18.76778223@news.proaxis.com>
Source record: 72193

in reading an old Raytheon book (1955 ?) i see a list of these
diodes 1N305 - 1N313. i'm wondering, would the higher
forward conduction (without greatly lessened back resistance)
at low voltage, make these preferable to the usual 1N34 type
diode used in crystal radio circuits?
are these goldbonded diodes stilll available?
tnx, hue miller

3109. WTB: SWTPc computer system

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Alan <alan.diaz@snet.net>
Message-ID: <7d1v1o$jji@news1.snet.net>
Source record: 72194
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

I'm looking for an SWTPc computer, any model. Typical SWTPc (Southwest Technical Products Corporation) models were around in the late 70's. If you have an SWTPc computer buried in the shack and are interested in selling it please email me at chipsndips@snet.net.

Alan

3110. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <36f47f2e.530264@news.newsguy.com>
Source record: 72195

On 21 Mar 1999 02:44:20 GMT, "Reg Edwards" <G4fgq.Regp@btinternet.com>
wrote:

>Moonshine.
>Reg.

Reg,

How about beer too?

Danny

3111. Need AN980 Application note (Motorola)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: scan7705@my-dejanews.com
Message-ID: <7d27ufsor1@nnrp1.dejanews.com>
Source record: 72196

Please send me AN980 by email.
I can't use motorola's MFAX system.

Many thanks in advance.

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3112. Re: linear amp. 2xQ450 II in gg.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Lennart Nilsson <ln@hagagymnasiet.norrkoping.se>
Message-ID: <36F42FB1.7280A95D@hagagymnasiet.norrkoping.se>
Source record: 72197

ct1hjo skrev:

> How to estimate, calculate the accurate input impedance of above Brown
> Boveri
> tubes in parallel in grounded grid design.
> Tubes are similar to Valvo QB 4/1100 (Tetrodes)
> please reply to:
> mop69975@mail.telepac.pt
>
> many thanks...

In Bill Orr's Radio Handbook cathode impedance is given as 150 ohms for
one 4-400A, which is the same as QB4/1100.
73 de
Len SM5DFF

3113. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: John Kiljan <jpkiljan@ix.netcom.com>
Message-ID: <36F4B243.A31AD56E@ix.netcom.com>
Source record: 72198

Brett,

Years ago I converted an old transistor pocket AM/FM radio to shortwave and it didn't cost anything more than a bit of time and solder. No new parts were needed although I wish I had taken the time to put together a band spread capacitor since the backlash in the main dial got pretty aggravating as I moved up in frequency.

The reason it was so easy is because on a typical cheap transistor AM radio, the local oscillator is actually resonated by the ferrite antenna. All I had to do was start unwinding loops off the the main ferrite slowly till I got it to the frequency range I wanted. If you go too far, just wind some more back on from the pile you are going to have all over your workbench. You will be lost, so it would be nice to have something oscillating at the frequencies that you are looking to hit as a reference to work toward. I was able to get a settiing that brought in both the 6 and 9 MHz broadcast bands. (Or, was I just getting the 6 MHz band and its images 910 KHz away? So long ago, I don't remember now.) Anyway, when you think you have it about right, just cut off the excess wire and solder the ends of that tiny wire together.

The ferrite antenna will pick up signals of its own, but they will be weak. You can short over the base of the telescoping FM antenna to a simple two-turn coil that heads to ground with the two turns wrapped over the far end of the modified ferrite antenna. That way you can use the FM antenna as the SW antenna and it also gives you a place to clip on another 10 feet or so of hookup wire that has an aligator clip soldered to it. To complete the job, I cut and marked up an index card with the new stations I was hearing (BBC, Deutsche Welle, Havanna, WWV, R Nederland, etc.) and pasted it over the old dial marker.

Was it any better than a cheap AM/FM/SW radio that I could have found for $5 in any flea market? Absolutely not! But it was fun and I felt proud of myself listening to that thing late at night in bed as I drifted of to sleep. To do a more serious job, in addition to the bandspread I already mentioned, a 455 KHz loose-coupled local oscillator for sideband and code reception, a voltage-regulated power supply to the local oscillator, an S-meter readout, and finally . . . wait for it . . . a digital readout would all be pretty straightforward if you spread the whole thing out on a breadboard and sank a few more weekends (and a lot more $'s) into it. But then, that probably wouldn't be as much fun. And, that's what we're trying to do here isn't it?

Good luck,

-- John (N0BUP)

Brett Hall wrote (quite a few times, it seems):

> I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave
> receiver. I understand a mixer and local oscillator circuit(s) should
> accomplish this end.
>
> Though I have found a few general circuit schematics - I am finding a lack
> of information on procedures for actual component selection and calculation,
> JFET biasing, etc...
>
> Any suggestions on what steps to take next would be greatly appreciated.
> Thanks in advance for your help.
>
> Best wishes,
>
> Brett
> KB2IBD

3114. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Graeme Zimmer <gzimmer@vic.bigpond.net.au>
Message-ID: <7d2fsp$7s2$1@m2.c2.telstra-mm.net.au>
Source record: 72199

> The reason it was so easy is because on a typical cheap transistor AM radio, the
> local oscillator is actually resonated by the ferrite antenna. All I had to do
> was start unwinding loops off the the main ferrite slowly till I got it to the
> frequency range I wanted.

I doubt this very much.

If the ferrite rod winding controls the frequency, then it isn't a superhet, but some kind of TRF.

If it has an oscillator at all, then it will have a separate oscillator coil..

73's ..... Zim..... VK3GJZ

3115. Internet communication...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: rocky <fireplutoon@hotmail.com>
Message-ID: <7d2o2n$n9g$1@cubacola.tninet.se>
Source record: 72200

Is it possible to connect my homePC to our server via radiocomm.
in order to surf at internet?

3116. FS HEATH SB-610 MONITOR SCOPE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: edron1@aol.com
Message-ID: <19990321085023.19098.00000033@ng-fp1.aol.com>
Source record: 72201

FOR SALE

HEATHKIT SB-610 MONITOR SCOPE AND MANUAL(COPY). BOTH IN GOOD CONDITION.

$145.00 SHIPPED UPS CONUS.

EDRON1@AOL.COM

3117. Inductors for biasing MMICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7d2u1kfdm1@news.netcologne.de>
Source record: 72202

Hi,

inductors with an inductance of some 100 nH and a self resonating frequency well above 1 GHz seem to be a problem. Can small ferrite beads be used instead of coils for biasing the MiniCircuits or HP MMICs and similar circuits? If so, what type of ferrite material (preferably AMIDON types) is the right one for frequencies up to 1 GHz?

Peter

3118. UHF/Microwave attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7d2u1lfdm2@news.netcologne.de>
Source record: 72203

Hi,

for my homebrew 10 MHz - 1.2 GHz RF signal generator project I need a switched 0-20-40 dB attenuator. I thought of using two shielded 20 dB SMD resistor attenuators and micro-strip RF relays (OMRON 6GY) for switching this stages in and out.

What is the best circuit topology for the resistors? Pi or T-network? Will two cascaded Pi or T networks _for each 20 dB attenuator stage_ give better results? What is the
formula to calculate the values of the resistors of the "double Pi" or "double T" network?

Peter

3119. circuit diagram for 6M wave meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Jason Brown <jason@erthis.freeserve.co.uk>
Message-ID: <7d30guvil1@news7.svr.pol.co.uk>
Source record: 72204

Has anyone got diagrams so I can build a simple 6M wave meter.

Jason Brown

3120. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7d36nokro1@nnrp1.dejanews.com>
Source record: 72205

In article <19990320022250.24556.00000288@ng90.aol.com>,
grogancat@aol.com (Grogancat) wrote:
> >If this doesn't change his mind about a "home conversion" 'nuttin will :)
> >
>
> Im not trying to discourage him, just suggesting a starting point. It might
> build
> the confidence needed to actually then go
> in and perform surgery on a modern solid
> state radio.
>
> Most of your average hams dont have the
> skill or knowledge to do the conversion of
> an AA5 which means using some basic RF math too. If you can figure that out,
> you
> shouldnt have any problems doing it to a
> kmart am/fm assuming you have the manual
> dexterity to pull coils/rebuild them in such
> cramped quarters but then thats what separates those of us who can call
> ourselves
> radiomen and those who never open and attempt modifications, fixes etc. Never
> learn
> cw, operate uhf/vhf exclusively and give others here a generally bad time.
Oh,
> but
> they are 'hams'. I proud of the guy for even
> comtemplating something like that, more hams
> should learn how their radios work and maybe even MAKE one... a direct
> conversion, simple superhet, rock bender..
> qrp xmtr... all he gets from you guys is 'give up' 'suicide, jimmy'. I meet
> so many younger
> hams that just dont have a clue and I dont understand how just talking on
> vhf/uhf or packet and never actually figuring out or even wondering and
> pondering about the
> eloquent mathmatics behind it all can give them any pleasure. But then, I
> never understood the attraction to CB radio either.
>
> Yep, to me... fun is listening/talking to a far distant HF station on radios
> you built/designed
> yourself (and maybe even the dipole or yagi)
> on a cold star-filled winter's night.
>
> The wonders of the universe around us.
> It's interesting, isn't it?

>
> "what good is it?"
> .....it's coming from out there...
> "out where?"
> .....space....
> "just space? You've spent thousands of dollars on
> transistors..and..and..circuits
> and cathode ray...what good is it?"
> .....well........it's interesting.....
>
>

There is nothing better than do your own radio, turn it on and begin to
listen the bands and discover stations from far away.
I suggest you begin with a simple one, a regenerative, for instance.
There is a kind of magician in listening the shortwave band with a receiver
constructed with a single tube, a phone and half a dozen resistors, capacitors
and coil.

The really beautyful resides in learn, do and see your radio beginnig to
work. And this you can't get "buying" a radio. Do it yourself, wind your
own coils. Begin with simple things. Go step by step increasing
the complexity of your radios, there is no end for it.

You will have time to grow up and compare the more elaborated circuits with
the simplers. The beauty of simple things must be known by the begginer
to take advantage of it or, even to not reinvent the wheel.
Go ahead, modify the coils of an existing receiver make it operate in the
band you want.
Do a converter, use an existing receiver as your first IF, enjoy it.

In the 70s(I was 19) I did a receiver for the 11m band(CB) using an old
receiver with a 455KHz FI, detector and audio without modification. The part
I introduced was a RF amplifier an oscilator and a converter. It gave me
years of pleasure and hundreds of contacts with USA, Canada, Europe, Africa,
Central and South America. Simple and very cheap (all the components came
from old TV selectors and old radios) .

Do it by yourself !

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3121. Re: Internet communication...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F563D8.9E25FCA@bellsouth.net>
Source record: 72206

rocky wrote:
>
> Is it possible to connect my homePC to our server via radiocomm.
> in order to surf at internet?

Kinda.

The technology exists. Big problem is, the current state of the art for radio modems is pretty slow - maybe about the same as an old 1200bd. modem. Speeds up to about 4800bd. are possible if you're technically qualified to hack some radio gear. You *can* surf the Web that way, but it'll give a whole new meaning to "World Wide Wait"!

There is research in progress (in fact, a project in development) for an Ethernet-speed system. --
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3122. Re: UHF/Microwave attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36f50d60.1821359894@news.online.no>
Source record: 72207

On Sun, 21 Mar 1999 14:55:08 +0100, "Peter Bolch"
<nc-bolchpe@netcologne.de> wrote:

>Hi,
>
>for my homebrew 10 MHz - 1.2 GHz RF signal generator project I need a
>switched 0-20-40 dB attenuator. I thought of using two shielded 20 dB SMD
>resistor attenuators and micro-strip RF relays (OMRON 6GY) for switching
>this stages in and out.
>
>What is the best circuit topology for the resistors? Pi or T-network? Will
>two cascaded Pi or T networks _for each 20 dB attenuator stage_ give better
>results? What is the
>formula to calculate the values of the resistors of the "double Pi" or
>"double T" network?
>
>
>
>Peter
>
>
>
>
>
>
try http://www.telford-electronics.com/

73
Jan-Martin LA8AK

3123. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <36F525A0.7614@northwest.com>
Source record: 72208

they're called "N" connectors.

==========

Vincent Coppola wrote:
>
> Does anybody know what they are called or how to convert say a regular
> SMA or BNC to HP's connectors? These things are used all over their
> older generation connectors. I need to inject some RF to do some testing
> of a mixer and I don't know how to convert to these things.
>
> Any help appreciated!!
> Vince N1VC

3124. Modification in DSP-2232

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: chondeville@hotmail.com
Message-ID: <36F5ACC2.4E58EE70@hotmail.com>
Source record: 72209
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.equipment

Does anyone know how to modify the AEA DSP-2232 in order to get the best
of it when you operate the birds at 9600??. I've heard there is
something I can do to enhance it.
Please, make your comments to chondeville@hotmail.com

73,
Christian

3125. ebay: Comm. Receiver Manual CR2 -Rare

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: regblah@aol.com
Message-ID: <19990321132501.26910.00000108@ng35.aol.com>
Source record: 72210

Rare hard to find First Edition, (August 1952) Howard and Sams Communications Reciever Manual CR2. This book is in good condition and includes parts lists and descriptions, Schematics, and alignment instructions for the following kinds of radio recievers: Collins, Gon-Set, Hallicrafters, National, RME, Monitoradio, Policalarm, Hammarlund, Ranger, Motorola, Learadio, Jefferson Travis, Heath, and Harvey Wells.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=81029530

3126. LARGE 900 MEG HAM/BUSINESS BAND REPEATER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7d3j1f$uq6$1@nnrp1.dejanews.com>
Source record: 72211

900 meg system originally designed for tracking ships. consists of several 160 watt amps, over 10 plug-in 45 watt amps, cavities, plug in tx and rx modules. 4 cabinets in total with rackmount control computers. amps and cavities are decibel. everything looks new. system was never put into service. pics are available via email if interested. item is for auction on ebay. proceeds from sale will be used to buy equipment for local response team. heres the link...
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=79732468 thanks robert

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3127. Re: Internet communication...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: WebMonkey <usethelink@below.org>
Message-ID: <36F54B8D.5457@below.org>
Source record: 72212

rocky wrote:
>
> Is it possible to connect my homePC to our server via radiocomm.
> in order to surf at internet?

do a websearch on WAN, wide area network.
there are plenty of devices to do just that.
some are reliable, so they say, at 256kbps.
not as good as 10 or 100baseT of course,
but still better than a 56k modem.
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

3128. Re: DDS Chip sources?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: timolmst@cyberramp.net
Message-ID: <09D1B83CC1B1F5ED.DCB20D28DAD6E086.63F946192BFEF846@library-proxy.airnews.net>
Source record: 72213

hinermad@woodnet.att.net (Dave Hinerman) wrote:

>>> And since I've found a way to make
>>>PC boards without shelling out $3 a sheet for toner transfer paper, time
>>>spent wiring up chips isn't as big a problem.
>>
>>Do tell. I'm interested.
>
>Well, DynaArt (http://www.dynaart.com) makes a version of the
>toner-transfer product, and I suspect they're a great bunch of
>engineers that don't know when to stay quiet.

I tried the Dynaart system, and didn't like it. I'm going to the
DuPont Riston PCB film. The toner transfer paper shrinks pretty badly
when you run it through the fuser. This causes traces to be stretched,
and smeared. Very bad for fine line work, and, the stretching can/will
sometimes prevent the toner from properly bonding to the copper. This
might not be spotted before you etch the bd, and the toner will flake
away while etching. THis leaves breaks in the traces.

I just gave up on it in disgust. I hope you have beter luck than me.

Tim Olmstead WP5PFJ
email : timolmst@cyberramp.net
Visit the unofficial CP/M web site.
MAIN SITE AT : http://www.devili.iki.fi/cpm
PRIMARY US MIRROR AT : http://www.mathcs.emory.edu/~cfs/cpm
SECONDARY US MIRROR AT : http://CPM.INTERFUN.NET

3129. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: timolmst@cyberramp.net
Message-ID: <FB4EA84D59E6248F.0DB4D55F1519EFA8.16325578FE46EE04@library-proxy.airnews.net>
Source record: 72214

"Matt J. McCullar" <mccullar@flash.net> wrote:

>I went ahead and bit the bullet, ordering a set of _QST_ on CD-ROM

Interesting! I wonder if they will do the same thing for back issues
of the ARRL handbook.

Tim Olmstead WP5PFJ
email : timolmst@cyberramp.net
Visit the unofficial CP/M web site.
MAIN SITE AT : http://www.devili.iki.fi/cpm
PRIMARY US MIRROR AT : http://www.mathcs.emory.edu/~cfs/cpm
SECONDARY US MIRROR AT : http://CPM.INTERFUN.NET

3130. looking for GM 300 & Spectra

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: rescue50 <rescue50@ix.netcom.com>
Message-ID: <7d3k83$t4t@sjx-ixn10.ix.netcom.com>
Source record: 72215
Cross-posted to:
rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.homebrew,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,alt.radio.scanner

looking for used GM 300 VHF and UHF models 16ch. Also looking for one Used VHF spectra. Must be in good working condition.

3131. Re: QST on CD-ROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <36F55DA2.C5FBF34B@att.net>
Source record: 72216

Has the search engine been improved on later releases? I
got the 1985-1989 and the 1990-1994 CD sets when they first
came out. If I read the instructions often enough, it does
wouk, but the search engine has to be the MOST user HOSTILE
software I have ever seen! Without doubt it is on the
opposite end of the spectrum from intuitive! It is even
worse than the low production volume, specialty (translate
low-level & buggy) software I use on an antique DEC RT-11
driven piece of x-ray analysis gear at work.... BTW, I know
they are B/W TIFF images and cannot be searched like text
documents, but at least ARRL could have entered the all the
table of contents of all issues in a text format file and
enabled a *reasonable* a word match search.
Woody
----

timolmst@cyberramp.net wrote:
>
> "Matt J. McCullar" <mccullar@flash.net> wrote:
>
> >I went ahead and bit the bullet, ordering a set of _QST_ on CD-ROM
>
> Interesting! I wonder if they will do the same thing for back issues
> of the ARRL handbook.
>
> Tim Olmstead WP5PFJ
> email : timolmst@cyberramp.net
> Visit the unofficial CP/M web site.
> MAIN SITE AT : http://www.devili.iki.fi/cpm
> PRIMARY US MIRROR AT : http://www.mathcs.emory.edu/~cfs/cpm
> SECONDARY US MIRROR AT : http://CPM.INTERFUN.NET

--

----------- de Woody, WB4QXE -----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

3132. Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: hinejs@aol.com
Message-ID: <19990321175148.03651.00000248@ng-da1.aol.com>
Source record: 72217

Newbie needs help brewing an S-Meter for fox hunting.

Hello all,

Fairly new to the world of amateur radio, and have been bitten by the fox-hunting bug. Would like to add an S-Meter to my quad antenna rig in the truck, and would like another one to take in the field with my handheld yagi antenna. Any help would greatly be appreciated as far as resources and references.

-Jeremy
KF4RTY

3133. Modifications for AN/PRC-10

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36f572b1.1847300458@news.online.no>
Source record: 72218

got swedish version of PRC-10, covers the same range and has possibly
the same components. Has anyone of you made any modifications for it?
Any inverter to avoid all those battery voltage?

73
Jan-Martin LA8AK

3134. Info on Centennial 80 M xceiver kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <36F586C9.29778976@seidata.com>
Source record: 72219
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

Looking for anyone who has built this radio kit or
has seen a review or has any info on it. What is the
performance like? Is it a good rig or a piece of junk?
I have looked on the web for info and could find
no reference about this kit at all. I feel the need to
build something and this could be a neat project
for me and useful too.

Thanks,
Randy KB8ASO Milan, In

80 Meter Centennial SSB Transceiver
By Paul Daulton K5WMS

Full band coverage (500KC), 3 to 5 Watt output, 4" X 7 5/8"
Silkscreened Board, 3 Pole Crystal Filter, and
Varactor Diode Tuned with a 10 Turn Pot.

All you have to furnish is your favorite cabinet, knobs and
the connectors you like.

Dan furnishes board, all board mounted components, 10 turn
pot, Audio Pot with switch, and instruction manual.

Dan's price $69.95

Dan's
Small Parts and Kits
Box 3634
Missoula, Montana 59806-3634
Phone or Fax 406 258 2782

3135. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7d492psid1@winter.news.rcn.net>
Source record: 72220
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

Strange. I found the prices plainly marked at website
order form.

Peter

Mark Goad 35 wrote in message ...
>You did not tell us what the price of your mug is. You only stated that it
>costs $4 to ship it. Are you any relation to Monty Crisco??
>
>

3136. Re: Info on Centennial 80 M xceiver kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <36F5ADB3.67F0FBB8@mlecmn.net>
Source record: 72221
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment

I purchased a partial kit (PC board, crystals, and ICs) and built the kit about a year and a half ago. The rig has adequate sensitivity, clear audio on transmit and receive, and the receive current drain is only about 35 mA. After checking out the transceiver, I made the following modifications:

1. The author of the plans seemed to have a misunderstanding of how you measure PEP. He talked about measuring peak-to-peak voltage across a 50 ohm resistor, squaring it, and dividing by 50 to get PEP. He left out a factor of 8. At the time I bought the kit, it was advertised as having 5 to 8 watts output, but mine would only put out about 5/8 to 1 watt PEP. I used a voltage doubling transformer between the output transistor and the filter to bring the PEP up to about 3 watts with a 13-volt supply.

2. The VFO uses a type 2 (red) toroid core for the inductor. Substituting a type 6 (yellow) core (and adding a couple of turns to get the same inductance) improves the temperature stability by a factor of about 3.

3. The VFO inductor is very close to the T-R switching relay and experiences a slight inductance change due to the stray magnetic field. To minimize the amount of frequency shift between transmit and receive, it was necessary to rotate the inductor until the best position was found.

Possibly some of these design flaws have been corrected since I built my kit.

Lyle, K0LR

Randy and Cara Randall wrote:

> Looking for anyone who has built this radio kit or
> has seen a review or has any info on it. What is the
> performance like? Is it a good rig or a piece of junk?
> I have looked on the web for info and could find
> no reference about this kit at all. I feel the need to
> build something and this could be a neat project
> for me and useful too.

3137. Re: using USB filter on LSB ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-21 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <QqjJ2.482$Nm3.9836@news20.ispnews.com>
Source record: 72222

Hue,

Some filters are assymetrical with a steeper cutoff on the side closest the carrier. This is to provide additional carrier suppression. Such filters were generally sold in pairs.

Using a symmetrical filter (like many of the Collins radios) with a switched IF frequency works well, but you lose dial calibration of the main dial. Some radios used two dial pointers, one for each sideband. Collins handled this by shifting the PTO or another injection oscillator at the same time.

73, Barry WA4VZQ ornitz@tricon.net

3138. Re: TVI on Channel 5

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <36F5D0FD.B082E29D@att.net>
Source record: 72129

A possibility is an oscillating TV preamp/line amp (or
something else "taking-off" that is not supposed to). If
you don't have one, it could be a neighbor (unless closest
is miles away). Wouldn't hurt to try killing power to
everything in the house but the tv to see if anything weird
is happening with other appliances.
Woody

jathatcher@hotmail.com wrote:
>
> I live along the Southern end of the Salt Lake region, in Orem Utah about 70
> miles from the TV transmitters. All channels have near perfect recepition
> except for Channel 5. Channel 5 suffers from TVI that on screen resembles CB
> or HAM interference. It is usually worse at night. Sometimes it is bad
> enough to blank out the picture. When it is this bad usually channels 2 and
> 4 are also affected to a lesser degree.
>
> I have tried toroidal core snap-ons on the TV's power, a power line
> conditioner, and FM filter. Nothing. The antenna is mounted in the attic
> and is a Channel Master "fringe-area" sized VHF/UHF connected to 4 coax jacks
> in the house using R6 coax cable. It was professional installed. All my
> TV's including a presumed good quality Panasonic Superflat 27 inch display
> the Channel 5 TVI problem.
>
> While the picture interference seems to suggest CB or HAM interference (based
> on the examples I have seen at the FCC web site), I have never heard an
> operator's voice. Also, on occasion at night, the Channel 5 interference will
> suddenly clear for about 10 seconds then return when a refrigerator or furnace
> fan powers on. But on most other occasions, the refrigerator or furnace fan
> has no effect.
>
> This interference has me baffled. Could there be more than 1 problem?
>
> What could this be?
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

--

----------- de Woody, WB4QXE -----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

3139. Re: TVI on Channel 5

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F62AAD.68B5CEB3@bellsouth.net>
Source record: 72130

jathatcher@hotmail.com wrote:
> operator's voice. Also, on occasion at night, the Channel 5 interference will
> suddenly clear for about 10 seconds then return when a refrigerator or furnace
> fan powers on. But on most other occasions, the refrigerator or furnace fan

Do I gather from this statement that the interference is pretty much
continuous?

Note that hams and CBers are two-way operators -- they stop transmitting
about half the time to listen to the other guy. So if the interference
continues for more than about 2 minutes at a time, it's probably
something else. (and not police, fire, or commercial radio dispatch
either, for the same reason)

Interesting that it briefly clears (sometimes) when a fan powers on. It
makes me think you might have some computerized device in your house
that's generating the interference. Maybe the brief drop in AC line
voltage when the high-current load kicks in is causing something to
reset, and while resetting it isn't generating any interference?

(I would look at things like microwave ovens, timer-controlled
thermostats, external modems, etc.)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3140. Re: TVI on Channel 5

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F62AF3.72A775FF@bellsouth.net>
Source record: 72131

Woody White wrote:
>
> A possibility is an oscillating TV preamp/line amp (or
> something else "taking-off" that is not supposed to). If
> you don't have one, it could be a neighbor (unless closest
> is miles away). Wouldn't hurt to try killing power to

Good point. I've seen one of these take out channel 3 reception over
about a 3-mile radius, in a location about 50 miles from the channel 3
transmitter.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3141. Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7d4m8p$651$1@oak.prod.itd.earthlink.net>
Source record: 72132
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber

All mugs are made with quality control in mind. They are dishwasher safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber

If you what to buy your personal callsign mug all you will have to do is send a check or money order for the amount of the mug plus $4.00 for shipping. Remember to send your callsign so I can place it on the mug.(The mug you see on my web sit is just a sample mug. Your callsign will be placed on the mug you order.) Please USA orders only. See at http://home.earthlink.net/~jawjabber

To see a picture of the Callsign Mug and to get the order forms please click on the link below. http://home.earthlink.net/~jawjabber

3142. Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7d4mcq$6bt$1@oak.prod.itd.earthlink.net>
Source record: 72133
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber

All mugs are made with quality control in mind. They are dishwasher safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber

If you what to buy your personal callsign mug all you will have to do is send a check or money order for the amount of the mug plus $4.00 for shipping. Remember to send your callsign so I can place it on the mug.(The mug you see on my web sit is just a sample mug. Your callsign will be placed on the mug you order.) Please USA orders only. See at http://home.earthlink.net/~jawjabber

To see a picture of the Callsign Mug and to get the order forms please click on the link below. http://home.earthlink.net/~jawjabber

3143. WTB: HP 816A Coaxial slotted section.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Stephen Schiller <polytope@prado.com>
Message-ID: <7d4ofe$9b$0@209.66.82.22>
Source record: 72134

HI,

I am looking for an HP 816A.
Also interested in HP probes that are used with it.

thanks,
Steve

510 581 3792

3144. Get your Callsign on a Mug..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7d4nj1$9h5$1@ash.prod.itd.earthlink.net>
Source record: 72135
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG.

Georges Mug Shop
http://home.earthlink.net/~jawjabber

3145. FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: napoli@i-2000.com
Message-ID: <36f83480.7229881@news.i-2000.com>
Source record: 72136

F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
with rectangular face 0--10 amp- scale..brand new..pse remove the
(ns) from my address..thanks..Bob ..on Long Island....$40.00

3146. Re: Tuning knobs for HB radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7d5ibs$i5s$1@nnrp1.dejanews.com>
Source record: 72137

In article <ZiOI2.189$Yk5.30953@news.shore.net>,
paz@anti.spam.shore.net wrote:
>
>
> I'm in the process of homebrewing a few radios and am in need of
> some nice flywheel-like (weighted) tuning knobs for the VFO.
> Anyone know of a good source?
>
> My alternative is hacking some 3" dia. steel rod, drilling,
> tapping, etc. Nasty, and not bound to be too pretty when
> done.

A couple of ideas...

1) Flywheels from scrapped tape decks. They're already balanced. Paint them, pot them with tool-handle dip, or glue a plastic cap over them. They're already balanced. There's nothing more annoying than a radio that drifts because the knob is off balance!

2) A large plastic cap, Petri dish, or other suitably shaped container filled with glue & lead shot. This would be harder to get balanced properly, and a bushing to get it to stay on the control shaft may be tricky.

3) Why steel rod? Aluminum (if it's big enough - 3" sounds big enough) should be plenty heavy. If you make your knob -too- heavy it may cause the shaft to bind.

You've already expressed a concern about appearance, but in cases where the "home-made" look isn't a problem, think about sticking a metal rod into the side of a small knob, sort of like a long pointer. It extends the "virtual" diameter of the knob and makes it easier to make fine adjustments. May be tricky to do with a multi-turn control, because you need room to swing the rod. And it looks like a hack. (Well, it -is- a hack. But it works.)

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3147. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F64CFA.ABD@eece.maine.edu>
Source record: 72138

HineJS wrote:
>
> Newbie needs help brewing an S-Meter for fox hunting.
>
> Hello all,
>
> Fairly new to the world of amateur radio, and have been bitten by the
> fox-hunting bug. Would like to add an S-Meter to my quad antenna rig in the
> truck, and would like another one to take in the field with my handheld yagi
> antenna. Any help would greatly be appreciated as far as resources and
> references.
>
> -Jeremy
> KF4RTY

To add to his question (since it is in a similar thread), what are the S
units a measure of (I think one S unit is something like 6 dB, but is
that recieved power?)? I think I read once that it was a measure of
something like an automatic gain control--when the reciever hears a
strong signal, instead of using lots of gain, it turns down it's own
gain control, and so this "unbiasing" is what is shown by the S meter.

Thanks for the info.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3148. 900 Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: ALAN HOLT <aholt@southwind.net>
Message-ID: <01be7479$f3975a80$6c6435ce@alanholt>
Source record: 72139

Does anyone know where I can find info on converting cellphones for 900 Mhz use?

I have seen at least one magazine article where someone reprogrammed a phone for
902-928 Mhz use, but I don't remember which one.

If you know of a magazine or website with this info, please let me know.
Thanks!

3149. CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F66527.237C@eece.maine.edu>
Source record: 72140

Hello all, just a quick question. Being short on time, I am looking
for a CW filter that would go after the audio stage. I know I could
design one myself, but I would rather just find someone else's already
working design, and go on that. It has to be passive, and capable of a
a watt or two of audio. I plan on adding this to my 2m multimode, which
does not have a cw filter internally, and also would like to use on my
Ten-Tec 40m qrp radio, which has a kinda wide cw filter. Thanks.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3150. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7d5rv3quc1@nnrp1.dejanews.com>
Source record: 72141

In article <19990321200632.19585.00000016@ngol02.aol.com>,
n2ey@aol.com (N2EY) wrote:

> (snip...) Any type of home construction is a good thing.

Amen. In this day and age I want to be as lenient as possible
on the definition of "homebrew" - partly because few people
ever build anything anymore, and partly because I can't
stand the elitist crap that goes with making distinctions
between "built from a magazine article", "built from a kit",
"personal design from discrete components", "personal design
with VLSI", and so on.

"Frankly, my dear..."

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3151. F.S. Collins Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: "Alan D. Gray" <agray@voicenet.com>
Message-ID: <36F65B32.FDF2049C@voicenet.com>
Source record: 72142

I have the following Collins parts for sale (all are new and unused original Collins parts unless otherwise indicated):

F455J15 1.5 khz Mechanical Filter for the 75A-4 $295 each

Retainer Clips and Hardware for 75A-4 Mechanical Filters $15 each

Original Manuals for the KWS-1, 75A-4 or 51J-4, (Used, excellent condition) $65 each

Beryllium Copper Band and Spring Assembly for the 75A-4 or KWS-1 PTO $50.

F250Z3 3 KHZ Mechanical Filter for the KWS-1 (used) $250.

4:1 Gear Assembly for the Vernier Knob on the 75A-4 or KWS-1, complete with instruction manual $70.

Dial Glass for 75A-4 or KWS-1 $22/set

Red Pointer for 75A or KWS-1 Slide Rule Dial $25 each PTO for 75A-4 $325

PTO for KWS-1 $325

Jensen Speaker for the Collins 270G-2 or 3 or 312A-1 or 2 $50.

Collins 115 V.D.C Antenna Transfer for the KWS-1 $150.

Knob Set for the KWS-1 (Includes Main Tuning Knob) $75.

Knob Set for 75A-4 (includes Main Tuning Knob) $75.

Main Tuning Knob for 75A series receivers $22 each Knobs for the KWS-1 & 75A-4 $7 each

KWS-1 2500V, 1 Amp. Fuses $6 each

Bearing Sets for KWS-1 Blower Motor $24. KWS-1 Cable Set (Used, Excellent Condition) $24.

Vernier Knob Sets for the KWS-1, complete with gears $250.

75A-4, KWS-1 and 51-J Escutcheons $95 each

Round Kilohertz Dials for the KWS-1 and 75A-4 $65 each

3TF4 Ballast Tubes for KWS-1 $35 each

6AS7/6080 Regulator Tubes for the KWS-1 Screen Supply $5 each
3B28 Rectifier Tubes $35/pair

CP-1 Crystal Pack for the Collins S-Line, complete with gripper tool $250.

Many other KWS-1 and 75A series parts- Transformers, IF cans, gears, doors, emblems, sheet metal, manuals, etc. Inquire.

Alan, W3BV

3152. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7d5t3v$s1s$1@nnrp1.dejanews.com>
Source record: 72143

In article <Pine.GSO.3.94.990320232448.29562B-100000@Stratus.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:

> But the original post was cross-posted to pretty much all the newsgroups
> in the rec.radio.amateur.* hierarchy which surely would explain the early
> answers. Someone's comment about building an antenna (that's homebrew)
> is a little more understandable if you consider that the post landed in
> that newsgroup. And the "buy one it's cheaper" undoubtedly came from
> someone reading the post in rec.radio.amateur.misc (or
> rec.radio.amateur.equipmenter where I think it landed too).
>
> It may not say much about the state of amateur radio, but hopefully it
> explains the early comments in a newsgroup that is meant to be about
> building.

The other issue is one of motivation - in this day and age, home-
brewing such a device is not cost-effective (while a better antenna
may be *very* cost-effective). What is the poster attempting to
accomplish with such a project? They won't save any money, and there
are better ways of learning about VHF power amplifiers.

The original post suggests that the poster is about to make a
costly mistake.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3153. Re: UHF/Microwave attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36f60406.1884511460@news.online.no>
Source record: 72144

On Mon, 22 Mar 1999 04:30:38 GMT, maddog@io.com (Monty Northrup)
wrote:

>On Sun, 21 Mar 1999 16:32:33 GMT, la8ak@online.no (J M Noeding) wrote:
>
>>On Sun, 21 Mar 1999 14:55:08 +0100, "Peter Bolch"
>><nc-bolchpe@netcologne.de> wrote:
>>
>>try http://www.telford-electronics.com/
>>
>>73
>>Jan-Martin LA8AK
>
>How does that help Peter's homebrew project? (It's a commercial
>test-equipment distributor)
>
>
use your small grey........, and how did yours post improve it?????

3154. Re: Motorola Maxar 80

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Bill Bailey <billbailey@accglobal.net>
Message-ID: <7d60hr$138$1@news2.tor.accglobal.net>
Source record: 72145
Cross-posted to:
alabama.birmingham.radio.amateur,pnet.rec.radio.amateur.talk,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Bill Bailey wrote in message ...
>Hello;
> I obtained a few of these and was wondering if anyone has the shop manual
>and also if they have the mod to bring them down into them into the 2 meter
>band presently they are tx/rx at 153.170 MHz
> These operate on crystals
>
>

3155. Re: 2m to 1296MHz transverter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f68507.0@news.netwalk.com>
Source record: 72146

YZ7REA/45AT142 Vladimir wrote in message <36F54959.C20063C5@EUnet.yu>...
> Hi,
> can anyone tell me more about this. Maybe send me some schematics or
>PCB layouts... Of course I need a complet RX and TX setup.
>
> THANKS IN ADVANCE

check www.downeastmicrowave.com

3156. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f684cb.0@news.netwalk.com>
Source record: 72147

Shawn Upton wrote in message <36F64CFA.ABD@eece.maine.edu>...
>To add to his question (since it is in a similar thread), what are the S
>units a measure of (I think one S unit is something like 6 dB, but is
>that recieved power?)? I think I read once that it was a measure of
>something like an automatic gain control--when the reciever hears a
>strong signal, instead of using lots of gain, it turns down it's own
>gain control, and so this "unbiasing" is what is shown by the S meter.

Originally the S unit was purely subjective. It originated back before
there was such things as S meters. It went along with the RST report that
is still used by CW operators today. (Readability Strength Tone)

The strength of a signal was judged by ear on a scale of 0 to 9, with 9
being a perfectly readable clear signal with no apparent noise. The 0
would, obviously, be a completely unreadable signal.

Then sometime in the 1930s, I would guess, someone put a meter on the front
panel of a receiver and hooked it to the IF stage so the meter would move up
and down with the strength of the signals. They marked the meter with the
numbers 0 to 9. Sometime later (1960s?) someone else decided to put the 9
in the middle of the receiver scale and add some extra numbers to the right.
The extra numbers where supposed to be in dB greater than S9. It was then
possible to tell someone that their signal was 20 dB greater than perfectly
readable! Really makes 'sense' doesn't it? ;-)

I believe it was then in the late 1970s or early 80's that it was decided
that 1 S unit was equal to a signal change of 6 dB. Remember, however, that
dB means 'a ratio to something expressed as a power of 10', so you still
need to know what the receiver maker used as the 'something'.

You are correct, I believe, in that most modern receivers use the AGC
circuit to drive the S meter, but as far as using it to accurately measure
signal strength I am highly skeptical. Maybe there is an absolute standard
for S units, but I am unaware of it. Unless it is a scientific grade
receiver it won't mean much anyway, with variations in frequency, linearity,
temperature sensitivity, bandwidth, reception mode, etc.

In summary, S meters are OK for making relative measurements only.

Jim
N8EE

3157. Re: Inductors for biasing MMICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f68650.0@news.netwalk.com>
Source record: 72148

Peter Bolch wrote in message <7d2u1kfdm1@news.netcologne.de>...
>Hi,
>
>inductors with an inductance of some 100 nH and a self resonating frequency
>well above 1 GHz seem to be a problem. Can small ferrite beads be used
>instead of coils for biasing the MiniCircuits or HP MMICs and similar
>circuits? If so, what type of ferrite material (preferably AMIDON types) is
>the right one for frequencies up to 1 GHz?
>
>
>Peter
>
>
>
>

If I recall, you can also use a fixed resistor in the supply line, or possibly a resistor and an inductor in series. The advantage of using a resistor is that the impedance is theoretically the same at all frequencies.

I believe they recommend using a resistor in series and a capacitor in parallel on the supply line. There is a description of how to calculate the correct value in the MiniCircuits RF designers handbook.

Jim
N8EE

3158. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f687ce.0@news.netwalk.com>
Source record: 72149

larryc@northwest.com wrote in message <36F525A0.7614@northwest.com>...
>they're called "N" connectors.
>
>==========
>
>Vincent Coppola wrote:
>>
>> Does anybody know what they are called or how to convert say a regular
>> SMA or BNC to HP's connectors? These things are used all over their
>> older generation connectors. I need to inject some RF to do some testing
>> of a mixer and I don't know how to convert to these things.
>>
>> Any help appreciated!!
>> Vince N1VC

By the way, how many of you know that a male N plug will plug into a female BNC socket? They were intentionally designed that way.

N, C (somewhat rare), BNC, and TNC where all designed by the same two guys, Mr., 'N' and Mr.. 'C'. Perhaps someone else on the group knows more details on the story.

Jim
N8EE

3159. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37278554.349657191@news.atl.bellsouth.net>
Source record: 72150

On Mon, 22 Mar 1999 09:00:26 -0500, Shawn Upton <supton@eece.maine.edu> wrote:
>To add to his question (since it is in a similar thread), what are the S
>units a measure of (I think one S unit is something like 6 dB, but is
>that recieved power?)? I think I read once that it was a measure of
>something like an automatic gain control--when the reciever hears a
>strong signal, instead of using lots of gain, it turns down it's own
>gain control, and so this "unbiasing" is what is shown by the S meter.

Yes, S meters measure relative signal strength by metering either
the AGC line of the receiver, or for FM receivers, by measuring the
limiter current. We can say with considerable assurance that a
reading of S2 represents a stronger signal than a reading of S1
(on the same antenna and receiver), but we can't go much further
than that without knowing more about the particular setup.

In theory, an S unit is a 6 dB signal strength change. In practice it
rarely is because few receiver AGC systems have a true log response.
Also in theory, S9 represents 50 uV across 50 ohms, but again that's
rarely the case. Receiver gain distribution, and the variance of that
from one frequency to another, makes such a determination quite
uncertain. (There's a different S meter scale defined for VHF receivers,
but that's similarly not well followed. It defines S9 as 5 uV across 50
ohms, and an S unit as 2 db. That's more appropriate to VHF/UHF
signals.)

It would be possible to make a calibration chart for your receiver to
conform to these specifications, by feeding the receiver a signal from
a calibrated signal generator and step attenuator, and noting down
the S meter reading at each power increment on each band, but few
amateurs do. (I have, which is why I know most amateur equipment
reads far from the standards.)

So the only real value of the S meter is to indicate that one signal
may be stronger than another by some ambiguous amount. That's
often sufficient for RDF work where you're only looking for a relative
peak or null in antenna directional response. But unless you've done
a calibration chart for your particular setup, don't depend on S meter
readings for antenna front to back measurements, or comparative
gain figures.

I've found in doing calibration charts that the amateur equipment I've
checked can vary from 1.8 dB to 8 dB in what it considers an S unit,
and that can change on the same receiver from one S unit to another,
IE S1 to S2 may be a very different signal level change than S8 to S9.
I've also found as much as a 10 dB difference in what a receiver
considers S9 from band to band and receiver to receiver of the same

model. Receivers of different makes can have even wider variances.

What I'm trying to say here is that the S unit, and S meters, have very little utility as accurate measures of signal strength unless you go to the trouble to hand calibrate the particular unit you're using. They are, however, useful for a relative indication of where peaks and nulls occur in an RDF system, and as a very crude relative indication of signal levels delivered from different stations to a particular receiving site.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3160. 31LQ6 help needed .....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Paul <w9ned@blueriver.net>
Message-ID: <7d5mp9$d9p$1@dagobah.blueriver.net>
Source record: 72151
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amature.misc

I am planing on replacing the (4) 6LQ6's in a Dentron 1000B amp with (4)
31LQ6's.
Is there any problems with doing this , or does anyone have any suggestions
as to the best way to do it?

i.e. should I use a filament transformer or just wire them in series and run
off of 120... ?

The main reason I am doing this is that a 31LQ6 runs $5.00 a piece verses
the 6LQ6 @ $20.00 + !!

--
Paul
w9ned@blueriver.net
Why do we say something is out of whack? What is a whack?

3161. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37298c3b.351424615@news.atl.bellsouth.net>
Source record: 72152

On 21 Mar 1999 22:51:48 GMT, hinejs@aol.com (HineJS) wrote:
>Fairly new to the world of amateur radio, and have been bitten by the
>fox-hunting bug. Would like to add an S-Meter to my quad antenna rig in the
>truck, and would like another one to take in the field with my handheld yagi
>antenna. Any help would greatly be appreciated as far as resources and
>references.

S meters monitor receiver AGC voltage for those receivers employing
AGC, and monitor limiter current for those receivers having limiters,
IE FM rigs. Since most foxhunting is VHF/UHF, and is done with FM
radios, it is the latter you want to monitor.

You'll need a schematic of your receiver to determine where you can
tap in to monitor limiter current. Many of today's radios have an IF on
a chip, which may or may not have a limiter current monitoring point.
This is typically labeled as a RSSI pin on the schematic. This will usually
not be connected in a receiver lacking an S meter. You can consult the
chip maker's data sheets to see what voltage or current is output by
this pin for various signal levels, then build a suitable metering circuit
to show that in terms of S units. I can't be more specific than that without
knowing the particular radio you're using.

For example, I use a BC 780XLT as a general purpose portable service
monitor. Its IF chip has a RSSI output with a 70 dB log response. I brought
that out to a separate meter panel which also has a meter which monitors
the zero center discriminator voltage. So I can measure both signal strength
and frequency error. I had to make up a set of calibration charts, however,
because the scanner gain is different on different frequency bands. I also
brought out the buffered LO signal to a step attenuator to use as a wide
range signal generator (I have to calculate the offset from the displayed
frequency in my head, of course.)

It dawns on me, however, that what you may really be wanting is a field
strength meter. That's a simple passive diode detector driving a meter
movement. The circuit is in the Handbook. It is very useful when you
get close enough to the fox that your receiver limiter saturates.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3162. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F6915B.78D2524D@teleport.com>
Source record: 72153

Shawn Upton wrote:
>
> To add to his question (since it is in a similar thread), what are the S
> units a measure of (I think one S unit is something like 6 dB, but is
> that recieved power?)? I think I read once that it was a measure of
> something like an automatic gain control--when the reciever hears a
> strong signal, instead of using lots of gain, it turns down it's own
> gain control, and so this "unbiasing" is what is shown by the S meter.
>
> Thanks for the info.

You're correct about the AGC circuit and what it does.

Virtually all amateur receivers have an S-meter, and the units on it are universally called S-units. The S-meter simply shows the AGC voltage, which is only approximately logarithmic, and varies a great deal from manufacturer to manufacturer and from model to model. The S-units on my Icom 730 vary from 1.3 dB near the bottom of the scale to 4.0 dB near S-9. The "10 dB" marks indicating signal strength over S-9 are from 5.6 to 13.5 dB. (This is for the band where I measured it -- it might be different on the others.) I've seen S meters on some receivers which have a reasonably constant 5 dB per unit, so you can see that a report of signal differences in "S-units" carry no quantitative information. Some writers, for reasons which escape me, like to define a unit of measure they call an "S-unit" as 6 dB. The difficulty with this is that people think it's the same as the marks on their S-meters, which of course it isn't. Quantitative differences given in dB don't carry this ambiguity, yet the "S-unit" persists in the amateur community. You'll never see the "S unit" used as a unit of measure in any professional publication.

Roy Lewallen, W7EL

3163. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <372a90a9.352559319@news.atl.bellsouth.net>
Source record: 72154

On Mon, 22 Mar 1999 10:43:35 -0500, Shawn Upton <supton@eece.maine.edu> wrote:
>Hello all, just a quick question. Being short on time, I am looking
>for a CW filter that would go after the audio stage. I know I could
>design one myself, but I would rather just find someone else's already
>working design, and go on that. It has to be passive, and capable of a
>a watt or two of audio. I plan on adding this to my 2m multimode, which
>does not have a cw filter internally, and also would like to use on my
>Ten-Tec 40m qrp radio, which has a kinda wide cw filter. Thanks.

A fully passive design can be made with surplus 88mH telco toroids and
capacitors configured as a Pi section filter. This was popular 35 years
ago for RTTY. An *old* Handbook should have the circuit, or any filter
design program can give you the capacitor values for a fixed frequency
unit in a jiffy. You'll have to dig through some old timer's junkbox to find
the toroids (you'll need 8). I've got some, but I'm hanging onto them for
an ELF project (60 Hz notch filter).

In more recent times, an active opamp filter would be used, followed
by a chip audio amplifier to boost the signal back up to speaker level.
The Opamp Cookbook, or a more recent copy of the Handbook, would
have these circuits. Look for a state variable filter. This will be cheaper
and smaller than the passive approach, and tunable too.

Today, of course, we'd just use a DSP filter. There are a bunch of
them available new or used. Radio Shack made one that was good
as a filter, though it didn't do noise suppression or hetrodyne elimination
like the better DSP units. But it was cheap, and had a speaker amp and
speaker built in. It closed out for $35, and you should be able to find one
used for less. There's also a kit available from a W9 I think, and of course
a number of W&T units by Timewave, JPS, MFJ, etc. That's the high price
spread of course. You can also use a sound card and a program on a PC
(there is some freeware). This is a far cry from the passive unit you wanted,
but it is the more modern way to do the job. Newer equipment has DSP
filtering built in.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3164. Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7d65op$o5l$1@mendelevium.btinternet.com>
Source record: 72155

Thankyou to those who replied to my last message regarding frequency counters. Although it may well be cheaper and easier to buy a second hand model, I would still rather make my own; The experience gained would be as useful to me as the finished project. I am new to digital electronics and would rather start with something
simple, using 74LS series TTL, rather than a more complicated microprocessor, and the counter need only work at frequencies as high as, say, 30MHz. I intend to use the 74LS90 and 74LS48 for each display digit, using the divide-by-10 output of each 74LS90 to drive the next digit. I am unsure how to make the input amplifier and gate/reference oscillator, however, and would be grateful if anyone could help.
Thanks for your help.

3165. Re: 31LQ6 help needed .....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <dgfF90H8G.KF3@netcom.com>
Source record: 72156
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amature.misc

In article <7d5mp9$d9p$1@dagobah.blueriver.net> "Paul" <w9ned@blueriver.net> writes:
>I am planing on replacing the (4) 6LQ6's in a Dentron 1000B amp with (4)
>31LQ6's.
>Is there any problems with doing this , or does anyone have any suggestions
>as to the best way to do it?
>
>i.e. should I use a filament transformer or just wire them in series and run
>off of 120... ?
>
>The main reason I am doing this is that a 31LQ6 runs $5.00 a piece verses
>the 6LQ6 @ $20.00 + !!

I did exactly the same thing for exactly the same reason.

Worked fine.

My first iteration did put the filaments in series and across half of
the primary, but much (well received) feedback indicated that this was
a serious safety hazard should there by (somehow) a plate-to-filament
short or other fault - the 1kv plate could find continuity to the AC
mains. However, it worked fine other than some RF leakage through the
mains. The next pass just mounted a 24V 2A filament xfmr on the back and
series it with the existing 6V filament winding. I did find that ample
bypassing of the filament lines was necessary in both cases to reduce RF
leaking out of the power lines. The final result (with ECG 31LQ6's
available at the time from antique electronic supply at $4.50 each) was
as expected, although I suggest taking GREAT pains to label the amp
internally as to the odd filament voltage so as to avoid someone
destroying 6LQ6's in it in the future.

PS as I recall it took two passes with Antique Electronic to get really
"NIB" 31LQ6's; the first batch were an assortment of tubes from various
labels, none quite the same, and they worked poorly. The replacement
batch were all identical and worked great.

GL &
73 Dave WB0GAZ dgf@netcom.com

3166. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <36F6A41C.70B7@ixpres.com>
Source record: 72157

N2EY wrote:
> There is no thrill quite like getting on
> the air and making contacts with gear you built yourself. I've been totally
> ruined for manufactured gear by the experience. Sold my Ten-Tec Argosy in 1985
> and have used nothing but homebrew, converted surplus, kit and
> restored-from-basketcase gear ever since.
>

Jim OM,

I would like to add my voice to the chorus that from personal
experience, homebrewing and modifying has essentially eliminated me as
an interested buyer of most factory-made rigs, particularly new ones.
Advertisers in magazines such as QST certainly do not like to hear this,
although the percentage of homebrewers out there is certainly low, so
there is no real threat. But as homebrewing becomes easier and easier
(which it certainly is today, compared with days of yore!), that could
change; who knows?

73,
Don, W6JL

3167. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F6A484.167E@eece.maine.edu>
Source record: 72158

Doug Smith wrote:

> Hmmm. There are plenty of designs for *active* CW audio filters, most
> of which could be placed externally to the rig - just set the rig's
> audio gain below the point of filter overload, and adjust audio gain
> through the filter.
>
> For a *passive* design, about the only thing I can think of is a
> series-resonant circuit for whatever frequency you want to listen at.
> The big problem is, the tolerance of components with enough inductance
> and capacitance to resonate at (say) 800Hz is *really* wide. You could
> buy components that, according to their markings, should resonate at
> 800Hz, and find them resonating at 300Hz instead... Anyway, the active
> filter is probably cheaper, it can be built with a dual op-amp and a
> handful of resistors & capacitors..
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66

That seems to be what I am hearing. I was hoping for something easy to
do, something I could just throw in-line, but it is starting to sound
like I will have to actually do some work. Sigh. Guess I oughta find
that manual for my Icom 245 so I can start to figure out what I can do
(and also so I can adjust the sidetone on it, if it does have it).
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3168. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F6A3D6.41C6@eece.maine.edu>
Source record: 72159

First, thanks for all that wrote. I'm not sure if the original thread question got answered yet, but I know I've learned something so far.

Roy Lewallen wrote:
>
> You're correct about the AGC circuit and what it does.
>
> Virtually all amateur receivers have an S-meter, and the units on it
> are universally called S-units. The S-meter simply shows the AGC
> voltage, which is only approximately logarithmic, and varies a great
> deal from manufacturer to manufacturer and from model to model. The
> S-units on my Icom 730 vary from 1.3 dB near the bottom of the scale
> to 4.0 dB near S-9. The "10 dB" marks indicating signal strength over
> S-9 are from 5.6 to 13.5 dB. (This is for the band where I measured it
> -- it might be different on the others.) I've seen S meters on some
> receivers which have a reasonably constant 5 dB per unit, so you can
> see that a report of signal differences in "S-units" carry no
> quantitative information. Some writers, for reasons which escape me,
> like to define a unit of measure they call an "S-unit" as 6 dB. The
> difficulty with this is that people think it's the same as the marks
> on their S-meters, which of course it isn't. Quantitative differences
> given in dB don't carry this ambiguity, yet the "S-unit" persists in
> the amateur community. You'll never see the "S unit" used as a unit of
> measure in any professional publication.
>
> Roy Lewallen, W7EL

On a side note, when do you think us amateurs will start measuring actual signal strength? Although that would be funny--I've got you at -136dBm, etc. That would be far more qualitative, but I guess tradition is hard to break.

And, as a departing remark on S-meters, is it just me or if I want to talk to a repeater w/my HT, if the S-meter isn't pegged at beyond full strength, then I don't talk to that repeater? I know that is mostly due to my "slightly better than a dummy load" rubber duckie. Anyone else notice that?
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus

****

3169. Re: 31LQ6 help needed .....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f6a2b9.0@news.netwalk.com>
Source record: 72160
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amature.misc

Paul wrote in message <7d5mp9$d9p$1@dagobah.blueriver.net>...
>I am planing on replacing the (4) 6LQ6's in a Dentron 1000B amp with (4)
>31LQ6's.
>Is there any problems with doing this , or does anyone have any suggestions
>as to the best way to do it?
>
>i.e. should I use a filament transformer or just wire them in series and
run
>off of 120... ?
>
>The main reason I am doing this is that a 31LQ6 runs $5.00 a piece verses
>the 6LQ6 @ $20.00 + !!
>

I don't know anything about the Dentron Amps, but I would think that you
would want to use a transformer for safety reasons.

Jim
N8EE

3170. Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F6A59C.2781@eece.maine.edu>
Source record: 72161

How do the manufactures make the antennas 50 ohms? I mean, what kind of matching network do they use to make up for the minimumal ground plane? My friend made his own 1/4 wave antenna for his HT, and noticed that it made a huge difference between holding the radio (and providing a ground plane for the antenna) and not holding the antenna (loss of signal strength, etc).

I played around a store bought 1/4 wave antenna, to see if I could improve it by using some coax sheild (w/o any of the other coax stuff in it) to provide some ground radials. It seemed to improve it, but the SWR did not decrease that much, went from 1.5 to 1.1.

I'm kinda interested in this, as I've noticed (being in a area not populated by repeaters) that my HT is a bit range limited. I would like to do some work on antennas to get more range, hence my questions.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3171. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <36F6A73D.2311@ixpres.com>
Source record: 72162

marsgal42@hotmail.com wrote:
>
> In article <19990321200632.19585.00000016@ngol02.aol.com>,
> n2ey@aol.com (N2EY) wrote:
>
> > (snip...) Any type of home construction is a good thing.
>
> Amen. In this day and age I want to be as lenient as possible
> on the definition of "homebrew" - partly because few people
> ever build anything anymore, and partly because I can't
> stand the elitist crap that goes with making distinctions
> between "built from a magazine article", "built from a kit",
> "personal design from discrete components", "personal design
> with VLSI", and so on.
>
> "Frankly, my dear..."
>
> Laura Halliday VA3LDH "Que les nuages soient notre pied
> Grid: FN03gs a terre..." - Hospital/Shafte
>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

Laura YL,

Elitist is not a bad word; it isn't 'crap', quoting you directly. It
is, however, not "PC" currently, and perhaps this is what is really
important to you.
Elitism is often a motivator which can make a person strive to belong
to a group of those who have achieved what the individual finds
desirable or admirable. It is a positive human trait, not a negative
one as you seem to believe. To some non-achievers, anyone identifying
himself (or, if you will, herself) with a group of achievers is an
'elitist', a negative sense of the word. The common-sense term for this
type of envy is 'sour grapes'. I see examples of it every day, and you
remind me that it is evident here on Homebrew also.

73,
Don, W6JL

3172. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jack Hardin <jhardin@hal-pc.org>
Message-ID: <01be74a2$b0b92440$9880b4ce@jhardin>
Source record: 72163

Shawn --

The expert on passive filters is:

Ed Wetherhold, W3NQN
1426 Catlyn Pl
Annapolis, MD 21401-4208
Phone: 410-268-0916
Fax: 410-268-4779

He sells CW Filter kits and 88mH toroidal inductors.

I recently bought a CW filter kit from Ed which cost $22 and seems to have about the effect of the 500Hz CW filter on my old Kenwood rig.

If you're looking for an active filter which can be put into your QRP rig right before the audio amp, you can get a kit from Dan's Small Parts (he has a web page) for $10 plus shipping.

Good luck & 73
Jack, KD5EDO

>>>Shawn Upton <supton@eece.maine.edu> wrote in article
<36F66527.237C@eece.maine.edu>...
> Hello all, just a quick question. Being short on time, I am looking
> for a CW filter that would go after the audio stage. I know I could
> design one myself, but I would rather just find someone else's already
> working design, and go on that. It has to be passive..

3173. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F6B4AE.9E4EBED1@teleport.com>
Source record: 72164

Shawn Upton wrote:
>
> How do the manufactures make the antennas 50 ohms? I mean, what kind of
> matching network do they use to make up for the minimumal ground plane?
> My friend made his own 1/4 wave antenna for his HT, and noticed that it
> made a huge difference between holding the radio (and providing a ground
> plane for the antenna) and not holding the antenna (loss of signal
> strength, etc).

There isn't any way to keep the antenna at or even near 50 ohms with
all the variables involved. What they do is design the output stages
to tolerate extreme mismatches without blowing. The design compromises
to get this ruggedness are probably why most HTs are only around
20-30% or so efficient, even when driving a perfect 50 ohm load. The
loss in most HT antennas and other elements in the antenna system does
help stabilize the impedance, but I imagine it still gets pretty wild.

> I played around a store bought 1/4 wave antenna, to see if I could
> improve it by using some coax sheild (w/o any of the other coax stuff in
> it) to provide some ground radials. It seemed to improve it, but the
> SWR did not decrease that much, went from 1.5 to 1.1.
>
> I'm kinda interested in this, as I've noticed (being in a area not
> populated by repeaters) that my HT is a bit range limited. I would like
> to do some work on antennas to get more range, hence my questions.

The reason for this is probably that the repeater runs a whole lot
more power than your HT, but doesn't have that much better of a
receiver. This seems common for repeaters.

Roy Lewallen, W7EL

3174. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F6B5B0.4D6715DC@teleport.com>
Source record: 72165

Shawn Upton wrote:
>
> On a side note, when do you think us amateurs will start measuring
> actual signal strength? Although that would be funny--I've got you at
> -136dBm, etc. That would be far more qualitative, but I guess tradition
> is hard to break.

Building and using a simple step attenuator is beyond the capabilities or interests of most hams. So I think that will happen only when the receivers have a meter on them that measures in dBm. And I don't think that will ever happen because hams won't pay for it.

Roy Lewallen, W7EL

> And, as a departing remark on S-meters, is it just me or if I want to
> talk to a repeater w/my HT, if the S-meter isn't pegged at beyond full
> strength, then I don't talk to that repeater? I know that is mostly due
> to my "slightly better than a dummy load" rubber duckie. Anyone else
> notice that?

Sorry, I answered that in response to another of your postings. The reason is probably because the repeater power is a lot more than your HT's, but its receiver isn't that much better.

Roy Lewallen, W7EL

3175. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f6baa8.0@news.netwalk.com>
Source record: 72166

Shawn Upton wrote in message <36F6A59C.2781@eece.maine.edu>...
>How do the manufactures make the antennas 50 ohms? I mean, what kind of
>matching network do they use to make up for the minimumal ground plane?
>My friend made his own 1/4 wave antenna for his HT, and noticed that it
>made a huge difference between holding the radio (and providing a ground
>plane for the antenna) and not holding the antenna (loss of signal
>strength, etc).
>

It is better to think of it as an asymetrical dipole. The rubber duck forms half of the dipole and the circuitry inside the HT forms the other half. Rubber ducks do not necessarily have to be 50 ohms, particularly across the entire band

>I played around a store bought 1/4 wave antenna, to see if I could
>improve it by using some coax sheild (w/o any of the other coax stuff in
>it) to provide some ground radials. It seemed to improve it, but the
>SWR did not decrease that much, went from 1.5 to 1.1.

Do you mean a 1/4 wave HT antenna, or a ground plane? If you are talking about fixed station use, put up something bigger than a 1/4 wave---possibly even a small yagi or quad.

>
>I'm kinda interested in this, as I've noticed (being in a area not
>populated by repeaters) that my HT is a bit range limited. I would like
>to do some work on antennas to get more range, hence my questions.
>--

Well, yes. HT are meant for short range use. There are long rubber ducks available that give a few dB improvement over the short ones. There are also collapsible quarter wave antennas and, if I recall, even collapsible 5/8 wave whips. All of these are, in my opinion, an attempt to get an HT to work somewhere where it was not intended to be used---outside the prime coverage area of a repeater.

3176. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f6bc33.0@news.netwalk.com>
Source record: 72167

Shawn Upton wrote in message <36F6A3D6.41C6@eece.maine.edu>...

>On a side note, when do you think us amateurs will start measuring
>actual signal strength? Although that would be funny--I've got you at
>-136dBm, etc. That would be far more qualitative, but I guess tradition
>is hard to break.
>
In some ways we already are. The FCC has imposed radiation exposure limits
and we are at least supposed to estimate (by calculation) the field
strength. Field strength is also needed to measure antenna patterns
accurately.

>And, as a departing remark on S-meters, is it just me or if I want to
>talk to a repeater w/my HT, if the S-meter isn't pegged at beyond full
>strength, then I don't talk to that repeater? I know that is mostly due
>to my "slightly better than a dummy load" rubber duckie. Anyone else
>notice that?
>--

All S meters are different, even between samples of the same model. If your
S meter has to be pegged to work a repeater would say that it is of little
use.

Jim
N8EE

3177. FS!- 8 piece 4-1000A amplifier semi-kit!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <922141945.277.80@news.remarQ.com>
Source record: 72168
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Started out as an Amp Project that never really got off the ground!! The
following items for sale:
1. Two Eimac 4-1000A Tetrodes. FULL output, Low Hour pulls.
2. Two Eimac SK-510 Plastic Air Sockets with Chimey Guides.
3. Two Eimac SK-506 Glass Chimneys.
4. Two Eimac HR-8 Heat Dissipating Anode Connectors.
All items in Perfect condition ready for that Big Two-Holer!
$475.00 plus shipping.

3178. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36f6be77.1932247287@news.online.no>
Source record: 72169

On Mon, 22 Mar 1999 13:27:12 -0800, Roy Lewallen <w7el@teleport.com>
wrote:

>Building and using a simple step attenuator is beyond the capabilities
>or interests of most hams. So I think that will happen only when the
>receivers have a meter on them that measures in dBm. And I don't think
>that will ever happen because hams won't pay for it.
>
>Roy Lewallen, W7EL
>
I use MC3356 S-meter detector -displaying 0-70dB above 1uV, and since
background noise level is 10-20dB below 1uV, one have to add some to
the reading. However very few stations on HF are 54dB above background
level on my FT-902, so using this log.meter you risk that many
amateurs mentions behind your neck that you have a bad transceiver.
Hardly believe it is possible to sell equipment which does not lie
about signal strength, 1.3dB per s-unit "indicates" that the receiver
is "sensitive", 5 or 6dB indicates that it is not, very likely Drake
and Collins owners replace the valves too often because they might
believe sensitivity is degraded. Atlas 210-X has 0.8-2dB per s-unit
and sure this aided popularity of this rig.

Reliable information does not help the appliance operator!

73
Jan-Martin LA8AK

3179. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36f6c125.1932933386@news.online.no>
Source record: 72170

On 21 Mar 1999 22:51:48 GMT, hinejs@aol.com (HineJS) wrote:

>Newbie needs help brewing an S-Meter for fox hunting.
>
>Hello all,
>
>Fairly new to the world of amateur radio, and have been bitten by the
>fox-hunting bug. Would like to add an S-Meter to my quad antenna rig in the
>truck, and would like another one to take in the field with my handheld yagi
>antenna. Any help would greatly be appreciated as far as resources and
>references.
>
>-Jeremy
>KF4RTY

if it is for 2m, the ARRL handbook shows a simple and easily applied
circuit

3180. Re: FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36f6c191.1933041365@news.online.no>
Source record: 72171

On Mon, 22 Mar 1999 12:16:08 GMT, napoli@(ns)i-2000.com wrote:

> F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
>with rectangular face 0--10 amp- scale..brand new..pse remove the
>(ns) from my address..thanks..Bob ..on Long Island....$40.00
>
isn't it sort of vintage equipment?

3181. F.S. New Eimac SK-606 Chimneys

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: "Alan D. Gray" <agray@voicenet.com>
Message-ID: <36F6CE55.C6D3164F@voicenet.com>
Source record: 72172

For Sale: New Eimac SK-606 Chimneys for 4CX250 series tetrodes. $9.00 each plus shipping.

Alan, W3BV

3182. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36F6DB27.7685@pop.removethistomailme.net>
Source record: 72173

> say, 30MHz. I intend to use the 74LS90 and 74LS48 for each display digit,
> using the divide-by-10 output of each 74LS90 to drive the next digit. I am
> unsure how to make the input amplifier and gate/reference oscillator,
> however, and would be grateful if anyone could help.

That turns out to be pretty easy with modern MMIC amplifiers. Look at the Mini-Circuits MAR-3, MAR-4, MAV-11, and similar parts that offer +10 dBm output into 50 ohms. (http://www.minicircuits.com) You can generally AC-couple directly into a TTL gate once you have +10 dBm or so worth of signal. Not strictly kosher but it usually works. These parts are easy to use -- just mount the MMIC(s) directly to an unbroken ground plane of copper-clad board. (You can also cascade a couple of them to 'square' the signal, for better reliability on slow sine waves.) Some experimentation may be necessary to get the best response on a variety of signal levels and waveshapes, but this is probably still the simplest way to go.

Apart from that, and assuming you want to stick with discrete TTL chips for educational purposes, you will probably want to use 74LS75 (? it's been awhile...) quad latches between your 7490s and 7448s (unless the 7448 has the latches built in? I always used the 7447...) Otherwise you won't be able to look at the results of the last count interval while the next one is in progress. The Forrest Mims "Engineers' Notebooks" available at Radio Shack are great for this type of circuit.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

3183. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <7d6qs6$q6p$1@samsara0.mindspring.com>
Source record: 72174

HP or do you mean GR for General Radio? Sparks W4EAS

Vincent Coppola wrote in message <36F41109.75F0@snet.net>...
>Does anybody know what they are called or how to convert say a regular
>SMA or BNC to HP's connectors? These things are used all over their
>older generation connectors. I need to inject some RF to do some testing
>of a mixer and I don't know how to convert to these things.
>
>Any help appreciated!!
>Vince N1VC

3184. Personal Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7d70kd$72g$1@fir.prod.itd.earthlink.net>
Source record: 72175
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber
All mugs are made with quality control in mind. They are dishwasher and microwave safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber for details.
If you what to buy your personal callsign mug all you will have to do is send a check or money order for the amount of the mug plus $4.00 for shipping. Remember to send your callsign so I can place it on the mug.(The mug you see on my web sit is just a sample mug. Your callsign will be placed on the mug you order.) Please USA orders only. See at http://home.earthlink.net/~jawjabber
To see a picture of the Callsign Mug and to get the order forms please click on the link below.

Georges Mug Shop
http://home.earthlink.net/~jawjabber

3185. Re: Inductors for biasing MMICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <36F718D6.46AE@northwest.com>
Source record: 72176

i'm using the MAV-11 as a low-level (15dBm) AM amplifier at 250mHz. the mmic amp is running off 5 volts (max recommended voltage is 5.5 volts) thru a bypassed 0.56uh choke. no instability is observed with the TEK 495 spectrum analyzer.

the Minicircuits manual recommends that the minimum choke impedance be at least 10 times the load impedance at the lowest frequency used. this impedance is in parallel with the output transistor of the MMIC.

keep in mind, if one uses mmics at uhf and above, the leads become appreciably inductive, especially the two ground leads. follow the recommendations in the manual. the ERA-series mmics are good thru 10ghz.

=====
> If I recall, you can also use a fixed resistor in the supply line, or
> possibly a resistor and an inductor in series. The advantage of using a
> resistor is that the impedance is theoretically the same at all frequencies.
>
> I believe they recommend using a resistor in series and a capacitor in
> parallel on the supply line. There is a description of how to calculate the
> correct value in the MiniCircuits RF designers handbook.
>
> Jim
> N8EE

3186. WTB 4gc. 0-30db attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: glennh <glennh@ecom.net>
Message-ID: <7d768ilrv1@la-mail4.digilink.net>
Source record: 72177

Glenn K6YTY

glenn@ecom.net

3187. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF9249w.9Cp@netcom.com>
Source record: 72178

In article <19990321175148.03651.00000248@ng-da1.aol.com>,
HineJS <hinejs@aol.com> wrote:
>Newbie needs help brewing an S-Meter for fox hunting.
>
>Hello all,
>
>Fairly new to the world of amateur radio, and have been bitten by the
>fox-hunting bug. Would like to add an S-Meter to my quad antenna rig in the
>truck, and would like another one to take in the field with my handheld yagi
>antenna. Any help would greatly be appreciated as far as resources and
>references.

A copy of "Transmitter Hunting, Radio Direction Finding Simplified"
by Moell and Curlee, Tab Books, 1987 is a good place to start.

Amplified sniffers are also a staple project so just about any
years worth of one ham magazine or another will have at least one,
as will an ARRL handbook.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3188. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990321200632.19585.00000016@ngol02.aol.com>
Source record: 72223

In article <36F2C174.121756A@netscape.net>, "D.Pearce" <depearce@netscape.net> writes:

>Subject: What constitutes Homebrew?
>From: "D.Pearce" <depearce@netscape.net>
>Date: Fri, 19 Mar 1999 14:28:20 -0700
>
>Do kits count, or must it be built from plans, or must you design the
>circuits?
>
>Just intrested in what the correct definition of homebrew is, not
>counting the food definition.
>
Hello folks,

First, there's no hard-and-fast definition. Some would count anything that requires significant assembly as homebrew, including kits with highly detailed instructions. Others don't count anything that is not totally home designed and assembled.

I fall somewhere in the middle. To me the thing that makes it homebrew is whether or not significant decision-making and component-prepping had to be done by the builder, AND whether or not most of the assembly is done by the builder.

Kits are not homebrew, because the decisions are usually all made for you, and in many cases the components require no preparation. (Winding toroids is another matter!)

Converting surplus isn't homebrew, because most of the assembly is done for you.

Building an exact copy from a magazine article is a fine-line decision. In some cases, where significant decisions are made by the builder and parts have to be fabricated, it's homebrew. In other cases, where you buy a complete kit of parts and the magazine article is the assembly manual, it's more like kit building.

Restoring/modifying an old piece of gear is not homebrew, even though it may sometimes involve even more work that building.

I use precise terms for the situation. Some of my gear is built from kits, some is converted surplus, some is restored from basketcase condition. Most is completely homebrew and homedesigned. There is no thrill quite like getting on the air and making contacts with gear you built yourself. I've been totally ruined for manufactured gear by the experience. Sold my Ten-Tec Argosy in 1985 and have used nothing but homebrew, converted surplus, kit and

restored-from-basketcase gear ever since.

None of this is meant as a putdown of kits or conversions. Any type of home construction is a good thing.

73 de Jim, N2EY

3189. EARLY T.I. IC's, NEW IN BOX! for auction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7d4ehl$l9m$1@nnrp1.dejanews.com>
Source record: 72224

NEW texas instruments ic's. these are early ic's, they are gold and are mounted on special plastic carrier. seem to have been designed to plug into a special socket. chips are on ebay. heres the link.. http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=79942035 thanks robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3190. WESTINGHOUSE RADIO INTERCOMS, ON CB BAND! for auction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7d4evslnr1@nnrp1.dejanews.com>
Source record: 72225

3 westinghouse radio intercoms on cb band (chnl 11). pics available. units are on ebay. heres the link
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=79943604
thanks
robert

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3191. Re: WTB: SWTPc computer system

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: mervins@aol.com
Message-ID: <19990321221240.18264.00000281@ng-fd1.aol.com>
Source record: 72226

Alan, I have a couple, but do not wish to sell. However, once you find yours, I might be able to help you with copies of documentation. Scotty

>I'm looking for an SWTPc computer, any model. Typical SWTPc (Southwest
>Technical Products Corporation) models were around in the late 70's. If you
>have an SWTPc computer buried in the shack and are interested in selling it
>please email me at chipsndips@snet.net.
>
>Alan

3192. TVI on Channel 5

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: jathatcher@hotmail.com
Message-ID: <7d4g28mil1@nnrp1.dejanews.com>
Source record: 72227

I live along the Southern end of the Salt Lake region, in Orem Utah about 70 miles from the TV transmitters. All channels have near perfect recepition except for Channel 5. Channel 5 suffers from TVI that on screen resembles CB or HAM interference. It is usually worse at night. Sometimes it is bad enough to blank out the picture. When it is this bad usually channels 2 and 4 are also affected to a lesser degree.

I have tried toroidal core snap-ons on the TV's power, a power line conditioner, and FM filter. Nothing. The antenna is mounted in the attic and is a Channel Master "fringe-area" sized VHF/UHF connected to 4 coax jacks in the house using R6 coax cable. It was professional installed. All my TV's including a presumed good quality Panasonic Superflat 27 inch display the Channel 5 TVI problem.

While the picture interference seems to suggest CB or HAM interference (based on the examples I have seen at the FCC web site), I have never heard an operator's voice. Also, on occasion at night, the Channel 5 interference will suddenly clear for about 10 seconds then return when a refrigerator or furnace fan powers on. But on most other occasions, the refrigerator or furnace fan has no effect.

This interference has me baffled. Could there be more than 1 problem?

What could this be?

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3193. Re: UHF/Microwave attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-22 00:00:00 UTC
From: maddog@io.com
Message-ID: <36f5c70e.5250168@news.io.com>
Source record: 72228

On Sun, 21 Mar 1999 16:32:33 GMT, la8ak@online.no (J M Noeding) wrote:

>On Sun, 21 Mar 1999 14:55:08 +0100, "Peter Bolch"
><nc-bolchpe@netcologne.de> wrote:
>
>try http://www.telford-electronics.com/
>
>73
>Jan-Martin LA8AK

How does that help Peter's homebrew project? (It's a commercial
test-equipment distributor)

3194. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F6DC2C.11EA51EB@bellsouth.net>
Source record: 72079

Shawn Upton wrote:
>
> Hello all, just a quick question. Being short on time, I am looking
> for a CW filter that would go after the audio stage. I know I could
> design one myself, but I would rather just find someone else's already
> working design, and go on that. It has to be passive, and capable of a
> a watt or two of audio. I plan on adding this to my 2m multimode, which
> does not have a cw filter internally, and also would like to use on my
> Ten-Tec 40m qrp radio, which has a kinda wide cw filter. Thanks.

Hmmm. There are plenty of designs for *active* CW audio filters, most
of which could be placed externally to the rig - just set the rig's
audio gain below the point of filter overload, and adjust audio gain
through the filter.

For a *passive* design, about the only thing I can think of is a
series-resonant circuit for whatever frequency you want to listen at.
The big problem is, the tolerance of components with enough inductance
and capacitance to resonate at (say) 800Hz is *really* wide. You could
buy components that, according to their markings, should resonate at
800Hz, and find them resonating at 300Hz instead... Anyway, the active
filter is probably cheaper, it can be built with a dual op-amp and a
handful of resistors & capacitors..
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3195. Re: Newbie needs help brewing an S-Meter for fox hunting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: hinejs@aol.com
Message-ID: <19990322190712.01069.00000173@ng-cd1.aol.com>
Source record: 72080

It dawns on me, however, that what you may really be wanting is a field strength meter. That's a simple passive diode detector driving a meter movement. The circuit is in the Handbook. It is very useful when you get close enough to the fox that your receiver limiter saturates.

Gary
Gary Coffman KE4ZV

Gary,

Yes, I'm looking for a way to measure the field signal strength. This circuit you mention, isn't in my local library. The handbook you mention, do you mean the ARRL Handbook, the most recent copy? Perhaps I should just go out and purchase a copy of the handbook for myself.

-Jeremy
KF4RTY

3196. LC7137 type CB to 6m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Allan McDermid <allan@mm1bjp.freeserve.co.uk>
Message-ID: <7d6qhq$uj9$1@news4.svr.pol.co.uk>
Source record: 72081

Hi there, has anyone ever converted a cb which uses the lc7137 pll chip to 6m?

Cheers!

Allan McDermid

3197. Universal Programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Ingra-Beton@t-online.de
Message-ID: <36F6F8F7.4E658C25@t-online.de>
Source record: 72082

Hi,

I have just released a nice little Software for:
(download from my page)

Read/write/edit any SmartCard like
- async.T=0 (GSM SmartCards)
- sync. Telecards (Phonecards)
- sync. I2C (Towitoko Cards, 2Kbit-64Kbit, ...)
- sync. 2-wire (German Social insurance, ...)
- sync. 3-wire (German Social insurance, Towitoko Card with Pin, ...)
- sync. microwire

Read/write ANY Serial EEPROM
- I2C (24C00,24C01,24C02,24C04,24C08,24C16,24C32,24C64,24C128,...)
- Microwire (93C46,93C56,93C66,93C76,93C86, ... 8 and 16 bit org.)
- SPI (X25C02,X25020,X25040,X25057,X25138,X25170,X25330,X25650,...)

It is developed with and for the makinterface,
but some parts of it might work with some
other interfaces like the DumbMouse, SerProg,
Phoenix, ...

What this has to do with Radio Amateur :)))))

These nice little EEproms are in almost every
device today. In your GSM phone (containing
the byte for activating the engeneering menu),
in your DVD player (containing the country
code), ... and of course in EVERY Radio Scanner
and Radio Transciever.

I have read (and written to) without problems
the EEproms on my TM-V7 and IC-Q7.

And I am VERY disapointed in ICOM.

The EEprom is used only 25%, the rest is EMPTY.

I don't understand the world any more, instead of
pushing the technologie to the edge, ICOM is cutting
the Frequency range, the number of memorys, ...
and the Hardware is all there.

What a shame, in the intention to sell the IC-R2
they have crippled the IC-Q7.

Well now I am playing a little with the CPU, the
M38267M8L-209GP, I have found the assembly language
manual, ... and with a little luck we will be able
to write our own firmware soon.

And I bet my Firmware will be better then ICOM's, :)
it will have 800 memorys, 80 scan edges and will
cover 0.5-1.6GHz :), and I will help ICOM a little
bit, I will make the IC-Q7 the best mini HT :)))))

Please don't ask my about the possibilitys the
EEprom reprogramming will offer for the IC-Q7,
I have to explore a little bit (In my free time)

The Software was tested with every SmartCard and
EEprom I could find, play a little with the
Software and report any bugs, sugestion, ...

--

Goran Vlaski (Ingra-Beton@t-online.de)
http://vlaski.virtualave.net/
http://www2.crosswinds.net/frankfurt/~vlaski/

3198. Re: 31LQ6 help needed .....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: mmoss@mindspring.com
Message-ID: <36f70df9.1276215@news.mindspring.com>
Source record: 72083
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amature.misc

I wonder about the heater to cathode breakdown voltage. You will
probably have 200 VAC peak and I don't know if the cathode has that
kind of capability?

Marv

On Mon, 22 Mar 1999 10:07:32 -0500, "Paul" <w9ned@blueriver.net>
wrote:

>I am planing on replacing the (4) 6LQ6's in a Dentron 1000B amp with (4)
>31LQ6's.
>Is there any problems with doing this , or does anyone have any suggestions
>as to the best way to do it?
>
>i.e. should I use a filament transformer or just wire them in series and run
>off of 120... ?
>
>The main reason I am doing this is that a 31LQ6 runs $5.00 a piece verses
>the 6LQ6 @ $20.00 + !!
>
>
>--
>Paul
>w9ned@blueriver.net
>Why do we say something is out of whack? What is a whack?
>
>
>

3199. AZDEN PSC7000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: n0osc@aol.com
Message-ID: <19990322230409.08826.00000378@ng21.aol.com>
Source record: 72084

Does anyone know where I can locate information on modifications for the Azden PCS 7000? Any information would be appreciated!

Drue Powers
N0OSC
N0OSC@aol.com

3200. Dragon SY-550 mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Vostok-Radio <vradio@vradio.geon.donetsk.ua>
Message-ID: <01be7509$656dc240$LocalHost@default>
Source record: 72085
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.cb,sci.homebrew

Dear friends,
My task as follows: re-arrange above mobile transceiver
for RX/TX in the band 160 - 170 MHz
If anybody has an experiance, please inform me.
Thanks in advance. Any help will cordially appreciated
--
Sincerely:
Victor - UT0IY
vradio@vradio.geon.donetsk.ua

3201. Re: Shortwave Receiver Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Harry lythall <a@sm0vpo.8m.com.spam>
Message-ID: <36F76AE0.D16240DF@sm0vpo.8m.com.spam>
Source record: 72086

Hi Brett,

It's all on my homepages. See the URLs:
http://sm0vpo.8m.com/rx/rxmod.htm - Conversion to any band.
http://sm0vpo.8m.com/rx/160mod.htm - SSB/CW conversion (for 1.8MHz)

Harry

Brett Hall wrote:

> I'd like to "convert" a simple and inexpensive AM/FM radio into a shortwave
> receiver. I understand a mixer and local oscillator circuit(s) should
> accomplish this end.

3202. Re: Universal Programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f79194.0@news.netwalk.com>
Source record: 72087

Vlaski Goran wrote in message <36F6F8F7.4E658C25@t-online.de>...

>And I bet my Firmware will be better then ICOM's, :)
>it will have 800 memorys, 80 scan edges and will
>cover 0.5-1.6GHz :), and I will help ICOM a little
>bit, I will make the IC-Q7 the best mini HT :)))))
>

Be advised.

In the US modifying a receiver so that it will receiver cellular
transmissions may result in undesirable legal side effects.

Jim
N8Ee

3203. FS Radios and

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Chuckk <chuckk@kerrlake.com>
Message-ID: <36F79D76.C6465929@kerrlake.com>
Source record: 72088
Cross-posted to:
rec.radio.swap,rec.radio.amateur.swap,rec.radio.amateur.homebrew,alt.ham-radio.packet,alt.ham-radio.vhf-uhf,alt.radio.scanner

Spring cleaning

1 Motorola Radius rpb 50 includes 2 key note pagers and book $225

1 Johnson 587-5900-012 dual drop in charger $30

1 Uniden APX 600B gang charger $75

1 Common wealth pot 500 paging terminal $75

3 Uniden FPS 820ts with DTMF pads need new bat $50 each

1 Standard C766L 35 Watt uhf $35

1 Regency U156B Programmable UHF $40 as is

1 CRL PMC 300A Modulation controller $100

2 Landmaster II VHF 136 to 174 $75 for 2

1 New Motorola Tel Tac cell phone never in service new in box $60

1 Heathkit IM 4180 deviation meter works great $100

1 Radius mobile VHF 2 channel mike and bracket $200

1 Science workshop " Poor Man's" Spectrum Analyzer
Includes 3 tuners tracking generator marker generator
Ramp generator digital frequency read out switched filter kit
and book all boards are built have all controls
Cost $479 in kit form will sell all for $400

All equipment is working I am open to all offers prices do not include
shipping

Chuckk
KB2AHZ
KUSTOM
C&E

3204. Torroid Material ? Where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7d8abruoq1@nnrp1.dejanews.com>
Source record: 72089

I'd appreciate your help to discover the material used in toroids applied
in output filter of personal computers switched mode power supply.
The torroid must be capable of handle an energy of 15mJ.
They have a yellow painting and 30mm external diameter.
It would be very helpful to know who manufacture this kind of core.

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3205. Re: Personal Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: dan@dcopeland.com
Message-ID: <36f7a3bd.7866834@news.alltel.net>
Source record: 72090
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

I think you have done enough spaming to
the newsgroups for awhile.

3206. Ten-tec 6M kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Paul Martin <pmartin@bright.net>
Message-ID: <7d8832njt1@cletus.bright.net>
Source record: 72091

Can anyone who has this rig tell me what the first IF freq is and if the transmitter final is a module or discrete transistors. If I buy the kit I was wanting to make a SSB adapter for it and I wanted to make sure I could add bias to the PA stage. Of course, if it is a module like some rigs are that wouldn't be possible. Has anyone already done this and what if any problems did you run up against. Thanks and 73.
Paul N8ULS
pmartin@bright.net

3207. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be7584$e5e0cb40$4de5abc3@default>
Source record: 72092

The other half of the antenna is the outside of the box containing the receiver + the hand holding it + the arm + ... A sweaty palm can make a lot of difference. As Roy said, the RF output stage is designed to survive severe changes in load impedance. If you bend the antenna through 90 degrees and make an inverted-L out of it, it will most likely still maintain solid communication.

Most amateur full-size antenna systems are just as tolerant to misadjustment, abuse and installation errors. That's why the bands are so cluttered up with people chatting to each other so easily. The real art and skills of radio communication lie in preventing PA output transistors from blowing up.

Reg G4FGQ

3208. Re: Torroid Material ? Where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7d8f6r$32i$1@nnrp1.dejanews.com>
Source record: 72093

I'd appreciate your help to discover the material used in toroids applied
in output filter of personal computers switched mode power supply.
The torroid must be capable of handle an energy of 15mJ.
They have a yellow painting and 30mm external diameter.
It would be very helpful to know who manufacture this kind of core.
Thank you very much.

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3209. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: ge@sr.hp.com
Message-ID: <7d8d4p$j6u@canyon.sr.hp.com>
Source record: 72094

Vincent Coppola (vinyc@snet.net) wrote:
: Does anybody know what they are called or how to convert say a regular
: SMA or BNC to HP's connectors? These things are used all over their
: older generation connectors. I need to inject some RF to do some testing
: of a mixer and I don't know how to convert to these things.

I think I need a better description to know what "they" are like.
Since you ask about something that seems to be particularly "HP"
I'll hazard a guess.

If the connector has the same coaxial dimensions as N and is sexless;
that is if each of two mating eonnectors are identical, you may
be seeing an APC-7 connector.

The 8410 network anazyzer used these.

Glenn Elmore n6gn

IP by radio: glenn@SantaRosa.ampr.org
by wire: ge@sr.hp.com
n6gn@sonic.net

|--------- N6GN's Higher Speed Packet WWW Page ---------|
| |
| http://www.tapr.org/~n6gn/index.html |
| http://www.sonic.net/~n6gn |

3210. Re: Universal Programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Ingra-Beton@t-online.de
Message-ID: <36F7BB6B.FC7B35EA@t-online.de>
Source record: 72095

Jim schrieb:
>
> Vlaski Goran wrote in message <36F6F8F7.4E658C25@t-online.de>...
>
> >And I bet my Firmware will be better then ICOM's, :)
> >it will have 800 memorys, 80 scan edges and will
> >cover 0.5-1.6GHz :), and I will help ICOM a little
> >bit, I will make the IC-Q7 the best mini HT :)))))
> >
>
> Be advised.
>
> In the US modifying a receiver so that it will receiver cellular
> transmissions may result in undesirable legal side effects.

Poor you, we in Europe have no such problems. Is there any
other country in the world with such legal problems ???

--

Goran Vlaski (Ingra-Beton@t-online.de)
http://vlaski.virtualave.net/
http://www2.crosswinds.net/frankfurt/~vlaski/

3211. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <7d8ifa$5sv$1@nnrp1.dejanews.com>
Source record: 72096

In article <36F6A41C.70B7@ixpres.com>,
W6JL@ixpres.com wrote:
> N2EY wrote:
> > There is no thrill quite like getting on
> > the air and making contacts with gear you built yourself. I've been totally
> > ruined for manufactured gear by the experience. Sold my Ten-Tec Argosy in
1985
> > and have used nothing but homebrew, converted surplus, kit and
> > restored-from-basketcase gear ever since.
> >
>
> Jim OM,
>
> I would like to add my voice to the chorus that from personal
> experience, homebrewing and modifying has essentially eliminated me as
> an interested buyer of most factory-made rigs, particularly new ones.
> Advertisers in magazines such as QST certainly do not like to hear this,
> although the percentage of homebrewers out there is certainly low, so
> there is no real threat. But as homebrewing becomes easier and easier
> (which it certainly is today, compared with days of yore!), that could
> change; who knows?

Don,

I know EXACTLY what you are talking about. I am Yaecomwood's worst nightmare: the active radio amateur who can't/won't even consider buying their products. And in some ways we ARE a real threat, because we may "infect" others. The QRP folks are almost all kit builders/modifiers/homebrewers, and their numbers are growing. I would be very surprised if the Elecraft K2 (an excellent kit rig) is not a smashing success. If Elecraft makes an optional 100 watt output module (please do!), they will be right in the mainstream market.

I started building rigs because I had almost no money for radio (Novice at age 13), and could build better rigs than I could afford to buy. Now it's 32 years later, and I'm still building rigs. A tough habit to break!

73 de Jim, N2EY

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3212. Help: 40volts heavy duty power suply project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: "Escola B&#65533;sica Louros"
Message-ID: <7d8jel$7uh$1@duke.telepac.pt>
Source record: 72097

I'm looking for a schema of a 40volts heavy duty power suply. Anyone can help me?

Sory my english,
ct3kn - Ricardo Martins

3213. Re: Universal Programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f7cefc.0@news.netwalk.com>
Source record: 72098

Vlaski Goran wrote in message <36F7BB6B.FC7B35EA@t-online.de>...
>Poor you, we in Europe have no such problems. Is there any
>other country in the world with such legal problems ???
>

Is there any other country with such a separation between politicians and
intelligence?

Jim
N8EE

3214. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f7d0c9.0@news.netwalk.com>
Source record: 72099

Reg Edwards wrote in message <01be7584$e5e0cb40$4de5abc3@default>...
>The other half of the antenna is the outside of the box
>containing the receiver + the hand holding it + the arm +

Since 99.9999% of HTs have plastic cases I did not consider the hand and arm as being part of the antenna, although it would certainly have an effect---same thing as putting your 40 Mtr vertical next to a steel frame building.

It is possible to design a helically loaded vertical antenna that will have 50 ohms impedance, but then:
1. Mount it with (essentially) no ground plane
2. Place it 2inches from your head (including eyeglasses!!)
3. Change to a different repeater frequency

...and you have absolutely no idea what the final amp is looking at!

Jim
N8EE

3215. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7d8n3e$9gp$1@nnrp1.dejanews.com>
Source record: 72100

In article <36F6A73D.2311@ixpres.com>,
W6JL@ixpres.com wrote:

> Laura YL,
>
> Elitist is not a bad word; it isn't 'crap', quoting you directly. It
> is, however, not "PC" currently, and perhaps this is what is really
> important to you...

Shrug. I was more concerned with the level of divisiveness and
general bickering and infighting in ham radio. "Political correctness"
(usual translation: "I have nothing meaningful to say") has nothing
to do with it.

If you want to hang out with your friends and compare how big
your, uh, radios are, go right ahead...

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3216. Wanted: copy of users manual DAIWA DP-830 SWR meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <7d8kd9$5bd$1@news3.Belgium.EU.net>
Source record: 72101
Cross-posted to: alt.ham-radio.marketplace,alt.ham-radio.vhf-uhf,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Hello.

Who can help me on a copy of the users manual from the DAIWA DP-830 swr meter ?

The expenses wil be payt by me !

Let me now if you can help me.

send me back a e-mail: geert.pirens@ping.be

73.

Geert - ON1DQD

3217. Need converter to use HT Mike on a CB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Adam Huber <ahuber@csulb.edu>
Message-ID: <36F7D76E.89D613CE@csulb.edu>
Source record: 72102
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.misc

I know that most HT mikes will not work with most CBs because they use different types of microphones (I don't remember the names.) I need to use an HT mike on both my HT and my CB (using a switch to switch back and forth.) I was reading either QST or 73 years ago and saw a schematic for a converter which one could use between the HT mike and the CB. I can't find the article. Does anyone know where I can find this article or a schematic for this device.

Thanks and 73,
Adam Huber
KD6SRI - Genereal
kd6sri@yahoo.com

3218. Re: Universal Programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Ingra-Beton@t-online.de
Message-ID: <36F7EB3B.A88A5EC3@t-online.de>
Source record: 72103

Jim schrieb:
>
> Vlaski Goran wrote in message <36F7BB6B.FC7B35EA@t-online.de>...
> >Poor you, we in Europe have no such problems. Is there any
> >other country in the world with such legal problems ???
> >
>
> Is there any other country with such a separation between politicians and
> intelligence?

What are you talking about, as far as I know only in the US
the radios are cellular blocked, Europe, Canada, ... have
nothing similar, or am I wrong ???

--

Goran Vlaski (Ingra-Beton@t-online.de)
http://vlaski.virtualave.net/
http://www2.crosswinds.net/frankfurt/~vlaski/

3219. Re: Torroid Material ? Where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990223114549.OUI22.ejune@intuitive-data.com>
Source record: 72104

Gilson,

Those are most likely Amidon toroid cores. You can get more information
at:

http://www.bytemark.com/amidon/

--
Regards,

Eric June
KU6J

3220. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F7F0B2.59E2@eece.maine.edu>
Source record: 72105

Glenn Elmore wrote:
>

> I think I need a better description to know what "they" are like.
> Since you ask about something that seems to be particularly "HP"
> I'll hazard a guess.
>
> If the connector has the same coaxial dimensions as N and is sexless;
> that is if each of two mating eonnectors are identical, you may
> be seeing an APC-7 connector.
>
> The 8410 network anazyzer used these.
>
> Glenn Elmore n6gn
>

Do the APC-7 connectors screw together? Our school here has some old
microwave equipment which has sexless connectors, but they have to be
pushed on/pulled off. If these connectors are not APC-7's, then what
are they?
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3221. Raytheon SNG83N CHIP WTD

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: mstud26073@aol.com
Message-ID: <19990323154612.20282.00000535@ng-fa1.aol.com>
Source record: 72106

I'm looking for a source for this chip (SNG83N) manufactured by Raytheon. It appears to be a dual 3 gate AND with strobe (TTL) housed in a 14 pin DIP package.

Thankyou, Mike W7MS

3222. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36F7F914.5CF5@pop.valley.net>
Source record: 72107

Shawn Upton wrote:
>
> Glenn Elmore wrote:
> >
>
> > I think I need a better description to know what "they" are like.
> > Since you ask about something that seems to be particularly "HP"
> > I'll hazard a guess.
> >
> > If the connector has the same coaxial dimensions as N and is sexless;
> > that is if each of two mating eonnectors are identical, you may
> > be seeing an APC-7 connector.
> >
> > The 8410 network anazyzer used these.
> >
> > Glenn Elmore n6gn
> >
>
> Do the APC-7 connectors screw together? Our school here has some old
> microwave equipment which has sexless connectors, but they have to be
> pushed on/pulled off. If these connectors are not APC-7's, then what
> are they?
> --

Hello--
These might be General Radio (GR) 874 connectors; both inner pin and
outer shell use a hard-to-describe split-cylinder design.

If anyone needs replacement center pins for these connectors, I can
offer some at a reasonable price.

73,
Brad AA1IP

3223. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <7d9407$lh1$1@nnrp1.dejanews.com>
Source record: 72108

In article <7d5rv3quc1@nnrp1.dejanews.com>,
marsgal42@hotmail.com wrote:
> In article <19990321200632.19585.00000016@ngol02.aol.com>,
> n2ey@aol.com (N2EY) wrote:
>
> > (snip...) Any type of home construction is a good thing.
>
> Amen. In this day and age I want to be as lenient as possible
> on the definition of "homebrew" - partly because few people
> ever build anything anymore, and partly because I can't
> stand the elitist crap that goes with making distinctions
> between "built from a magazine article", "built from a kit",
> "personal design from discrete components", "personal design
> with VLSI", and so on.

Hello Laura,

I must strongly disagree with being "as lenient as possible on the definition of homebrew". Building a kit is NOT the same thing as homebrewing from scratch. That is NOT a put-down of the kitbuilder - it's just being accurate. To label all types of home building as "homebrew" is an insult to some (the scratch- builder) and patronizing to others (the kit builder). It's electro-political correctness - mustn't use terms that might, just might, offend certain groups, but it's perfectly fine to offend others.

It's not "elitist crap" to use exact definitions. Not in my book.

I make all my own bread. Used to make it all by hand - now I have a machine. The machine made stuff is OK, but not as good as the handmade kind. Both are far better than anything I can buy in the stores. And yes, I make the distinction between machine made and hand made. Because there IS a difference.
>
> "Frankly, my dear..."

Frankly, some of us DO give a darn.

73 de Jim, N2EY

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3224. FA: MEISSNER ANALYST Vintage Test Gear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: indyno@spammytheriver.com
Message-ID: <36F81AB5.C62801D8@spammytheriver.com>
Source record: 72109

Real nice!

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=81982001

To email, remove: nospammy from my address.

3225. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36F8195B.7106@pop.removethistomailme.net>
Source record: 72110

n2ey@aol.com wrote:
>
> In article <7d5rv3quc1@nnrp1.dejanews.com>,
> marsgal42@hotmail.com wrote:
> > In article <19990321200632.19585.00000016@ngol02.aol.com>,
> > n2ey@aol.com (N2EY) wrote:
> >
> > > (snip...) Any type of home construction is a good thing.
> >
> > Amen. In this day and age I want to be as lenient as possible
> > on the definition of "homebrew" - partly because few people
> > ever build anything anymore, and partly because I can't
> > stand the elitist crap that goes with making distinctions
> > between "built from a magazine article", "built from a kit",
> > "personal design from discrete components", "personal design
> > with VLSI", and so on.
>
> Hello Laura,
>
> I must strongly disagree with being "as lenient as possible on the definition
> of homebrew". Building a kit is NOT the same thing as homebrewing from
> scratch. That is NOT a put-down of the kitbuilder - it's just being accurate.
> To label all types of home building as "homebrew" is an insult to some (the
> scratch- builder) and patronizing to others (the kit builder). It's
> electro-political correctness - mustn't use terms that might, just might,
> offend certain groups, but it's perfectly fine to offend others.
>
> It's not "elitist crap" to use exact definitions. Not in my book.
>
> I make all my own bread. Used to make it all by hand - now I have a machine.
> The machine made stuff is OK, but not as good as the handmade kind. Both are
> far better than anything I can buy in the stores. And yes, I make the
> distinction between machine made and hand made. Because there IS a difference.
> >
> > "Frankly, my dear..."
>
> Frankly, some of us DO give a darn.
>
> 73 de Jim, N2EY
>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

How about this definition? Looking at a schematic of your radio, point to any individual component at random. If you can say, correctly, what that component is, what it does, why it's there, what would happen if it weren't there, and how its parameters were chosen, with a score of 90% or better across a run of 25 randomly-chosen components, you're eligible for certification as an Official Homebrewer(tm). If you can't, you're not.

This is convenient because it applies equally to the rig you built from tubes and old TV parts, the rig you built from a Heathkit, and the shiny new 5-conversion Yaesu FT-6000SUX your spouse got you for Christmas. Successfully passing my "test" means you don't have to prove anything further to anyone, regardless of who built your rig and how. This is a state for which one should strive mightily, since it's not "elitism" (the desire to run with the big dogs for no other reason than to be in their private club) or the "who gives a damn how it works, as long as it transmits" attitude that pervades the rest of the hobby. :-)

Really, this debate is an absurd one. It all comes down to motivation.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

3226. FYI: 60 Plus HomeBrew Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <36F82B64.7355@ix.netcom.com>
Source record: 72111

Just finished searching for Ham HomeBrew Pages -- the 60 that didn't include Home Brewing Beer are linked at URL:
http://www.ac6v.com/pagehb.html

7 and the old 3
Rod in San Diego
--
AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 320,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3227. CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Vostok-Radio <vradio@vradio.geon.donetsk.ua>
Message-ID: <01be7510$61c85cc0$6606a8c0@default>
Source record: 72112
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Hi, my dear friends&collegues
Thanks for reading of this
Does anybody know, how to shift
working band of simple 40ch CB-tranceiver
to band around freq.s 28 - 29 MHz
with the same band width
Thanks
UT0IY

3228. Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7d9eq3$i40$1@news1.fast.net>
Source record: 72113
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

My employer, Lucent Technologies, is looking for a Senior RF Technican
with the following abilites and experience:

Senior RF Technician Job Description

1. Ability to read schematics.
2. Ability to solder, including small surface mount devices,
and build up RF, analog, and digital circuits in both prototype
and "small lot production" environments.
3. Able to operate various equipment including oscilloscopes,
voltmeters, spectrum analyzers, and RF generators.
4. Familiar with RF design principles and RF test methods for
return loss, transmission loss, output power, matching and RF grounding.
5. Ability to troubleshoot RF circuitry down to the component level.
6. Perform testing of products based upon a starting point provided
by RF engineer.
7. PC competency using word processing and spreadsheets, good
communication and documentation skills required.
8. Responsible for management of engineering lab, including
ordering/stocking of components and lab accessories.
9. Two years minimum previous experience as RF Technician

Location: Allentown, PA

This will *probably* be a 6 month contract position initially, with
renewal or conversion to permanent, direct employment likely
for the right individual.

If you're interested in working with modern digital radio equipment
in a design and development environment, please e-mail me your
resume ASAP. (MS Word or .pdf format preferred, though plain
ASCII, MS Works, or WordPerfect formats cana be handled as well.)

73,
- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
```

Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBNvg+VZe+N6+q84HiEQLc9wCg4MRdPxiYRt0tBDL9HYPn+Na0VAgAoKNL
C8aTm6rl45LpcsVYKE34JqjB
=xZsA
-----END PGP SIGNATURE-----

3229. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Paul K <pjktg@itis.com>
Message-ID: <7d9f6q$rg4$1@news.itis.com>
Source record: 72114
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Yes . No Problem. Just place it carefully behind a truck wheel and back up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased with the results.
You can repaint later after you give it a test on the 10 meter AMATEUR BAND where you need a license. If you had a license you would know how to do this simple feat.

Paul K. N9EMX

3230. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Al Watts <alnmel@mediaone.net>
Message-ID: <36F841C4.8C9EADC3@mediaone.net>
Source record: 72115
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

Even more strange is to list your shipping price on this post but not the price of the mug, true it is in the Order Form, but not on the post, would be appreciated by interested parties and maybe more productive.

CommQuart wrote:

> Strange. I found the prices plainly marked at website
> order form.
>
> Peter
>
> Mark Goad 35 wrote in message ...
> >You did not tell us what the price of your mug is. You only stated that it
> >costs $4 to ship it. Are you any relation to Monty Crisco??
> >
> >

3231. AM-6155 / AM-6154 FA e-Bay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36F84D70.54C900C1@uswest.net>
Source record: 72116
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

I have placed one of each of these amplifiers on e-bay they are clean
and
not beat up. They are just as received from the FAA.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=81376582
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=81384430

Thanks
Art
KB7WW

3232. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F84EB1.1CFB@eece.maine.edu>
Source record: 72117
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Not to flame, but how does one go about entering into the field of RF
engineering? I've been studying electrical engineering for four years
now, and I'm starting to look ahead to entering the job market.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3233. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Paul K <pjktg@itis.com>
Message-ID: <7d9jooud1@news.itis.com>
Source record: 72118
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

If this was a legitimate request from a Russian Ham, I apologize for my scathing sarcasm. Lately there have been a lot of CBers and truckers moving up into the 10 meter amateur band. I thought it was one of these guys trolling. Sorry. Paul K

Paul K wrote in message <7d9f6q$rg4$1@news.itis.com>...
>Yes . No Problem. Just place it carefully behind a truck wheel and back
>up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased
>with the results.
> You can repaint later after you give it a test on the 10 meter
AMATEUR
>BAND where you need a license. If you had a license you would know how to
>do this simple feat.
>
> Paul K. N9EMX
>
>

3234. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <36F85857.3608EAF0@ix.netcom.com>
Source record: 72119
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

6 Month Contract?? No thanks.
"Temp" or "contract" jobs are for suckers.
I've been there and I'd rather swamp toilets then play the
"Oh, just a few more weeks and Human Resources will get to you!
Honest we're going to hire you in just a few more days!" game.

I can't say about your specific company-- maybe you're the
rare exception that is being straight with prospective employees--
but I've seen companies "dangle the carrot" in front people
while treating them like dirt over and over again.
It's counter-productive and it's immoral. And you have
no rights when you're a "contractor." Employers can do
whatever they please to you, no matter how despicable,
and you can do exactly -nothing- about it.

No RF tech worth his soldering iron is going to put up with it
for very long. How long would YOU work with no medical
insurance for you kids, hmmmm??

Good RF techs who know their stuff and will COME TO WORK and
WORK when they get there are getting *really* tough to find.
Yes, companies can get people who know how to change parts
and just "meat-grinder" them-- sure costs alot
to do that and not much gets fixed, but they can do it.

I'm a darn fine RF tech and I've been a manager working
the very best techs walking the planet, IMHO ;-).
I wouldn't take a "contract" position on a bet,
and I don't think any of my people would have either.
Either pony up the money for wages and benies
or go get yourself a 22-year-old tech school grad who comes
to work about 3 days a week, 2 of which he spends on the phone.

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

3235. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <cmZJ2.869$G6.3778@news.goodnet.com>
Source record: 72120
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Oh come on now...

David Stinson wrote
>
>6 Month Contract?? No thanks.
>"Temp" or "contract" jobs are for suckers.

For a person who has a steady income from an earlier retirement
(I retired at 40), and only wants to work part time in various fields,
it is a good way to stay busy and interested.

>I've been there and I'd rather swamp toilets then play the
>"Oh, just a few more weeks and Human Resources will get to you!
>Honest we're going to hire you in just a few more days!" game.

Just send the resume and the cover letter, and forget about it.
If they call, and you're busy, tell them tough luck. Why worry,
be happy...

>It's counter-productive and it's immoral. And you have
>no rights when you're a "contractor." Employers can do
>whatever they please to you, no matter how despicable,
>and you can do exactly -nothing- about it.

On the other hand, you don't have to put up with all the
company crap. You come in, do the work, go home. No
additional duties.

>No RF tech worth his soldering iron is going to put up with it
>for very long. How long would YOU work with no medical
>insurance for you kids, hmmmm??

What a crock. How do you think people who build homes
all their life get by? They'd love to get a 6 month contract.
One contract leads to another. If not, you go to work at 7-11
until the next one comes up.

>I wouldn't take a "contract" position on a bet,
>and I don't think any of my people would have either.

Who cares.

>Either pony up the money for wages and benies
>or go get yourself a 22-year-old tech school grad who comes
>to work about 3 days a week, 2 of which he spends on the phone.

Go tell em! Boy, they're gonna change their ways now!!

>
>73 DE Dave Stinson AB5S

3236. Pin-out for Shure 527C?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <36F88AB5.1E789BA0@asu.uswest.net>
Source record: 72121
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

I need pin-out info for a the Shure 527C dynamic hand-mic. Need to go
from present 6-wire connector to 4-wire. Any net based archives of such
info, or mayhaps someone here has it?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

3237. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: kh2d@my-dejanews.com
Message-ID: <7da6aufmh1@brokaw.wa.com>
Source record: 72122
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Now wait a minute, Dean. Before you go off the deep end you have to realize a few things here. Paul probably has never heard any UT0 stations on his local VHF repeater, so you have to excuse his ignorance.

With the 400,000 Indonesian, Filipino, Chinese, and South American CB'ers we have on ten meters now, one more 5 watt signal will do permanent damage to the E layer and ten meters will never work again.

And you have to realize that Paul probably was a CB'er before he got his ham license, so it's his job as a duly licensed amateur radio operator to condem anyone associated with 11 meters in order to squelch any thoughts that maybe he used to operate there....

Finally, Dean, you have to realize that Paul doesn't realize that the CB'ers all over the ten meter band are using Kenwood, Icom, and Yaesu radios and 'export models' of good buddy stuff, so few of them are converting anything to become a pain in the neck.

Or maybe Paul is just like he is because somebody backed up over him with a truck.

And to our friend, UT0IY, yes, you can convert old 11 meter radios to ten meters, but how to do it is very dependent on the type of radio. The old one I converted required crystals be changed, some of the new ones don't. Post the model of the radio you have and maybe we can help you find out how to do it....

73, Jim KH2D
http://www.qsl.net/kh2d

mustang_maniac@centuryinter.net (Dean & Cindy Hemphill) wrote:

>In article <7d9f6q$rg4$1@news.itis.com>, you say...
>>
>>Yes . No Problem. Just place it carefully behind a truck wheel
>>and back up. Thats all theres to it. Easy Huh?? Try it. Im sure
>>youll be pleased with the results.
>> You can repaint later after you give it a test on the 10 me
>>ter AMATEUR BAND where you need a license. If you had a license
>>you would know how to do this simple feat.
>>
>> Paul K. N9EMX

>GEEZ! What a jackass response! Our Russian ham friend was looking
>for some simple information, and you flamed him! Still fighting the
>Cold War or something? He DOES have a license by the way, and if
>you'll look at his post again, you'll see that he's placed his HAM
>CALL SIGN, UT0IY, at the end of the post. If YOU were a real ham,
>you'd recognize that! I am embarassed to be a US ham, if you're the
>kind of colleague that I am to be associated with! I think you owe
>him an apology, you brainless boob!

>Dean, K5DH (a REAL radio amateur for 22 years)

3238. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF9402L.JE@netcom.com>
Source record: 72123

In article <7d65op$o5l$1@mendelevium.btinternet.com>,
David Cunningham <D.L.C@btinternet.com> wrote:
>Thankyou to those who replied to my last message regarding frequency
>counters. Although it may well be cheaper and easier to buy a second hand
>model, I would still rather make my own; The experience gained would be as
>useful to me as the finished project. I am new to digital electronics and
>would rather start with something
>simple, using 74LS series TTL, rather than a more complicated
>microprocessor, and the counter need only work at frequencies as high as,
>say, 30MHz. I intend to use the 74LS90 and 74LS48 for each display digit,
>using the divide-by-10 output of each 74LS90 to drive the next digit. I am
>unsure how to make the input amplifier and gate/reference oscillator,
>however, and would be grateful if anyone could help.

You could boost things a bit by using a 74F160 or 74F162 as the first
stage. (The 74F90 doesn't seem to exist).

If you can find the various hobby magazines back for the late 1980's,
there are several project articles for counters. Especially in
Radio-Electronics. For a while there, Optoelectronics and Startek
where using project articles as cheap advertising and there are at
least 3 different units in that time period. A lot of them use
high integration ICs for the actual counters, but the input circuits
are useable. One I remember uses a LT1016 comparator for a 50 MHz
input stage. So check to see what kind of fireball comparators that
Linear Technology, Maxim and Analog Devices have available in their
lines.

For the concepts behind counters, there's a great section on frequency
counters in "The Art of Electronics" by Horowitz and Hill, and the
various Don Lancaster cookbooks (TTL Cookbook, CMOS cookbook) will
have something too.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3239. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-23 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF9402p.K6@netcom.com>
Source record: 72124

In article <36F6DB27.7685@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>That turns out to be pretty easy with modern MMIC amplifiers. Look at
>the Mini-Circuits MAR-3, MAR-4, MAV-11, and similar parts that offer +10
>dBm output into 50 ohms. (http://www.minicircuits.com) You can
>generally AC-couple directly into a TTL gate once you have +10 dBm or so
>worth of signal. Not strictly kosher but it usually works.

That's what 74xx14's are for. (xx for the logic family of your choice).

These parts
>are easy to use -- just mount the MMIC(s) directly to an unbroken ground
>plane of copper-clad board. (You can also cascade a couple of them to
>'square' the signal, for better reliability on slow sine waves.) Some
>experimentation may be necessary to get the best response on a variety
>of signal levels and waveshapes, but this is probably still the simplest
>way to go.

In other words, if your layout is poor, the line out from the MMIC will
ring and you'll find you've got a input amplitude dependent frequency
multiplier in there. Depends on how hard the MMIC gets driven and
how sharp the clipping when it limits.

I got several weeks of entertainment modifying a total piece of sh*t
Datascan brand frequency counter so that it wasn't a random number
generator. That problem was just one of many in that unit. (The PN5179's
on a single sided board made better oscillators than input amplifiers.
And the claimed 1 megohm of input impedance was across a forward biased
clipping diode. And the 7 volt max 74HC IC's run on 8 volts, etc...)

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3240. RC transmitter power

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Cody Machler <cody_machler@hmc.edu>
Message-ID: <36F9AD75.DED99F39@hmc.edu>
Source record: 71979

Hi,

I'm on an engineering clinic team at Harvey Mudd College in Claremont, CA. Part of our project is implementing a stanard RC system into a water surface vehicle. Currently, our signal range is just the standard .5 to 1 mile, depending on the conditions. We need to increase this to 3 or 4 miles.

Our plan is to divert the signal before it runs through the antenna matching circuit, and then send it into a linear amplifier. However, I'm having difficulty designing a workable linear amplifier. So I was wondering if you could pass along any hints or suggestions to us.

The signal is a 75MHz signal. You can assume that we have unlimited power for the circuit, and we have a hefty budjet for the project. Also FCC regulations have been taken care of since our project is being sponsored by another government agency.

Thank you for your time.

Cody Machler

3241. Re: Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Smith-Gaspard <w4ono@citrus.infi.net>
Message-ID: <36F9BC4E.B4036C9@citrus.infi.net>
Source record: 71980
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi, Aaron ....

Some of the minimum references I use for phased vertical array design
follows:

Terman, Frederick E. ELECTRONIC AND RADIO ENGINEERING McGraw-Hill,
4th Ed 1955.

Monser, George J. ANTENNA DESIGN - A PRACTICAL GUIDE McGraw-Hill,
1st Ed 1996.

Orr, William I. ALL ABOUT VERTICAL ANTENNAS Radio Publications,
1st Ed 1986.

Noll, Edward M. 73 VERTICAL, BEAM AND TRIANGLE ANTENNAS MFJ
Enterprises,
Reprint Ed 1992.

ITT. REFERENCE DATA FOR RADIO ENGINEERS Howard W. Sams,
5th Ed 1972

Moxon, L. A. HF ANTENNAS FOR ALL LOCATIONS R.S.G.B. England,
Reprint 1991.

Orr, William I. RADIO HANDBOOK Howard W. Sams, 23 Ed 1987.

Plus the other A.R.R.L. publications already mentioned above.

Hope this helps.

73 de Jim W4ONO .-.-.

==========

Aaron Hanson wrote:
>
> Does anyone have recommendations for phased-array antenna reference
> material? I'm looking for something with some basic theory, and some
> complete project examples (preferrably for UHF, but not required).
>
> Thanks!
> -Aaron

3242. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Rick Kaumeier <k0vj@arrl.net>
Message-ID: <36F9D51B.7A4@arrl.net>
Source record: 71981
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Carl R. Stevenson wrote:

> Mike ... the "ad" was for a tech, not an engineer ... and
> because *good* techs are so hard to find, many companies
> hire them through a contract agency for 3-6 months to see
> how they work out before converting them to permanent
> employees.

Carl,

What's the average starting wage for an RF tech at Lucent? Good techs may be hard to find, but it also seems that the average wage is rather low for a "high tech" position.

I realize that this is partially due to the fact that many techs are non-degreed, having gained their experience at a vo-tech school or through the military.

Rick Kï¿½VJ

3243. fs mfj 259 (not "b") $135

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: The one and only! <mitch96@pobox.com>
Message-ID: <36F85A03.B0E0AAFC@pobox.com>
Source record: 72029

Manuel, charger, I ship lower 48.
--
mitch Ww4mL
Hollywood, Fla.

3244. Re: FYI: 60 Plus HomeBrew Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36f866cd.2736942@netnews.worldnet.att.net>
Source record: 72030

On Tue, 23 Mar 1999 16:01:40 -0800, AC6V <ac6v@ix.netcom.com> wrote:

>Just finished searching for Ham HomeBrew Pages -- the 60 that didn't
>include Home Brewing Beer are linked at URL:

But, but, but... oh, never mind.

Anybody ever try making their own vacuum tubes from beer bottles? Does
THAT fit anybody's definition of homebrew?

Dave

3245. Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Aaron Hanson <nanobit@worldnet.removethis.att.net>
Message-ID: <7d9qt1$bb5@bgtnsc03.worldnet.att.net>
Source record: 72031
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Does anyone have recommendations for phased-array antenna reference material? I'm looking for something with some basic theory, and some complete project examples (preferrably for UHF, but not required).

Thanks!
-Aaron

3246. Re: Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: "George T. Baker" <w5yr@swbell.net>
Message-ID: <36F8861D.B16A1C99@swbell.net>
Source record: 72032
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

ARRL Antenna Book, Low-Band Dxing, and articles by Roy Lewallen, W7EL, in
the Antenna Compendium and others.

72/73, George
Amateur Radio W5YR, in the 53rd year and it just keeps getting better!
AutoPOWER Systems, Fairview, TX (30 mi NE Dallas) Collin County
QRP-L QRP-ARCI FISTS NORCAL ZOMBIE #522 ARS 10-X 33.2 N 96.6 W EM13RE

Aaron Hanson wrote:
>
> Does anyone have recommendations for phased-array antenna reference
> material? I'm looking for something with some basic theory, and some
> complete project examples (preferrably for UHF, but not required).
>
> Thanks!
> -Aaron

3247. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <36F8D61B.55CFF91F@bellsouth.net>
Source record: 72033

Dean & Cindy Hemphill wrote:
> GEEZ! What a jackass response! Our Russian ham friend was looking

Actually, Ukranian<g>.

UT0IY - it will probably be necessary to know what model of CB you have in mind. There were different frequency-determining circuits in different models. (and I've heard reports that some newer models cannot be converted)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3248. Re: Help: 40volts heavy duty power suply project

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: "Michael A. McCormick" <tigger1@pa.net>
Message-ID: <7d9v8r$p38$1@news.pa.net>
Source record: 72034

what do you mean by heavy duty, how many amps etc..

--
Michael A. McCormick
Shermans Dale Computer Technologies
mccormckSDCT@xoommail.com
Remove SDCT for email
Escola B&#65533;sica Louros <@mail.telepac.pt> wrote in message
news:7d8jel$7uh$1@duke.telepac.pt...
>I'm looking for a schema of a 40volts heavy duty power suply. Anyone can
>help me?
>
>Sory my english,
>ct3kn - Ricardo Martins
>
>

3249. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: John Kiljan <jpkiljan@ix.netcom.com>
Message-ID: <36F8A52B.7D3729D5@ix.netcom.com>
Source record: 72035
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Paul, such a rude response!

But the apology speaks well of your character--most would not have had the courage to type it. Let's see if we can help this guy (or his radio sport club) out in simple English:

Okay Vostok-Radio, the conversion involves changing the reference crystal in the phase-lock-loop (PLL) circuit to the part you are interested in moving to in 10M. In North America, most AM activity is 29.000 to 29.100 MHz, sideband is from 28.300 on up to 28.700 or so. You can also frequency shift the carrier and operate in the FM portion of 10M from 29.400 to 29.700, but this is a slightly harder modification unless you have one of those FM CB radios that are built for overseas markets. A company named Melco used to offer a kit to make an FM conversion of an AM CB radio that was pretty easy to do. After the PLL's xtal is changed the reference voltage must be adjusted. Harder to figure out is the band-pass filter that comes after these oscillators. The new frequency will be attenuated if this is not changed. Usually it involves just changing a simple capacitor or inductor or two.

The hard part to all of this is understanding the theory behind PLL's and in finding a circuit diagram (schematic) since they are not usually published by the manufacturers and there are so many different models that have been sold. There is a CB web page that sells service manuals for CB repairmen that may help. Try

http://www.cbcintl.com

or just keep asking on these newsgroups if you have more specifics of the circuit you are working on. In the 1970's an American magazine called '73' published many articles on CB conversions. I'm afraid that I am not going to be much help. It has been 15 years since I did my last conversion and I cannot even find my notes.

If you are going to operate illegally, be sure to work from 27.5 to 28.3 MHz, always overmodulate, add echo effects if you can, and try to speak a very fast Spanish or Portuguese so that you blend in with the other operators I usually hear there. Just kidding!

Good luck,

-- John (N0BUP)

Paul K wrote:

> If this was a legitimate request from a Russian Ham, I apologize for my
> scathing sarcasm. Lately there have been a lot of CBers and truckers moving
> up into the 10 meter amateur band. I thought it was one of these guys
> trolling. Sorry. Paul K
>
> Paul K wrote in message <7d9f6q$rg4$1@news.itis.com>...
> >Yes . No Problem. Just place it carefully behind a truck wheel and back
> >up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased
> >with the results.
> > You can repaint later after you give it a test on the 10 meter
> AMATEUR
> >BAND where you need a license. If you had a license you would know how to
> >do this simple feat.
> >
> > Paul K. N9EMX
> >
> >

3250. Re: Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Mark Keith <nm5k@wt.net>
Message-ID: <36F889FB.60AF@wt.net>
Source record: 72036
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Aaron Hanson wrote:
>
> Does anyone have recommendations for phased-array antenna reference
> material? I'm looking for something with some basic theory, and some
> complete project examples (preferrably for UHF, but not required).
>
Most all the antenna books cover it. ARRL has quite a bit, Bill Orr
radio handbook has a section etc. MK
--
http://web.wt.net/~nm5k

3251. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Tommy Starr <tommystarr@hotmail.com>
Message-ID: <36F8AA7F.CF09BE77@hotmail.com>
Source record: 72037
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

uh oh.. another disgruntled ham radio operator that's gonna get postal on us
Tommy Starr

Paul K wrote:

> Yes . No Problem. Just place it carefully behind a truck wheel and back
> up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased
> with the results.
> You can repaint later after you give it a test on the 10 meter AMATEUR
> BAND where you need a license. If you had a license you would know how to
> do this simple feat.
>
> Paul K. N9EMX

3252. Please help me! 6 meter HB amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990324080745.28537.00000661@ng156.aol.com>
Source record: 72038

Hello fellow homebrews.....I recently completed a homebrew 6 meter 8877 amplifier from radio handbook plans (W6PO design I think). I am having a problem getting more than 400 watts from it. I am driving it with 100 watts and I am only getting about 35ma. of grid current and about 1 amp of plate current, but only 400 watts output. This is not right! I am thinking that the tank circuit is not resonant but the grid dipper says yes, the cathode tuning is working fine. My experience with 8877's tells me that the grid current rises sharply with increase in drive power until you load down the tank circuit. I can only muster 35 ma of grid current but lots of plate current with little increase in power output. I have checked the tube its 100% so its not that. Anybody give me suggestions on where to look for a problem? Please e-mail direct if you can shed some light on the problem...Thanks 73 LOU

3253. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Alan Glashan <alan.glashan@dundee.ncr.com>
Message-ID: <01be75f8$42404500$af014999@user>
Source record: 72039
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Good grief Paul,
One must assume that there is some history of conflict between the two of
you, for you to start ranting away like this.
What an interesting way you have of conveying the spirit of Amateur Radio.
(sarcasm was never my strong point)

Alan

UT0IY wrote

>Hi, my dear friends&collegues
>Thanks for reading of this
>Does anybody know, how to shift
>working band of simple 40ch CB-tranceiver
>to band around freq.s 28 - 29 MHz
>with the same band width
>Thanks
>UT0IY

Paul K <pjktg@itis.com> wrote in article <7d9f6q$rg4$1@news.itis.com>...
> Yes . No Problem. Just place it carefully behind a truck wheel and back
> up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be
pleased
> with the results.
> You can repaint later after you give it a test on the 10 meter
AMATEUR
> BAND where you need a license. If you had a license you would know how
to
> do this simple feat.
>
> Paul K. N9EMX
>
>
>

3254. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: CitySlicker <mannod@concentric.net>
Message-ID: <7daqca$o2q@journal.concentric.net>
Source record: 72040
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Just a sample of what you find on the Ham NG and the Ham Bands. Makes me
want to get a ticket...NOT!!

Tommy Starr wrote in message <36F8AA7F.CF09BE77@hotmail.com>...
: uh oh.. another disgruntled ham radio operator that's gonna get postal on
us
:Tommy Starr
:
:Paul K wrote:
:
:> Yes . No Problem. Just place it carefully behind a truck wheel and back
:> up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be
pleased
:> with the results.
:> You can repaint later after you give it a test on the 10 meter
AMATEUR
:> BAND where you need a license. If you had a license you would know how
to
:> do this simple feat.
:>
:> Paul K. N9EMX
:

3255. Sears Roadtalker SSB schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: stewgoat@indy.net
Message-ID: <7daqgskbt2@news.indy.net>
Source record: 72041

I need the schematic to finished my conversion to 10 MTRS. Crystal is installed and I have the 73 magazine article but I need the test points and can't read the coil number in the small oscillator doghouse. I'll be happy to pay reasonable charges.

73,

Jeff
KA9DAD

http://www.qsl.net/ka9dad

3256. Xtals Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: milo17@aol.com
Message-ID: <19990324090245.28537.00000675@ng156.aol.com>
Source record: 72042

Looking for xtals for the following frequencies (or close, no need to be exact)
:

15.395, 15.405, 15.415 , 15.435, 23.815, 23.785, 23.915, 23.965, 24.015 and
24.065. Thanks to the group in advance !
Mike

3257. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F8FA64.3F54@eece.maine.edu>
Source record: 72043
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

I'm curious to as which CB's would make the best subjects for
conversion. I know that it would be better to get one w/SSB (who does
work w/AM?), but I'm more curious about what models work best. After,
why pay $100-200 for a real 10m radio when, if I spend $20 bucks for an
old cb and do $10 worth of mods, I can have something that does the
trick?

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3258. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Jeff Johns <jeffj@scott.net>
Message-ID: <145082550016039NEWS2LX@news.scott.net>
Source record: 72044
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

On 24 Mar 1999 05:46:50 PST, "CitySlicker" <mannod@concentric.net> wrote:

> Just a sample of what you find on the Ham NG and the Ham Bands. Makes me
> want to get a ticket...NOT!!

I agree it was a bit of a premature reaction but if you don't want to be a
ham why read the newsgroups and listen to us on the air?

73 Jeff

--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------
jeffj@scott.net w4jef@amsat.org	Reserve Patrol Captain
Satellite: Mir R0MIR-1, AO-27	Jefferson County Sheriff's Dept
200LX+BayPac+FT50=Portable Packet	QTH Birmingham, AL USA

3259. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: z005381b@bc.seflin.org
Message-ID: <7db008$opb@nntp.seflin.org>
Source record: 72045
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Shawn Upton (supton@eece.maine.edu) wrote:
: Not to flame, but how does one go about entering into the field of RF
: engineering?

Not to be too simplistic - but - you accept a job in RF engineering. :)

RF engineering is a good field because most students are lured by the computer world. (Not as many RF people.) Having an amateur license will help, IF you also know and have been playing around with the circuits. The hard part is getting started without previous experience. Ham radio can give you that edge if you've been building your own stuff etc.

: I've been studying electrical engineering for four years
: now, and I'm starting to look ahead to entering the job market.

After four years, I'm sure you have already considered something along the lines of my first sentance. :)

A good first step;
Look in any issue of "RF Design" magazine. (Lots of job offers.) Their sit is; www.rfdesign.com
--
: Shawn Upton, KB1CKT Tech Plus

Good luck, you've picked an life long interesting field.
--
Jim Rosenthal, WA4STJ

3260. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: wpeloqui@ismi.net
Message-ID: <7db4bk$bq8$1@nnrp1.dejanews.com>
Source record: 72046
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Hey, wait a minute! I have held a amateur license for 18+ years and I don't know how to convert a CB to 10M. Actually I have just started using 10M mobile and think it is great fun. I want to put an inexpensive radio in my Jeep and I would appreciate learning the answer to this question.

BTW: He did sign his message with his call, UT0IY.

Willie
N8MDY

In article <7d9f6q$rg4$1@news.itis.com>,
"Paul K" <pjktg@itis.com> wrote:
> Yes . No Problem. Just place it carefully behind a truck wheel and back
> up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased
> with the results.
> You can repaint later after you give it a test on the 10 meter AMATEUR
> BAND where you need a license. If you had a license you would know how to
> do this simple feat.
>
> Paul K. N9EMX
>
>

Willie Peloquin
Senior Software Engineer - Contract
http://www.ismi.net/~wpeloqui

"It is unwise to

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3261. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F907BD.ABD@eece.maine.edu>
Source record: 72047
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

James Rosenthal wrote:

>
> Not to be too simplistic - but - you accept a job in RF engineering. :)
>
> RF engineering is a good field because most students are lured by the
> computer world. (Not as many RF people.) Having an amateur license will
> help, IF you also know and have been playing around with the circuits. The
> hard part is getting started without previous experience. Ham radio can
> give you that edge if you've been building your own stuff etc.

> After four years, I'm sure you have already considered something along
> the lines of my first sentance. :)
>
> A good first step;
> Look in any issue of "RF Design" magazine. (Lots of job offers.) Their
> sit is; www.rfdesign.com
> Good luck, you've picked an life long interesting field.
> --
> Jim Rosenthal, WA4STJ

Yeah, I haven't started looking seriously yet, (I graduate in December)
but most of the ads that I see for engineers either ask for a) 2-5 years
experience or b) 3.5 or better gpa. Now, this may or may not be the
real story, but that's just what I've seen in the quick looks that I've
given the subject.

My senior project is to build an 80m cw transciever; so far, I've been
working on a crystal filter and a dds (w/a pic controller). In the near
future, I'd like to expand my microwaves course a bit and actually try
to communicate across my campus somehow in the 1.2GHz ham band w/some of
the other amateurs on campus. I might even take the spring semester
after I graduate to do some odd jobs on campus so I can bum around and
use the really nice test equipment we have here to experiment some and
further my knowledge of RF. I'm hoping these are good steps in the
right direction.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus

****

3262. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: z005381b@bc.seflin.org
Message-ID: <7db2fj$t0s@nntp.seflin.org>
Source record: 72048
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

: Shawn Upton (supton@eece.maine.edu) wrote:
: Not to flame, but how does one go about entering into the field of RF
: engineering?

Not to be too simplistic - but - you accept a job in RF engineering. :)

RF engineering is a good field because most students are lured by the computer world. (Not as many RF people.) Having an amateur license will help, IF you also know and have been playing around with the circuits. The hard part is getting started without previous experience. Ham radio can give you that edge if you've been building your own stuff etc. And think about this, your going to get paid to learn more about the technical side of your hobby!!

: I've been studying electrical engineering for four years
: now, and I'm starting to look ahead to entering the job market.

Hope you took courses in the RF area. After four years, I'm sure you have already considered something along the lines of my first sentance. :)

A good first step;
Look in any issue of "RF Design" magazine. (Lots of job offers.) Their site is; www.rfdesign.com
--
: Shawn Upton, KB1CKT Tech Plus

Good luck, you've picked a life long interesting field.
--
Jim Rosenthal, WA4STJ

3263. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: ge@sr.hp.com
Message-ID: <7db3jc$guo@canyon.sr.hp.com>
Source record: 72049

Shawn Upton (supton@eece.maine.edu) wrote:

: Do the APC-7 connectors screw together? Our school here has some old
: microwave equipment which has sexless connectors, but they have to be
: pushed on/pulled off. If these connectors are not APC-7's, then what
: are they?

Yes. Both inner and outer conductors are approximately flush with the
front of the connector (modulo spring loaded center pin) and an outer
nut can be either threaded forward where it engages with the opposite
connector, or back, where it is out of the way so the other connectors
nut can engage. Only one of the two nuts, either one, is used at a
time.

A push/pull connector is something different from APC-7.

The "7" is for 7mm by the way.

Glenn Elmore
n6gn

IP by radio: glenn@SantaRosa.ampr.org
by wire: ge@sr.hp.com
n6gn@sonic.net

|--------- N6GN's Higher Speed Packet WWW Page ---------|
| |
| http://www.tapr.org/~n6gn/index.html |
| http://www.sonic.net/~n6gn |

3264. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <36F9040D.40DF@pacbell.net>
Source record: 72050
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Carl R. Stevenson wrote:
>
> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> My employer, Lucent Technologies, is looking for a Senior RF Technican
> with the following abilites and experience:
>
> Senior RF Technician Job Description
>
> 1. Ability to read schematics.
> 2. Ability to solder, including small surface mount devices,
> and build up RF, analog, and digital circuits in both prototype
> and "small lot production" environments.
> 3. Able to operate various equipment including oscilloscopes,
> voltmeters, spectrum analyzers, and RF generators.
> 4. Familiar with RF design principles and RF test methods for
> return loss, transmission loss, output power, matching and RF grounding.
> 5. Ability to troubleshoot RF circuitry down to the component level.
> 6. Perform testing of products based upon a starting point provided
> by RF engineer.
> 7. PC competency using word processing and spreadsheets, good
> communication and documentation skills required.
> 8. Responsible for management of engineering lab, including
> ordering/stocking of components and lab accessories.
> 9. Two years minimum previous experience as RF Technician
>
> Location: Allentown, PA
>
> This will *probably* be a 6 month contract position initially, with
> renewal or conversion to permanent, direct employment likely
> for the right individual.
>
> If you're interested in working with modern digital radio equipment
> in a design and development environment, please e-mail me your
> resume ASAP. (MS Word or .pdf format preferred, though plain
> ASCII, MS Works, or WordPerfect formats cana be handled as well.)
>
> 73,
> - --
> Carl - wa6vse
> wa6vse@fast.net

> http://www.users.fast.net/~wa6vse
> NCI #1052
> Join No Code International!
> Hams for the 21st century.
> Support the modernization of ham radio and help
> to assure its survival into the 21st century!
> http://www.nocode.org
>
> -----BEGIN PGP SIGNATURE-----
> Version: PGP for Personal Privacy 5.5.3
>
> iQA/AwUBNvg+VZe+N6+q84HiEQLc9wCg4MRdPxiYRt0tBDL9HYPn+Na0VAgAoKNL
> C8aTm6rl45LpcsVYKE34JqjB
> =xZsA
> -----END PGP SIGNATURE-----

Aha! So Lucent is reduced to trolling for resumes on the newsgroups.
Don't they have a human resources department? Lucent is a very
fine company, you'd think they could do better than offer
contract employment to their beginning techs. I think it's time
to review my stock portfolio.

Tom Donaly KA6RUH

3265. HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <36F91AA6.4E3B@snet.net>
Source record: 72051

To all that responded, I guess my description could have been better concerning the small RF connectors used in the 8410, 8407 and 8553B pluggins and I am sure much more in that generation of equipment.

Well I think I have confirmed for sure that they are SMC connectors. Now my next challange involves adapting them to the test equipment world, i.e. signal generator, spectrum analyzer, etc which involve standard a BNC, SMA,N etc.

Thanks all for replying
Vince N1VC

3266. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7db8jm$14p@news.Hawaii.Edu>
Source record: 72052
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.cb

Vostok-Radio <vradio@vradio.geon.donetsk.ua> wrote:
>Hi, my dear friends&collegues. Thanks for reading of this
>Does anybody know, how to shift working band of simple 40ch
>CB-tranceiver to band around freq.s 28 - 29 MHz with the same band width
>Thanks
>UT0IY

Hello OM,
I've successfully converted two synthesized CBs to 28 MHz for CW operation. The first radio was converted by removing the 10.240 MHz PLL reference crystal and replacing it with 10.635 MHz crystal I chose that frequency for no other reason than it was the first one to fall out of the junkbox! It was a good choice, for now Channel 1 is at 28.005 MHz.

The second CB was converted only after I had studied how PLL circuits work so as to learn how to re-wire the 8-bit binary-coded decimal (BCD) programming scheme.

I highly recommend the first method!

Keep in mind that if you change the crystal to get the radio up to 29 MHz, the crystal oscillator will need to be aligned, as will the RF stages.

Hope this helps!
73 from Hawaii, Jeff WH6U

3267. Re: HF QRP projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: jaci@bamboo.verinet.com
Message-ID: <VZ9K2.406$h3.170911232@news.frii.net>
Source record: 72053

I built a 20 Meter SSB rig from Small Wonder Labs last winter. It was
a bit of a stretch with 40 year old eyes, but it turned on fine.
The documentation was great. QST of April 1997 has an article on this
kit.

wes kc0eea

GRaney1882 (graney1882@aol.com) wrote:
: I'm new to homebrewing and I need to learn the basics ... where can I find some
: easy projects or kits for HF CW is fine to start with but I'd like to find one
: that does SSB too. Any info is helpful.

: Thanks KM5TY Gary

3268. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Jeff <bk43@earthlink.net>
Message-ID: <7dbc3r$9ec$1@holly.prod.itd.earthlink.net>
Source record: 72054
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Perhaps it was....
You are sorry...

--
NPMHU
Paul K <pjktg@itis.com> wrote in message news:7d9jooud1@news.itis.com...
> If this was a legitimate request from a Russian Ham, I apologize for my
> scathing sarcasm. Lately there have been a lot of CBers and truckers
moving
> up into the 10 meter amateur band. I thought it was one of these guys
> trolling. Sorry. Paul K
>
>
>
> Paul K wrote in message <7d9f6q$rg4$1@news.itis.com>...
> >Yes . No Problem. Just place it carefully behind a truck wheel and back
> >up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be
pleased
> >with the results.
> > You can repaint later after you give it a test on the 10 meter
> AMATEUR
> >BAND where you need a license. If you had a license you would know how
to
> >do this simple feat.
> >
> > Paul K. N9EMX
> >
> >
>
>

3269. Re: Help!! need to attach ext antenna to 2m HT that has a fixed antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36F937BB.A2B3CFD6@fallschurch.esys.com>
Source record: 72055

There should be some "ground-plane" in and aroun the RF areas of the
board. Connect the BNC shell to that ground plane with the shortest
lead you can manage (you want less than an inch) and you should be ready
to run coax to your roof-top antenna, 100 foot tower, or whatever!
You will find (with an ohm-meter) that the groundplane is electrically
common with the battery negative point tha another poster recommended,
but short lead lengths are important at VHF.
Good luck and 73 de W1AEL, Allan.

3270. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: mikedn@conan.ids.net
Message-ID: <HhbK2.4195$134.6484@news13.ispnews.com>
Source record: 72056
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <7db008$opb@nntp.seflin.org>,
James Rosenthal <z005381b@bc.seflin.org> wrote:

>RF engineering is a good field because most students are lured by the
>computer world.

But, how are the opportunities in the RF business as compared to the
computer end? Seems that the opportunities would be much less (more
specialized, limited spectrum, etc.)

MD
--
--
-- ...if it has four legs, and isn't a table, eat it.
--
-- These opinions are all mine, unless you've agreed to pay me for them.

3271. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36F9536A.79F8@ibm.net>
Source record: 72057
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Mike Deignan wrote:
> But, how are the opportunities in the RF business as compared to the
> computer end? Seems that the opportunities would be much less (more
> specialized, limited spectrum, etc.)

Wireless is presently exploding even faster than computers. RF engineers
can command a premium salary.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

3272. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36F947D3.F4BA20B7@fallschurch.esys.com>
Source record: 72058
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Hey, Shawn, you spend a lot of time on the NGs! How are your grades
doing?
Been there --Done that, and it took along time to recover!
Seriously -- Good Luck de W1AEL

3273. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Tate <73KC7ZRU73@cyberhighway.net>
Message-ID: <36F913EB.2F4943EC@cyberhighway.net>
Source record: 72059
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

ARGH!

and my apologies to you Paul!

You snuck this in as I was replying to you.

Good call!

73 de Tate

Paul K wrote:
>
> If this was a legitimate request from a Russian Ham, I apologize for my
> scathing sarcasm. Lately there have been a lot of CBers and truckers moving
> up into the 10 meter amateur band. I thought it was one of these guys
> trolling. Sorry. Paul K
>
> Paul K wrote in message <7d9f6q$rg4$1@news.itis.com>...
> >Yes . No Problem. Just place it carefully behind a truck wheel and back
> >up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased
> >with the results.
> > You can repaint later after you give it a test on the 10 meter
> AMATEUR
> >BAND where you need a license. If you had a license you would know how to
> >do this simple feat.
> >
> > Paul K. N9EMX
> >
> >

--
KC7ZRU | In Laramie Area
Laramie, WY | UARC Repeater
DN71eh | 146.610
"The Dungeon" online at http://www.cyberhighway.net/~tateb
KC7ZRU@KC7ZRU.#SEWY.WY.USA.NOAM
Remove 73s from addy to send email

3274. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Tate <73KC7ZRU73@cyberhighway.net>
Message-ID: <36F913A9.68B5FEC6@cyberhighway.net>
Source record: 72060
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

Paul,

UT0IY may well be a valid call sign. Looking at the QRZ New DX page at http://www.qrz.com/wrad/directory.cgi?new_dx I find a couple other UT prefixes listed. I also find in the 5th edition of the ARRL Operating Manual (ch. 17, pg. 90) that the prefix UT indicates someplace in the Ukraine, specifically Kiev.

I'm not up on searching for non-US call signs online. I've no way of confirming that UT0IY is valid or not - but it sure looks like it may be, but of what class/type - I don't know.

Now if this poster had indicated he was some yak-jawed 'good buddy' I'd have to totally agree with your suggestion. In this case though, methinks you've keyed up before listening.

Tate B - KC7ZRU

Paul K wrote:
>
> Yes . No Problem. Just place it carefully behind a truck wheel and back
> up.

--
KC7ZRU | In Laramie Area
Laramie, WY | UARC Repeater
DN71eh | 146.610
"The Dungeon" online at http://www.cyberhighway.net/~tateb
KC7ZRU@KC7ZRU.#SEWY.WY.USA.NOAM
Remove 73s from addy to send email

3275. Looking for PLL VFO 5-5.5 mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: ljl160@aol.com
Message-ID: <19990324141735.14500.00000291@ng-cr1.aol.com>
Source record: 72061

Im trying to stabilize old Ten Tecs with PLL vfo-any help appreciated. Thanks

3276. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36F93B7F.CD262F9C@fallschurch.esys.com>
Source record: 72062

That definition does not necessarily describe a "homebrewer" but rather a person who understands radio electronics fairly well -- a very useful quality in homebrewers, technicians, engineers, and a minority of hams. 73 de W1AEL, Allan.

3277. Re: Basic Sumer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36F93D12.56FAC8BB@fallschurch.esys.com>
Source record: 72063

Lauren, the first question has to be "What is the nature (power level, frequency, DC and AC components, etc) of the four signals you wish to sum. Well, at least the kidding you got on your "Sumer" goof was good-natured! The other responses may be applicable or not depending on what your signals are. 73 de W1AEL, Allan.

3278. Re: Can this be done??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36F93E7B.54A78372@fallschurch.esys.com>
Source record: 72064

Have you considered modifying a commercial Kband radar detector?

3279. Re: Daiwa PS300 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36F946E2.11F3D0F4@fallschurch.esys.com>
Source record: 72065

It should be perfectly suitable to run most HF rigs.
73 de w1 ael

3280. Re: UHF/Microwave attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <F948H4.MtG@world.std.com>
Source record: 72066

Peter B. asked

> for my homebrew 10 MHz - 1.2 GHz RF signal generator project I need a

Sounds cute. If it works out well, perhaps you can have some
friends reproduce it and then do a magazine project article.

> switched 0-20-40 dB attenuator. I thought of using two shielded 20 dB SMD
> resistor attenuators and micro-strip RF relays (OMRON 6GY) for switching
> this stages in and out.

> What is the best circuit topology for the resistors? Pi or T-network? Will
> two cascaded Pi or T networks _for each 20 dB attenuator stage_ give better
> results?

Cascaded Pi's is the normal thing for manually switched stepped
attenuators, usually with BCD or Binary stages, but they use DPDT
switches, does your OMRON come in that flavor with a way to have
50 ohm bypass? or are you thinking two SPDT relays interupting the
stripline?

> formula to calculate the values of the resistors of the "double Pi" or
> "double T" network?

Search engine www.altavista.com with
+attenuator 50-ohm (switched stepped) -audio
finds at #3. 50 Ohm Attenuator Table,Cross Technologies, Inc.
50 OHM ATTENUATOR DESIGN TABLE. T Network. PI Network. ATT. (dB) PWR.
RATIO. R3. (OHMS) R1. (OHMS) R2. (OHMS) R3. (OHMS) R1. (OHMS) R2. (OHMS)
URL: www.mindspring.com/~crosstec/ctdes50a.html
Last modified 3-Nov-97 - page size 7K
http://www.mindspring.com/~crosstec/ctdes50a.html
and a simliar page shows up at http://www.qsl.net/we6w/text/atten.html

Adding limiter of +(project kit homebrew) turns up an article
by one of our local fox-hunters, which is _not_ staged, but
switched. Not sure how this would work for stripline!

#3. Attenuator Directions
EASY AS "PI" ATTENUATOR. Copyright (c) 1994, 1996 by Clark Conti, N1NVK
Many thanks to Clark Conti for passing this on to the public.
Attenuators help...
URL: www.concentric.net/~Gfollett/equip2.htm
Last modified 29-Mar-98 - page size 3K
http://www.concentric.net/~Gfollett/equip2.htm

Oddly, I don't quickly find any WWW pages with traditional macro-strip-line DPDT/PI stage projects, but those are in _all_ the handbooks.

73

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

3281. Looking for Elmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: ku4yp@aol.com
Message-ID: <19990324165238.01103.00001080@ng-ca1.aol.com>
Source record: 72067

hello,

i have been reading about homebrew and building your own equipment for some time. i can't wait to start doing this, however, i have no experience in building, kits or otherwise. i can wire my own mike plugs and i am preety good with a soldering iron.

i am just looking for a place to start. i don't have alot of $$$ which probably qualifies me for homebrew/qrp very well. i am however very willing to learn.

are all elmers sk??

any help is very appreciated.
73 de KU4YP
Mike Prevatt
Lake Hendry, Fl.

3282. Re: Raytheon SNG83N CHIP WTD

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36F95987.1DBF@pop.valley.net>
Source record: 72068

MStud26073 wrote:
>
> I'm looking for a source for this chip (SNG83N) manufactured by Raytheon. It
> appears to be a dual 3 gate AND with strobe (TTL) housed in a 14 pin DIP
> package.
>
Hello--
This **may**cross to the ancient Sylvania SG-83, a member of the SUHL
(Sylvania Universal High-level Logic, IIRC).

73,
Brad AA1IP

3283. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36f95a67.0@news.netwalk.com>
Source record: 72069

Vincent Coppola wrote in message <36F91AA6.4E3B@snet.net>...
>To all that responded, I guess my description could have been better
>concerning the small RF connectors used in the 8410, 8407 and 8553B
>pluggins and I am sure much more in that generation of equipment.
>
>Well I think I have confirmed for sure that they are SMC connectors. Now
>my next challange involves adapting them to the test equipment world,
>i.e. signal generator, spectrum analyzer, etc which involve standard a
>BNC, SMA,N etc.
>
>Thanks all for replying
>Vince N1VC

Try contacting Pasternac (Pasternak? Pasternack??) Enterprises.

They are the premier supplier of connectors and connector-series adapters.
No matter what two types of connectors you have, they are pretty much
guaranteed to have an adapter that will work.

I do not know if they have a web page, but it is worth the check.

Jim
N8EE

3284. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36F96921.31DF@eece.maine.edu>
Source record: 72070
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Allan Kaplan wrote:
>
> Hey, Shawn, you spend a lot of time on the NGs! How are your grades
> doing?
> Been there --Done that, and it took along time to recover!
> Seriously -- Good Luck de W1AEL

Probably too much! I've been learning some stuff though, and I have to ability to check in a few minutes--I have a unix box here in my office, which I can leave logged in, with Netscape running, with the ng's going, so whenever I pop in for a minute, a quick click and I have all the new posts. I can quickly scan (I simply erase all the ones I don't want to read) and then read the ones I want, and then go back to whatever.

I'm starting to catch up, but only after organizing my time a bit and working more. It's always an uphill battle.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3285. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <36F968EA.50E3@pop.removethistomailme.net>
Source record: 72071

Allan Kaplan wrote:
>
> That definition does not necessarily describe a "homebrewer" but rather
> a person who understands radio electronics fairly well -- a very useful
> quality in homebrewers, technicians, engineers, and a minority of
> hams. 73 de W1AEL, Allan.

I think you guys missed my point, though -- nobody, but NOBODY, is going to pass my little "test" without a heck of a lot of hours spent with the books and on the bench as well. "Understanding" electronics is not the same as "doing" electronics. Even someone who builds a complete station from scratch from ARRL Handbook project articles and such could very well fail to pass the test. Likewise, someone with an MSEE but little hands-on interaction with components and circuits would almost certainly fail. I've seen plenty of examples at both ends of the spectrum.

-- jm KE5FX ("judge not, lest...")

Note: My E-mail address has been altered to avoid spam

3286. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: mikedn@conan.ids.net
Message-ID: <p_dK2.2909$3C3.6367@news3.ispnews.com>
Source record: 72072
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <36F9536A.79F8@ibm.net>, W6RCecilA <w6rca@ibm.net> wrote:

>Wireless is presently exploding even faster than computers. RF engineers
>can command a premium salary.

Is that why they're being offered "6 month contracts" with no benefits
and the "potential" of being hired full-time at some abstract point in the
future?

MD
--
--
-- ...if it has four legs, and isn't a table, eat it.
--
-- These opinions are all mine, unless you've agreed to pay me for them.

3287. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36F97C3A.40A9@ibm.net>
Source record: 72073
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Shawn Upton wrote:
> I'm starting to catch up, but only after organizing my time a bit and
> working more. It's always an uphill battle.

When I was in college, it was always a choice between studying and
having sex. Actually, with Texas A&M being an all-male military
college in the 50s, there was no choice. :-)
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

3288. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: W6RCecilA <w6rca@ibm.net>
Message-ID: <36F98216.4F82@ibm.net>
Source record: 72074
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Mike Deignan wrote:
>
> In article <36F9536A.79F8@ibm.net>, W6RCecilA <w6rca@ibm.net> wrote:
>
> >Wireless is presently exploding even faster than computers. RF engineers
> >can command a premium salary.
>
> Is that why they're being offered "6 month contracts" with no benefits
> and the "potential" of being hired full-time at some abstract point in the
> future?

Didn't sound like an engineering position to me. Sounded like a technician position. Didn't see any requirement for an engineering degree. 'Course, as always, I could be wrong.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

3289. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9903241748170.8027-100000@Ocean.CAM.ORG>
Source record: 72075
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.cb

On 24 Mar 1999, Jeffrey Herman wrote:

> Vostok-Radio <vradio@vradio.geon.donetsk.ua> wrote:
> >Hi, my dear friends&collegues. Thanks for reading of this
> >Does anybody know, how to shift working band of simple 40ch
> >CB-tranceiver to band around freq.s 28 - 29 MHz with the same band width
> >Thanks
> >UT0IY
>
> Hello OM,
> I've successfully converted two synthesized CBs to 28 MHz for CW
> operation. The first radio was converted by removing the 10.240
> MHz PLL reference crystal and replacing it with 10.635 MHz crystal
> I chose that frequency for no other reason than it was the first
> one to fall out of the junkbox! It was a good choice, for now Channel 1
> is at 28.005 MHz.
>
> The second CB was converted only after I had studied how PLL
> circuits work so as to learn how to re-wire the 8-bit binary-
> coded decimal (BCD) programming scheme.
>
> I highly recommend the first method!
>
> Keep in mind that if you change the crystal to get the radio up
> to 29 MHz, the crystal oscillator will need to be aligned, as
> will the RF stages.
>
But also note that if you change the reference crystal, the spacing will
be different. Also, the CB sets I've seen use the 10.240MHz crystal to
convert the 10.7MHz first IF to the 455KHz second IF. If you move the
reference frequency, depending on the rig you may move the signal out of
the first IF passband.

The CB sets that I've seen block diagrams of use a mixer between the VCO
and the programmable divider. It's there to simplify the calculations
and/or to get the VCo down to a frequency that the programmable
divider can handle.

They use a harmonic of the reference frequency as the second signal to the
mixer. The real change of the CB set's frequency comes from that harmonic,
not the actual reference frequency. The reference frequency is divided
down to 5KHz or so, and to make much difference at that point would
require a very large jump to another frequency for the crystal. However,

the change at the crystal frequency, especially when multiplied something like three times means the VCO has to move up in frequency by that much in order for the signal at the output of the mixer (ie the input to the programmable divider) to be the same as when the reference crystal was unchanged.

In other words, if you move the reference frequency up almost 400KHz, the injection to the mixer is over 1MHz higher so the VCO moves up that much.

The trick in the old magazine articles was to uncover where the reference frequency is multiplied and fed into the mixer between the VCO and the programmable divider, and cut the signal path. Feed a new oscillator into that point.

This moves the VCO (and the rest of the CB set) higher without messing with the channel spacing. It also will not mess with the second conversion osciilator.

Michael VE2BVW

3290. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7dc793dbb1@news1.fast.net>
Source record: 72076
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Donaly <dtdonaly@pacbell.net> wrote in message news:36F9040D.40DF@pacbell.net...
>
> Aha! So Lucent is reduced to trolling for resumes on the newsgroups.
> Don't they have a human resources department? Lucent is a very
> fine company, you'd think they could do better than offer
> contract employment to their beginning techs. I think it's time
> to review my stock portfolio.
>
> Tom Donaly KA6RUH

Lucent isn't "trolling" ... I thought I might help a
fellow ham find an interesting, exciting job opportunity.

Sheesh ... like Hans said ... you'd complain if you were
hung with a new rope, wouldn't you?

Lucent's HR department IS working the opening. Like I
said, I just thought I'd try to help a fellow ham.

As for your stock portfolio, If you want to sell Lucent
stock, how many shares do you have to sell? I buy the
maximum allowable under the employee stock purchase plan
every month and all of my 401k goes into the stock fund.
(not to mention my options)

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

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Version: PGP for Personal Privacy 5.5.3

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=2TAH
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-----END PGP SIGNATURE-----
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3291. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7dc7lc$dk4$1@news1.fast.net>
Source record: 72077
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

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-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Mike Deignan <mikedn@conan.ids.net> wrote in message
news:p_dK2.2909$3C3.6367@news3.ispnews.com...
> In article <36F9536A.79F8@ibm.net>, W6RCecilA <w6rca@ibm.net> wrote:
>
> >Wireless is presently exploding even faster than computers. RF engineers
> >can command a premium salary.
>
> Is that why they're being offered "6 month contracts" with no benefits
> and the "potential" of being hired full-time at some abstract point in the
> future?

Mike ... the "ad" was for a tech, not an engineer ... and
because *good* techs are so hard to find, many companies
hire them through a contract agency for 3-6 months to see
how they work out before converting them to permanent
employees.

It gives BOTH sides a chance to see how things are going
to work out.

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

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Version: PGP for Personal Privacy 5.5.3

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=C9LZ
-----END PGP SIGNATURE-----
```

3292. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7dc7qpdmb1@news1.fast.net>
Source record: 72078
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Mike Deignan <mikedn@conan.ids.net> wrote in message
news:HhbK2.4195$134.6484@news13.ispnews.com...
> In article <7db008$opb@nntp.seflin.org>,
> James Rosenthal <z005381b@bc.seflin.org> wrote:
>
> >RF engineering is a good field because most students are lured by the
> >computer world.
>
> But, how are the opportunities in the RF business as compared to the
> computer end? Seems that the opportunities would be much less (more
> specialized, limited spectrum, etc.)

Mike, you really don't get it, do you? The whole world is
going wireless and you say 'Seems that the opportunities
would be much less." Wake up!

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

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n6FSHxQQP1oAfa3KOJGRnQu/
=LQ/I
-----END PGP SIGNATURE-----
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3293. Daiwa PS300 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: rpemers@aol.com.alt.edu
Message-ID: <19990323201552.01730.00000216@ng-fy1.aol.com>
Source record: 72125

Does anyone know anything about the Daiwa PS300 power supply as far as it being suitable to run an HF rig from??? It sounds ok to me in that it produces variable V of 9-15 VDC and 30amp current. I would appreciate input from anyone familiar with this supply and use for an HF rig. Please email.

Thanks

Ron
rpemers@aol.com
WO8J

3294. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990323210807.00803.00000453@ngol04.aol.com>
Source record: 72126

In article <36F8195B.7106@pop.removethistomailme.net>, John Miles
<jmiles@pop.removethistomailme.net> writes:

>Subject: Re: What constitutes Homebrew?
>From: John Miles <jmiles@pop.removethistomailme.net>
>Date: Tue, 23 Mar 1999 14:44:43 -0800
(snip)
>
>How about this definition? Looking at a schematic of your radio, point
>to any individual component at random. If you can say, correctly, what
>that component is, what it does, why it's there, what would happen if it
>weren't there, and how its parameters were chosen, with a score of 90%
>or better across a run of 25 randomly-chosen components, you're eligible
>for certification as an Official Homebrewer(tm). If you can't, you're
>not.

Hello John,

All of us should be able to pass that test. But even getting 100 doesn't make
one a homebrewer. How about a title like "qualified amateur radio engineer?"
>
>This is convenient because it applies equally to the rig you built from
>tubes and old TV parts, the rig you built from a Heathkit, and the shiny
>new 5-conversion Yaesu FT-6000SUX your spouse got you for Christmas.
>Successfully passing my "test" means you don't have to prove anything
>further to anyone, regardless of who built your rig and how.

Sure you do. You have operate the dern thing.

> This is a
>state for which one should strive mightily, since it's not "elitism"
>(the desire to run with the big dogs for no other reason than to be in
>their private club)

Building gear isn't a private club. Anybody can join. The more the merrier!

>or the "who gives a damn how it works, as long as it
>transmits" attitude that pervades the rest of the hobby. :-)

Agreed. That attitude is far more poisonous than anything mistakenly called
"elitism".

I build 'em and I use 'em. Tremendous fun. Look up my call in the SS or FD
(1987-1995) to see how well homebrew-from-recycled-parts gear can work.
>
>Really, this debate is an absurd one.

Not at all. I just want accurate descriptions. Kit building is good. Homebrewing is good. Modifying is good. Restoring is good. I appreciate and applaud all of them. I've done all of them, and I want to encourage other hams to do all of them. What's the problem with being accurate?

> It all comes down to motivation.

Nope - it all comes down to accomplishment.

73 de Jim, N2EY

See QST for June 1989, page 62.

3295. WTB: HF Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36ff431b.208383268@207.217.77.140>
Source record: 72127

```
Wanted: HF Receiver
Reply email with model and price.
Rich
```

3296. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-24 00:00:00 UTC
From: mustang_maniac@centuryinter.net
Message-ID: <2rYJ2.4969$_m5.1180265@newsread1-mx.centuryinter.net>
Source record: 72128
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

In article <7d9f6q$rg4$1@news.itis.com>, you say...
>
>Yes . No Problem. Just place it carefully behind a truck wheel
>and back up. Thats all theres to it. Easy Huh?? Try it. Im sure
>youll be pleased with the results.
> You can repaint later after you give it a test on the 10 me
>ter AMATEUR BAND where you need a license. If you had a license
>you would know how to do this simple feat.
>
> Paul K. N9EMX

GEEZ! What a jackass response! Our Russian ham friend was looking for some simple information, and you flamed him! Still fighting the Cold War or something? He DOES have a license by the way, and if you'll look at his post again, you'll see that he's placed his HAM CALL SIGN, UT0IY, at the end of the post. If YOU were a real ham, you'd recognize that! I am embarassed to be a US ham, if you're the kind of colleague that I am to be associated with! I think you owe him an apology, you brainless boob!

Dean, K5DH (a REAL radio amateur for 22 years)

3297. ATTENTION to all Kansas City Tracker USERS or Enthusiast.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Geert Pirens <geert.pirens@ping.be>
Message-ID: <7dbtiantr1@news3.Belgium.EU.net>
Source record: 71982
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,
rec.radio.amateur.space,tw.bbs.rec.radio.amateur,uk.radio.amateur

Hello Kansas City Tracker User or enthusiast.

I'm collect the names of all the available programs that being written, or
suppot the kansas city tracker.

All these information wil be placed in a Database and wil be available to
all of you.

On my homepage http://www.ping.be/~p4u11324/ you wil find a list of all
available software.
If you know a program that not being in the list, PLEASE fill in the
Question form:

If you click here, you go wright to the question form
http://www.ping.be/~p4u11324/KCT_Ques.html

click below for the software list !

Thanks to all of you !

Geert Pirens - ON1DQD
Vissit my home page: http://www.ping.be/~p4u11324/

3298. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: mikedn@conan.ids.net
Message-ID: <K1fK2.2526$Ee4.4707@news15.ispnews.com>
Source record: 71983
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <36F97C3A.40A9@ibm.net>, W6RCecilA <w6rca@ibm.net> wrote:

>When I was in college, it was always a choice between studying and
>having sex. Actually, with Texas A&M being an all-male military
>college in the 50s, there was no choice. :-)

So, you bunked with Mark Morgon, eh? That explains a lot.

MD

--
--
-- ...if it has four legs, and isn't a table, eat it.
--
-- These opinions are all mine, unless you've agreed to pay me for them.

3299. Amplifier Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990324194513.26206.00000959@ng63.aol.com>
Source record: 71984

List #1= 3CX3000A7 tube,
Socket, Filament transformer 7.5 volts @ 51 Amps
Plate Transformer 2.7 Amps @ 5000 volts
HV Caps, Blower, Meters, Tank Coils
Cabinet to build a large amplifier.
I will sale all parts for $2,000.00 plus shipping.

3300. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: "Richard R. Plourde (Dick)" <rplourde@worldnet.att.net>
Message-ID: <7dc1hlgva1@mtinsc02.worldnet.att.net>
Source record: 71985
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Shawn Upton wrote:

:Yeah, I haven't started looking seriously yet, (I graduate in December)
:but most of the ads that I see for engineers either ask for a) 2-5 years
:experience or b) 3.5 or better gpa. Now, this may or may not be the
:real story, but that's just what I've seen in the quick looks that I've
:given the subject.

I do software and I've seen ads that required 5 years experience with NT (when it had been out only 3) and 3 years experience in Java (when it was 17 months old). In my opinion Human Resources at times don't know $hit from $hinola. ;-)

--
73 de Dick, N1SJM
http://home.att.net/~rplourde/
http://www.qsl.net/n1sjm/

3301. Two Intersting Links For Hams- Really Interesting

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7dc69d$i9i@bgtnsc02.worldnet.att.net>
Source record: 71986

packet antenna handbook:
http://www.sedan.org/ant.htm#various

http://www.polyphaser.com/
Poly Phaser Site, Check out Technical Info.

3302. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: "Al, N2NKB"
Message-ID: <7dc6u0$lef@bgtnsc02.worldnet.att.net>
Source record: 71987

Shawn Upton wrote in message <36F6A59C.2781@eece.maine.edu>...
>How do the manufactures make the antennas 50 ohms?

I have "played with" rubber duckies in my RF lab for a while, and in general,
I consider them as dummy loads that somewhat radiate. Many of them do not even resonate where they should, and body movement affects the resonance a great deal.
Obviously they are great for short range, but if you need any kind of RF gain please consider alternatives. Fortunately, the HT manufactures know
this very well, thus the TX Amp does not typically destroy itself against poor
mis-matches due to the wild return loss of the duckie.
Al, N2NKB

3303. Re: Torroid Material ? Where to buy ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Tim Groat KR0U <tmgroatNOJUNK@peakpeak.com>
Message-ID: <36F9B3AD.3005@peakpeak.com>
Source record: 71988

Micrometals makes a large variety of powdered iron cores for power
supplies. On the web:
http://www.micrometals.com/

Puppin wrote:
>
> I'd appreciate your help to discover the material used in toroids applied
> in output filter of personal computers switched mode power supply.
> The torroid must be capable of handle an energy of 15mJ.
> They have a yellow painting and 30mm external diameter.
> It would be very helpful to know who manufacture this kind of core.
>
> Gilson Puppin - PU5MPL
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3304. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: "Charlie T." <xctx@onr.com>
Message-ID: <01be7673$6de51980$680cc8cf@ct>
Source record: 71989

Yep...I have an HP8660C...will that work? It's a synthesized signal
generator w/digital frequency display. The "Q" I'm talking about refers
to the losses in the ferrite core. Not the "bandwith" of the resonant
circuit. In a series LC circuit there should be a Q rise in current
at resonance where the Q is the ratio of the reactance to the real
resistance (i.e. generator impedance + skin effect losses + wire resistance
+ ferrite
core loss). Can this be equivocated to the Q definition: 3dB
bandwidth/frequency?

thanks in advance,

-Charlie W5CDT

Roy Lewallen <w7el@teleport.com> wrote in article
<36F31C5A.323DD87F@teleport.com>...
> As Rocci said, it depends on the equipment you have available. I have
> a good method using a signal generator, frequency counter, and scope
> if you have them.
>
> Roy Lewallen, W7EL
>

3305. Re: Please help me! 6 meter HB amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19990324234248.01102.00000938@ng-cf1.aol.com>
Source record: 71990

Hi Lou,
I recommend you subscribe to the AMPS
reflector at www.contesting.com.
A wealth of knowledge from people that
know amps in and out (Rich Measures,
Carl km1h, others).
Once you subscribe, you can post questions
and get answers.
Sounds like you are pushing the plate current
too hard for the output, so there is some
non-resonance in there, or you have another
resonance on another frequency.
Good luck.
Bennett ko2ok.

3306. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7dckmp$364@news.Hawaii.Edu>
Source record: 71991
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <36F97C3A.40A9@ibm.net>, W6RCecilA <w6rca@ibm.net> wrote:
>
>When I was in college, it was always a choice between studying and
>having sex with an all-male military college in the 50s,

Oh, this darn pico editor. Sorry, Cecil - I don't know how that
happened... Somehow, some of your words got edited out... =:o

73, Jeff WH6U

3307. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36F9ED70.573C039D@teleport.com>
Source record: 71992

Here's how I do it. I make a parallel resonant circuit with the inductor and an air variable capacitor. (Even some mica capacitors have low enough Q to skew results for good inductors.) I couple in and out with 1 pF capacitors, to the signal generator and scope. I measure the resonant frequency (peak amplitude) and -3 dB points. The Q (see below) is the ratio of center frequency to bandwidth.

A reasonable model of the inductor at one frequency is a parallel RLC circuit, where the C represents the inter-turn capacitance. The Q measured by this method is the ratio of the R to XL in this model. If you define a single equivalent L as a combination of the L and C in this model, and the Q as the ratio of R to its reactance, the Q measured by this method will show a bit higher. If you need to find the shunt C, you can derive it from measurements of the apparent inductance of the coil at a couple of different frequencies. The Q I measure with the parallel-circuit method is fine for comparing core losses, since C should be about the same for the same winding on various cores.

An advantage of this method over some of the bridge and null methods is its relative insensitivity to impedances, the test fixture, etc. The only caution is to keep the inductor reasonably well away from conductors and lossy dielectrics.

I whipped up a switchable 3 dB pad to put in line for convenience. I switch it in when measuring the maximum, then swich it out and find the 3 dB points by adjusting the frequency for the same amplitude as before. The input and output of the pad have to see the right impedance, of course.

Roy Lewallen, W7EL

Charlie T. wrote:
>
> Yep...I have an HP8660C...will that work? It's a synthesized signal
> generator w/digital frequency display. The "Q" I'm talking about refers
> to the losses in the ferrite core. Not the "bandwith" of the resonant
> circuit. In a series LC circuit there should be a Q rise in current
> at resonance where the Q is the ratio of the reactance to the real
> resistance (i.e. generator impedance + skin effect losses + wire resistance
> + ferrite
> core loss). Can this be equivocated to the Q definition: 3dB
> bandwidth/frequency?
>
> thanks in advance,
>

> -Charlie W5CDT

3308. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Steve Sampson <ssampson@usa-site.net>
Message-ID: <DvmK2.78$45.71@news.goodnet.com>
Source record: 71993
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Keep paying your taxes!

Thanks,
Steve

BD wrote in message <7dbems$1cb$1@newnews.startext.net>...
>You really don't need that much, what with us young'ens giving you a large
>percentage of our paychecks, do you...?

3309. Re: RC transmitter power

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36fa549e.0@news.netwalk.com>
Source record: 71994

There are ready-built amplifiers that will work, unless the idea is to build your own. Check with MiniCircuits www.minicircuits.com, if I remember.

If you want to build your own, go to the college library and look up the ARRL Radio Amateurs Handbook. If they don't have one, go to the public library or go buy one yourself (you're on a government grant so you can spend all you want, right?).

If it is to operate in essentially one direction you might consider a directional antenna.

Jim
N8EE

3310. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7ddnuf$l7j$1@nnrp1.dejanews.com>
Source record: 71995

In article <7d65op$o5l$1@mendelevium.btinternet.com>,
"David Cunningham" <D.L.C@btinternet.com> wrote:
> Thankyou to those who replied to my last message regarding frequency
> counters. Although it may well be cheaper and easier to buy a second hand
> model, I would still rather make my own; The experience gained would be as
> useful to me as the finished project. I am new to digital electronics and
> would rather start with something
> simple, using 74LS series TTL, rather than a more complicated
> microprocessor, and the counter need only work at frequencies as high as,
> say, 30MHz. I intend to use the 74LS90 and 74LS48 for each display digit,
> using the divide-by-10 output of each 74LS90 to drive the next digit. I am
> unsure how to make the input amplifier and gate/reference oscillator,
> however, and would be grateful if anyone could help.
> Thanks for your help.

Stuff like this is covered in all the usual references, like
Solid State Design for the Radio Amateur and _The Art of
Electronics_ - both essential purchases. The first is cheaper. :-)

You may find your input amplifier works out better if you do
it in two stages. The first sets the instrument's input impedance,
while the second generates the logic-level swings for the TTL.
This often means a FET input stage driving a bipolar
switching transistor. Look at the digital display in _Solid
State Design_ for an example. 74LS TTL has the same drive
requirements and logic levels as the TTL they used.

Microcontrollers? Complicated? I guess I'm missing something.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3311. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: af801@FreeNet.Carleton.CA
Message-ID: <7ddlgq$9rh@freenet-news.carleton.ca>
Source record: 71996

Hello All
I did a pcb design of counter using the harris icm7224 chip
(i believe) and some prescalers. It counts up to 500Mhz
I can supply a schematic if anyone is interested.
The pcb is a two layer design. Works quite well.

3312. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: "Steven J. Zaugg" <sjzaugg@collins.rockwell.com>
Message-ID: <36FA6824.D87DC727@collins.rockwell.com>
Source record: 71997

n2ey@aol.com wrote:
>
> In article <7d5rv3quc1@nnrp1.dejanews.com>,
> marsgal42@hotmail.com wrote:
> > In article <19990321200632.19585.00000016@ngol02.aol.com>,
> > n2ey@aol.com (N2EY) wrote:
> >
> > > (snip...) Any type of home construction is a good thing.
> >
> > Amen. In this day and age I want to be as lenient as possible
> > on the definition of "homebrew" - partly because few people
> > ever build anything anymore, and partly because I can't
> > stand the elitist crap that goes with making distinctions
> > between "built from a magazine article", "built from a kit",
> > "personal design from discrete components", "personal design
> > with VLSI", and so on.
>
> Hello Laura,
>
> I must strongly disagree with being "as lenient as possible on the definition
> of homebrew". Building a kit is NOT the same thing as homebrewing from
> scratch. That is NOT a put-down of the kitbuilder - it's just being accurate.
> To label all types of home building as "homebrew" is an insult to some (the
> scratch- builder) and patronizing to others (the kit builder). It's
> electro-political correctness - mustn't use terms that might, just might,
> offend certain groups, but it's perfectly fine to offend others.
>
> It's not "elitist crap" to use exact definitions. Not in my book.
>
> I make all my own bread. Used to make it all by hand - now I have a machine.
> The machine made stuff is OK, but not as good as the handmade kind. Both are
> far better than anything I can buy in the stores. And yes, I make the
> distinction between machine made and hand made. Because there IS a difference.

Do you make or buy the ingredients?

> >
> > "Frankly, my dear..."
>
> Frankly, some of us DO give a darn.
>
> 73 de Jim, N2EY
>
> ------------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3313. 572B Driving Impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: martyt@pobox.com
Message-ID: <7ddvgtsjm1@nnrp1.dejanews.com>
Source record: 71998
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Can someone with a tube reference book tell me what the driving impedance is for a 572B tube (or tell me where I can find that info on the 'net)?

I'd like to try adjusting the input networks on my SB-200, and can do so with the MFJ-259 antenna analyzer but must have a couple of resistors that are the same value as the driving impedance of the tubes (572Bs).

Any help would be appreciated.

73,

-Marty KI0LO
martyt@pobox.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3314. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Richard Schober <rkschober@qtiworld.com>
Message-ID: <01be76e8$d968b200$5a4a31a1@rkschober>
Source record: 71999

Jim <jbolinger@Nloisnptaemk.com> wrote in article
<36f95a67.0@news.netwalk.com>...
>
> Vincent Coppola wrote in message <36F91AA6.4E3B@snet.net>...
> >To all that responded, I guess my description could have been better
> >concerning the small RF connectors used in the 8410, 8407 and 8553B
> >pluggins and I am sure much more in that generation of equipment.
> >
> >Well I think I have confirmed for sure that they are SMC connectors. Now
> >my next challange involves adapting them to the test equipment world,
> >i.e. signal generator, spectrum analyzer, etc which involve standard a
> >BNC, SMA,N etc.
> >
> >Thanks all for replying
> >Vince N1VC
>
> Try contacting Pasternac (Pasternak? Pasternack??) Enterprises.
>
> They are the premier supplier of connectors and connector-series
adapters.
> No matter what two types of connectors you have, they are pretty much
> guaranteed to have an adapter that will work.
>
> I do not know if they have a web page, but it is worth the check.
>
> Jim
> N8EE
>
I have their catalog right here but I have never ordered from them.
My impression is that if they don't have it you can't get it.

Pasternack Enterprises
P.O. Box 16759
Irvine CA 92623-6759
Phone: (949) 261-1920
Fax: (949) 261-7451
E-mail: sales@pasternack.com
Web: pasternack.com

I noticed that they have a $100 minimum order and a $10 line item minimum.

Rich, N8XQJ

3315. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36FA7933.4487@eece.maine.edu>
Source record: 72000

Al, N2NKB wrote:

> I have "played with" rubber duckies in my RF lab for a while, and in
> general,
> I consider them as dummy loads that somewhat radiate. Many of them do not
> even resonate where they should, and body movement affects the resonance
> a great deal.
> Obviously they are great for short range, but if you need any kind of
> RF gain please consider alternatives. Fortunately, the HT manufactures
> know
> this very well, thus the TX Amp does not typically destroy itself against
> poor
> mis-matches due to the wild return loss of the duckie.
> Al, N2NKB

Thats funny, dummy loads that sorta radiate. That does make sense;
attenuators are more broadband and present better swr than a tuned
circuit. At the moment, I'm toying with the idea of building a couple
of J-poles, one for my packpack, and one for my bicycle. I'd use the
typical 300 ohm twin-lead for the matching section, but I want to find
some sort of spring steel for a whip--so it will be self supporting, but
have some bend to it. Like the stainless steel whips for mag-mounts and
such. I suppose I could use brazing or welding rod, that would be
cheaper but right now, I'm just toying with the idea of it.

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3316. Re: Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Piero <picaruso@dontwriteme.com>
Message-ID: <7ddv6g$5r7$1@fe1.cs.interbusiness.it>
Source record: 72001
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

You can find a lot of info on "The AARL Antenna Book".
That's a fantastic book!
73 de IK2VTJ, Piero.

Aaron Hanson ha scritto nel messaggio
<7d9qt1$bb5@bgtnsc03.worldnet.att.net>...
>Does anyone have recommendations for phased-array
antenna reference
>material? I'm looking for something with some basic
theory, and some
>complete project examples (preferrably for UHF, but
not required).
>
>Thanks!
>-Aaron
>
>

3317. Re: Elecraft K2?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: K6JMB@arrl.net
Message-ID: <36fa7cd8.11731746@cnews.newsguy.com>
Source record: 72002

I'm wondering if anyone has some advice to a newcomer to QRP and also sorta new to amateur radio....

The last kit I built (with some help) was in 1951 when I was 10 yrs old - a Heathkit AR2, I think it was. I never followed thru on a license till just recently - too busy 'doing life' I guess.

I just recently got my license and now that I'm retired, I have lots of time on my hands to spend on things I love - like radio.

SInce I'm pretty inexperienced with kit building for the 21st Century, do you think I'd be getting in too far over my head with the K2? It certainly is the rig I'd like to ***use*** after consdiering other possibilities (I currently have a Ten Tec Scout). And most of these factory-built rigs run in the thousands of bucks. A complete K2 with all the available options, comes in under $900.

So am I nuts to try the K2 given my limited experience? From everything I've heard and read, this rig and kit sound like an absolutely first rate design job! I only wish the very large, well-know computer manufacturer where I worked for many years, paid as much attention to the user interface, manuals and other details that Elecraft has given so much thoughtful attention to.

Any feedback would me mucho appreciated.

tnx es 73,
Jim
K6JMB

3318. Re: Elecraft K2?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36FA99D4.1115D8AD@erols.com>
Source record: 72003

If you can solder and read you can build a K2. Just take your time and check and double check everything. Take the time to tape all resistors and capacitors onto sheets of paper and label the values. That way you don't have to make color code decisions during construction (some colors are hard to tell apart unless you can compare them side by side). IMHO most people get into trouble because they get into all night marathon building sessions trying to get it done in a hurry. I find kit building much more fun if I work on it a few hours a night.

If you haven't soldered in a while get some perf board and resistors from radio shack and practice a little before starting the K2.

You'll find the K2 manual to be very complete. The K2 is an excellent rig.

Jim wrote:
> I'm wondering if anyone has some advice to a newcomer to QRP and also
> sorta new to amateur radio....
>
> The last kit I built (with some help) was in 1951 when I was 10 yrs
> old - a Heathkit AR2, I think it was. I never followed thru on a
> license till just recently - too busy 'doing life' I guess.
>
> I just recently got my license and now that I'm retired, I have lots
> of time on my hands to spend on things I love - like radio.
>
> SInce I'm pretty inexperienced with kit building for the 21st Century,
> do you think I'd be getting in too far over my head with the K2? It
> certainly is the rig I'd like to ***use*** after consdiering other
> possibilities (I currently have a Ten Tec Scout). And most of these
> factory-built rigs run in the thousands of bucks. A complete K2 with
> all the available options, comes in under $900.
>
> So am I nuts to try the K2 given my limited experience? From
> everything I've heard and read, this rig and kit sound like an
> absolutely first rate design job! I only wish the very large,
> well-know computer manufacturer where I worked for many years, paid as
> much attention to the user interface, manuals and other details that
> Elecraft has given so much thoughtful attention to.
>
> Any feedback would me mucho appreciated.
>
> tnx es 73,
> Jim

> K6JMB

3319. How to get a repeatable T/R delay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: lrbrandt@statestreet.com
Message-ID: <7deb6n$7pg$1@nnrp1.dejanews.com>
Source record: 72004

Hi All,

I need a XCVR (or separates) that can simply switch between
transmit and receive in a predictable manner.

What I mean is I have a timing critical application where
the T/R delay, whatever it is, is not important. As long as
the delay is constant, that's OK.

The delay needs to be constant within about 1us (.000001 sec).
I've thought of adding a "fudged" time, that is always making
it wait 2 secs or so, this large time would average out any
really small delay variations.

I need this accuracy so I can launch a packet that occurs
after detetion of a packet on another frequency.

(would FCC allow me to "rebroadcast" the signal, I don't
think so but hearing a signal and "repeating" it with your
call (SSID) would be OK.)

I expect a separate transmitter and receiver (on diff. freqs.)
would have the _least_ delay, but again, I need repeatable delay.

I guess a transmitter that uses a digital PTT (+5V on a pin somewhere)
vs a relay (hardware or solid-state) would work in a more repeatable
fashion, but I'll need to test some, I guess!

A way to test this is with existing dual band units. But I'm wondering
if there have been any tests done that can help in selecting a XCVR
for this.

Any ideas post and/or email me!

Tnx es 73,

AA1EA

Larry

lrbrandt@statestreet.com

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3320. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <7ded3r$9c6$1@nnrp1.dejanews.com>
Source record: 72005

In article <36FA6824.D87DC727@collins.rockwell.com>,
"Steven J. Zaugg" <sjzaugg@collins.rockwell.com> wrote:
> n2ey@aol.com wrote:
(snip of old stuff)
> >
> > I make all my own bread. Used to make it all by hand - now I have a machine.
> > The machine made stuff is OK, but not as good as the handmade kind. Both are
> > far better than anything I can buy in the stores. And yes, I make the
> > distinction between machine made and hand made. Because there IS a
difference.
>
> Do you make or buy the ingredients?

Hello Steven,

Some of each. We grow (organically) herbs, spices, tomatoes and hot peppers here on RadioTelegraph Hill. (The hot peppers make habaneros seem like sweet peppers - ask W3RV about how I define "hot"). Have also done the sourdough thing. The rest we buy. You know you're serious about bread baking when you buy yeast in 2 pound bags.

Most radio parts here are "recycled" - that is, bought at hamfests or retrieved from dumpsters and the like. Some parts are manufactured - coils are wound, sheet metal fabricated, etc. Made a really neat illuminated drum dial out of a piece of plexiglas tubing six inches in diameter that was given to me. Works really well with the capacitor/dial drive from a junked BC-221 frequency meter.

Better than store-bought!

73 de Jim, N2EY

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3321. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Dana@Source.Net
Message-ID: <7deduv$a1l$1@nnrp1.dejanews.com>
Source record: 72006
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <7d9f6q$rg4$1@news.itis.com>,
Paul K" <pjktg@itis.com> displayed ignorance laced with rudeness and wrote:

> Yes . No Problem. Just place it carefully behind a truck wheel and back
> up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased
> with the results.
> You can repaint later after you give it a test on the 10 meter AMATEUR
> BAND where you need a license. If you had a license you would know how to
> do this simple feat.
>
> Paul K. N9EMX "Paul K" <pjktg@itis.com> wrote:

Nice, Paul. Learn how to recognize international callsigns, buddy, if you
had a license you would know how to do this simple feat. Oh wait, you
seem to have a license already, how did you miss the part about callsigns?

You don't even need a license to learn how to be courteous, but that
seems to be passe in amateur radio today.

Dana K6JQ
Dana@Source.Net

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3322. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <36FAB328.59E2B600@my-dejanews.com>
Source record: 72007

n2ey@aol.com wrote:
>
> In article <7d5rv3quc1@nnrp1.dejanews.com>,
> marsgal42@hotmail.com wrote:
> > In article <19990321200632.19585.00000016@ngol02.aol.com>,
> > n2ey@aol.com (N2EY) wrote:
> >
> > > (snip...) Any type of home construction is a good thing.
> >
> > Amen. In this day and age I want to be as lenient as possible
> > on the definition of "homebrew" - partly because few people
> > ever build anything anymore, and partly because I can't
> > stand the elitist crap that goes with making distinctions
> > between "built from a magazine article", "built from a kit",
> > "personal design from discrete components", "personal design
> > with VLSI", and so on.
>
> Hello Laura,
>
> I must strongly disagree with being "as lenient as possible on the
> definition of homebrew". Building a kit is NOT the same thing as
> homebrewing from scratch. That is NOT a put-down of the kitbuilder
> - it's just being accurate.
> To label all types of home building as "homebrew" is an insult to
> some (the scratch- builder) and patronizing to others (the kit
> builder). It's electro-political correctness - mustn't use terms
> that might, just might, offend certain groups, but it's perfectly
> fine to offend others.
>
> It's not "elitist crap" to use exact definitions. Not in my book.
>
> I make all my own bread. Used to make it all by hand - now I have
> a machine. The machine made stuff is OK, but not as good as the
> handmade kind. Both are far better than anything I can buy in the
> stores. And yes, I make the distinction between machine made and
> hand made. Because there IS a difference.
> >
> > "Frankly, my dear..."
>
> Frankly, some of us DO give a darn.
>

Everyone in this discussion seems to have some good points.

Those that build from scatch should have some kind of distinction
that sets them apart.

On the other hand, kit builders/circuit modifiers also deserve
some kind of credit.

I have been a designer/builder for over 30 years now. I build some
things from scratch and other things from kits, magazine articles,
etc. I don't believe that my way of designing something is the
best and only way. Sometimes I really like someone elses design,
so I might incorporate some or all of it in something I make.
Sometimes I like the features offered by a kit and don't want
to be bothered ordering all the parts and be put on hold for
months while things are back ordered. The only thing I can be
sure of is that, everything I have is going to have a modification,
sooner or later.

So, why not just let "HOMEBREW" describe the things that are
completely "built from scratch". Let's add another another
word, to give credit to those that may not have the knowledge,
or abilities, to build completely from scratch, but have the
willingness to learn and get their hands in the guts of a piece
of equipment. Why not describe this middle ground with the
word "HAMBREW".

Martin

--
Martin E. Meserve KB7EQS martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3323. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <F968Mt.1u7@world.std.com>
Source record: 72008

Jim n8ee replied to > Reg Edwards who wrote
> >The other half of the antenna is the outside of the box
> >containing the receiver + the hand holding it + the arm +
> Since 99.9999% of HTs have plastic cases

which provides a layer of lousy dielectric betwixt the circuit-board
groundplanes or the internal metal shield/case and your hands.
At RF, we don't need metal-metal junctions, which is why through-glass
has even half a chance of working better than a duckie in a car. (If an
HT doesn't have decent interal shields or groundplanes, it's gonna
radiate its LO and cause lots of problems ... who ever saw a
plastic case HT with point-to-point wiring? Normal VHF/UHF practice
will at least have all of one side and all the waste space on the
other for capacitive coupling to your arm, although expecting good
practices from someone not using shielding may be asking too much :-)

> I did not consider the hand and arm
> as being part of the antenna,

The case and arm are the counter-poise for an HT. Which is one
reason to be careful with the duckie-on-the-hat extension cables;
I'm going to check mine and see if it sweeps better with a choke at
a suitable distance down from the hat-mounted BNC. I'm not sure I
prefer having the "counterpoise" irradiating my brain to irradiating
my kidney when using speaker mike, but (a) if I were using built-in
mic and onbaord duckie, the head gets it anyway, with the arm/chest
as counterpoise; and (b) if it gets out better that way, I'm
absorbing less.

> although it would certainly have an
> effect---same thing as putting your 40 Mtr vertical next to a steel frame
> building.

More like putting your quarterwave magmount whip on a metal car roof
rather than a plastic one -- that's what it's designed for.

> It is possible to design a helically loaded vertical antenna that will have
> 50 ohms impedance, but then:

I expect they do have 50ohm when tested with a test instrument that
treats it like an HT would (eg MFJ-259 held in hands).

> 1. Mount it with (essentially) no ground plane
> 2. Place it 2inches from your head (including
> eyeglasses!!)

I think we're agreeing here, if you design it as a free-space 50-ohm
radiator, you're assuming a choked/balun'd feed and free-space,
which you won't get, so design for the environment and allow for
that in testing/measurement too.

73 de Bill n1VUX

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

3324. Re: Universal Programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <F968un.4K4@world.std.com>
Source record: 72009

In article <36F7BB6B.FC7B35EA@t-online.de>,
Vlaski Goran <Ingra-Beton@t-online.de> wrote:

> Poor you, we in Europe have no such problems. Is there any
> other country in the world with such legal problems ???

Is England part of Europe? (I guess a couple parliments are debating that very question :-) Last I'd heard, receiving POLICE signals was unlawful in Britain, and they were campaigning for that right. They may be able to buy a DC-Daylight receiver, but turning it on may be illegal. (Were they successful?)

Note one reason HTs for the 220 ham band aren't commonplace and aren't covered on most scanners is that frequency band is used for Japanese police, so the usual manufacturers have a major govermental disincentive to include them. Not written into law perhaps, but not included in the cheap scanners either.

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

3325. Re: 572B Driving Impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <36FAC462.B9A5E2FE@hamradio.org>
Source record: 72010
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There are a lot of useful tech notes on Svetlana's web site:

http://www.svetlana.com/

Hope this helps,

Al - K8EUR

martyt@pobox.com wrote:

> Can someone with a tube reference book tell me what the driving impedance is
> for a 572B tube (or tell me where I can find that info on the 'net)?
>
> I'd like to try adjusting the input networks on my SB-200, and can do so with
> the MFJ-259 antenna analyzer but must have a couple of resistors that are the
> same value as the driving impedance of the tubes (572Bs).
>
> Any help would be appreciated.
>
> 73,
>
> -Marty KI0LO
> martyt@pobox.com
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3326. Charging NiCADs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36FAE5A7.6231@eece.maine.edu>
Source record: 72011

Hello all,
I'm wondering about how to make a low cost NiCAD charger for charging up AA's. I have a wall cube that likes to put out about 17V (w/a slight load on it) that I used recently to charge up my lead acid 4Ah battery. For charging the lead acid, I simply used about 50 ohms to limit the current to something like 110mA, which took about 4 days to charge. Can I do something like that to charge up NiCADs, or do I have to spend money on this project? I don't want to buy a fast charger; I'd rather have a slow charger and get more life out of my batteries.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3327. Re: Charging NiCADs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <36FAEA7F.E4B@ix.netcom.com>
Source record: 72012

Shawn Upton wrote:
>
> Hello all,
> I'm wondering about how to make a low cost NiCAD charger for charging
> up AA's. I have a wall cube that likes to put out about 17V (w/a slight
> load on it) that I used recently to charge up my lead acid 4Ah battery.
> For charging the lead acid, I simply used about 50 ohms to limit the
> current to something like 110mA, which took about 4 days to charge. Can
> I do something like that to charge up NiCADs, or do I have to spend
> money on this project? I don't want to buy a fast charger; I'd rather
> have a slow charger and get more life out of my batteries.
> --
> **********
> Shawn Upton
> Electrical Engineering Student
> University of Maine at Orono
> webpage: http://www.eece.maine.edu/~supton/
> mail: supton@eece.maine.edu
> KB1CKT Tech Plus
> **********
--- Hi Shawn -- maybe read the care and feeding of Nicads at URL:
http://www.cc.columbia.edu/~fuat/cuarc/NiCd.html

73
Rod in San Diego
--
AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 320,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3328. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Brian Kelly <Kelly@dvol.com>
Message-ID: <36FAF80E.DFDA0A77@dvol.com>
Source record: 72013
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Carl R. Stevenson wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
> Hash: SHA1
>
> My employer, Lucent Technologies, is looking for a Senior RF Technican
> with the following abilites and experience:
>
> Senior RF Technician Job Description
>
> 1. Ability to read schematics.
> 2. Ability to solder, including small surface mount devices,
> and build up RF, analog, and digital circuits in both prototype
> and "small lot production" environments.

. . . . . yo Squiggy-Poo . . .

While I'm unalterably opposed to your position(s) on the ham radio code tests and your techo-weirdo-geek elitist bullshit wrt to what ham radio would be like if you were Emperor I gotta go to bat for you on this one.

Your post was an honest and forthright annoucement of an available slot for some kindred RF-oriented ham to fill at Lucent. Where I come from that was a good deed.

Now lookit all the freaking flame and nit-picking bullshit.

I wouldn't actually wouldn't wish it on anybody, but what these ungrateful dweebs really need is their first pass thru a major economic downturn wherein they have no clue how they are gonna make the next payments on their new SUVs and their outlandish mortgages and forthwith complete their "educations".

It will be interesting to see how they react to posts like yours when that crap goes down . . it's gonna happen, we can put that in the bank right now.

. . from one very senior engineer who has been there to another . . .

Brian Kelly w3rv
No SSB International #1,000,010

3329. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <36FB0080.DCBBFE22@att.net>
Source record: 72014

Vince,
You might consider making some cross-connector-type cables
for the instrument. My MCM catalog lists SMC plugs for
rg-178 for <$4 (#CN00489). Put a cable-end BNC receptacle
on the other end of the cable...
Last known address:
http://www.mcmelectronics.com
Woody

Vincent Coppola wrote:
>
> To all that responded, I guess my description could have been better
> concerning the small RF connectors used in the 8410, 8407 and 8553B
> pluggins and I am sure much more in that generation of equipment.
>
> Well I think I have confirmed for sure that they are SMC connectors. Now
> my next challange involves adapting them to the test equipment world,
> i.e. signal generator, spectrum analyzer, etc which involve standard a
> BNC, SMA,N etc.
>
> Thanks all for replying
> Vince N1VC

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

3330. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7df085dpq1@news1.fast.net>
Source record: 72015
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Rick Kaumeier <k0vj@arrl.net> wrote in message news:36F9D51B.7A4@arrl.net...
> Carl R. Stevenson wrote:
>
> > Mike ... the "ad" was for a tech, not an engineer ... and
> > because *good* techs are so hard to find, many companies
> > hire them through a contract agency for 3-6 months to see
> > how they work out before converting them to permanent
> > employees.
>
> Carl,
>
> What's the average starting wage for an RF tech at Lucent? Good techs
> may be hard to find, but it also seems that the average wage is rather
> low for a "high tech" position.
>
> I realize that this is partially due to the fact that many techs are
> non-degreed, having gained their experience at a vo-tech school or
> through the military.
>
> Rick Kï¿½VJ
>

Rick ... I'm honestly not sure ... I know that Lucent pays
well, but I did not ask my boss what the range was when I
suggested he allow me to "advertise" the opening to hams here.

If you're interested (assuming the rate is good), please send
me a resume via e-mail and I'll make a point of getting back
to you ASAP.

73,

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!

http://www.nocode.org

```
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBNvsD1Je+N6+q84HiEQIAUwCbBrqd0QYoRz5tOdPzcDFYreVYakkAoKcE
hWRLTQmPdc0Zb1aGGh47fWJb
=u6aW
-----END PGP SIGNATURE-----
```

3331. Re: Can this be done??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Cyberhax <cyberhax@thegrid.net>
Message-ID: <eiEK2.3865$PM2.31813@alfalfa.thegrid.net>
Source record: 72016

No I haven't, but I think it's a fine idea. Maybe I should look into it?

Thanks for the reply,

Shawn WB6JWB

Allan Kaplan wrote in message <36F93E7B.54A78372@fallschurch.esys.com>...
>Have you considered modifying a commercial Kband radar detector?
>
>

3332. Internet Phone and Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-25 00:00:00 UTC
From: Ryan Ashline <Ashline@sprintmail.com>
Message-ID: <7df8vo$26g$1@fir.prod.itd.earthlink.net>
Source record: 72017

I have heard that some hams are connecting the internet phone program from volcaltech to a radio. Does anyone know how this is done?

3333. Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36FBBA47.6956@eece.maine.edu>
Source record: 71929

I know how Class A, AB, and C are biased, and the rough operation of each, but what are the Class D and up amplifiers? From my understanding, class c is driving with a 50% duty cycle square wave; could the class d and higher amps be driven with a non-50% duty cycle wave so as to reduce the harmonic contents of these amplifiers?

--

****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3334. Re: Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36fbbbd5.0@news.netwalk.com>
Source record: 71930
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

And there is always Kraus' "Antennas" published by McGraw Hill.

By the way, there is a new edition out now for those who are interested.

Jim
N8EE

3335. Re: Charging NiCADs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36fbb9ad.0@news.netwalk.com>
Source record: 71931

&NM7U <&NM7U@pcez.com> wrote in message

>Adjust your resistor for a charge rate of cell_capacity/10
>and let 'er rip.

This would be about 45 to 50 mA for a AA, although there are higher capacity cells around. At this rate it typically takes 10 to 15 hours to fully charge. An easy way to check is to take their temperature. If they feel warm then they are done.

Jim
N8EE

3336. Re: How to get a repeatable T/R delay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36fbbb62.0@news.netwalk.com>
Source record: 71932

lrbrandt@statestreet.com wrote in message
<7deb6n$7pg$1@nnrp1.dejanews.com>...

>The delay needs to be constant within about 1us (.000001 sec).
>I've thought of adding a "fudged" time, that is always making
>it wait 2 secs or so, this large time would average out any
>_really_ small delay variations.
>

>I need this accuracy so I can launch a packet that occurs
>after detetion of a packet on another frequency.
>

Start with a high frequency crystal oscillator. Build a divider circuit
using digital logic to divide it down to the desired time interval. WHen
you receive a packet start the divider. When you get the output pulse it is
time to send. Even a cheap crystal would give you +/- 0.02% or better
timing.

>(would FCC allow me to "rebroadcast" the signal, I don't
>think so but hearing a signal and "repeating" it with your
>call (SSID) would be OK.)
>

That is what a repeater does. That is also what a digipeater (digital
packet repeater) does. Look up packet radio on the internet. There is lots
of info on it.

I assume you are talking about retransmitting a legitimate amateur radio
signal. Anything else would be illegal.

>I guess a transmitter that uses a digital PTT (+5V on a pin somewhere)
>vs a relay (hardware or solid-state) would work in a more repeatable
>fashion, but I'll need to test some, I guess!
>

Again, look into the radios designed for packet radio.

Jim
N8EE

3337. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36FBD547.973EE117@erols.com>
Source record: 71933

Take a look at http://www.ti.com/sc/docs/msp/pran/tutorial.htm Class D
is essentially pulse width modulation.

Shawn Upton wrote:
>
> I know how Class A, AB, and C are biased, and the rough operation of
> each, but what are the Class D and up amplifiers? From my
> understanding, class c is driving with a 50% duty cycle square wave;
> could the class d and higher amps be driven with a non-50% duty cycle
> wave so as to reduce the harmonic contents of these amplifiers?
> --
> **********
> Shawn Upton
> Electrical Engineering Student
> University of Maine at Orono
> webpage: http://www.eece.maine.edu/~supton/
> mail: supton@eece.maine.edu
> KB1CKT Tech Plus
> **********

3338. Re: VOX clipped syllable fix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36FBC933.392B6DD9@mwci.net>
Source record: 71934

DJohnson@DJandAssoc.Com wrote:

> The device he had in mind would allow a
> radio transceiver to operate in a VOX mode and would prevent the delays
> associated with switching from receiving and transmitting modes from clipping
> the first syllable spoken. His device would use a bucket brigade charge
> coupled device as an analog delay.

Some IF/RF noise blankers use a delay method so that when a noise pulse appears the signal switch is open-circuited before the desired signal arrives at the switch.

One scheme uses a glass delay line for the desired signal. A multi-section LC lowpass- or bandpass-filter also delays the signal.

An active opamp filter could be used at audio frequencies.

Bill W0IYH

3339. Re: Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36fbd839.0@news.netwalk.com>
Source record: 71935
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jim wrote in message <36fbbbd5.0@news.netwalk.com>...
>
>
>
>And there is always Kraus' "Antennas" published by McGraw Hill.
>
>By the way, there is a new edition out now for those who are interested.
>
>Jim
>N8EE
>
>

Sorry, but just realized the new book is Kraus' "Electromagnetics", not "Antennas".

Jim

3340. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36fbd7e9.0@news.netwalk.com>
Source record: 71936

Shawn Upton wrote in message <36FBBA47.6956@eece.maine.edu>...
>I know how Class A, AB, and C are biased, and the rough operation of
>each, but what are the Class D and up amplifiers? From my
>understanding, class c is driving with a 50% duty cycle square wave;
>could the class d and higher amps be driven with a non-50% duty cycle
>wave so as to reduce the harmonic contents of these amplifiers?
>--

No, a Class C is driven with a less than half-cycle sinewave.

Class A is biased so that the tube/transistor is always conducting. The signal (I am assuming a sine wave here) is amplified on its entire cycle. Class B is biased so that the tube/transistor is conducting only on (exactly) 1/2 cycle of the sinewave. Class C is biased so that the tube/transistor is conducting on less than 1/2 cycle.

Class AB is between A and B, in other words the tube is conducting over more than 1/2 cycle but less than a full cycle.

There are also sub classifications that you will see, such as AB1, etc. These have to do with exactly how much of the cycle is in conduction.

In the newer amplifiers, such as Class D and E, the tube/transistor is driven in to saturation on the peaks and completely cut off on the low points in the cycle. They are basically acting as a switch.

The trade-off in all this is between efficiency, power output, and distortion. Class A would give the smallest distortion but has the lowest efficiency. Class D/E would have the highest efficiency but the most distortion.

I, myself, are not completely familiar with the details of D, E and related classes. Perhaps someone else on the group can give you more details.

Jim
N8EE

3341. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: tracy <n1rkt@blomand.net>
Message-ID: <01be77bd$2863b560$856074cc@tracy-walters>
Source record: 71937
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.cb

I can understand all responces made to the request unknowingly Paul did not reconize the sorce of the ?,
we do have a problem with the cb's getting used wrong and there is no easy fix. Howevever the mods are easily done by a ham or anybody else that gets the info in the future why not deliver the info to a lic. ham via email and not public display it may only keep one radio from being modified for the wrong reason but it is a start.

'73 Tracy N1RKT

3342. FS: round meter movements

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: worley@50hill.com
Message-ID: <36FC0B21.4240@50hill.com>
Source record: 71938

I have at least 20 or 30 round meter movements from military v.o.m.s. Rugged steel constr with AC V, DC V, and ohms scales. 4-1/2'' o.d. with 3-1/2'' face, $4.00 each plus UPS. All are 50 uA movements made by Bruno, QVS, or Phaostron. The scale can be removed and reversed (or painted over) for a custom power meter, ammeter, etc. Four styles available, with blue or black bezel, and with entire meter visible under clear cover or with bottom third coverd by the bezel. Also have a few with an extra set of terminals to detect a "pegged" condition, for $6 ea. NOTE: Please REPLACE the "50" with "snow" to spell "snowhill" in my email or call 334-347-5281.

3343. Re: Phased-array antenna reference?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36FBE677.9F9731BB@teleport.com>
Source record: 71939
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I'd like to give a caution about using some of the professional texts for phased-array information. Much of the phased array development has been done for very large arrays (like the military one I worked on many years ago which had 10,000 transmit elements and around 5,000 for receiving). In these arrays, the environment of all the elements except ones on the very outside is essentially the same, so feed systems can be designed with the assumption that all element impedances are the same. This assumption underlies a lot of the analysis of large arrays, but isn't valid for most amateur arrays of a few elements. Making this assumption can lead to arrays that work very poorly.

In contrast, the element impedances of an amateur array are often very different from each other, and this has a profound effect on the required feed system. In professional texts, look in the sections devoted to AM broadcasting, such as Chapter 25 of Johnson (_Antenna Engineering Handbook_) or Chapter 20 of its predecessor edited by Jasik. Like amateurs, broadcasters also use arrays of a few elements. Their feed systems tend to be complex, and made to operate on a single frequency after a lengthy adjustment procedure. But their methods are valid and applicable to amateur arrays. (For examples of this approach see Lee, _Vertical Antenna Handbook_, published by CQ.)

A number of amateur sources have already been mentioned. You might also take a look at "The Simplest Phased Array Feed System -- That Works" in the _ARRL Antenna Compendium_, Vol. 2.

Jim, do you mean there's now a third edition of Kraus? The second edition has been out for 11 years now.

Roy Lewallen, W7EL

Jim wrote:
>
> And there is always Kraus' "Antennas" published by McGraw Hill.
>
> By the way, there is a new edition out now for those who are interested.
>
> Jim
> N8EE

3344. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7dgrvo$e0n$1@nnrp1.dejanews.com>
Source record: 71940

In article <36FBBA47.6956@eece.maine.edu>,
Shawn Upton <supton@eece.maine.edu> wrote:

> I know how Class A, AB, and C are biased, and the rough operation of
> each, but what are the Class D and up amplifiers? From my
> understanding, class c is driving with a 50% duty cycle square wave;
> could the class d and higher amps be driven with a non-50% duty cycle
> wave so as to reduce the harmonic contents of these amplifiers?

Your "Class C" is actually Class D - in effect, a high-speed SPDT
switch between the positive and negative power rails and the output.
Such amplifiers are easy to make with power MOSFETs. There was a
20 watt transmitter in Radio Communication a couple of years ago
that used push-pull Class D IRF 510s. Just about the most watts
per dollar I've ever seen. :-)

You're not going to find much on the subject in the amateur
literature - only the occasional article here and there - but this
sort of stuff is well covered in the professional literature.
Check the IEEE publications in your school library.

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3345. Re: How can I homebrew a 2 meter amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: jk108@mydejanews.com
Message-ID: <36fbeea3.20456865@news.sbtek.net>
Source record: 71941

I agree, this is the first message I saw the very first time I checked this ng. Funny thing is, I am considering building a 2M HT amp. Why? because I have the time, so why not. If I buy one, then I still have to find a project to keep me busy. Some people homebrew for something to do, not just to save $$, although I am usually a big fan of saving money..

Now, for the relevant part of this post, there is an article in the '99 ARRL Handbook on building a 2M amp for an HT. I have a dead dual band radio that I can rob the amplifier module out of.

Josh
N0NPI

On 20 Mar 1999 21:17:26 GMT, "w . roberts" <wilf.roberts@staffs.ac.uk> wrote:

>
>
>Quite , quite incredible , this ng is called <rec.radio.amateur.HOMEBREW>
>isn't it ?
>........what encouragement....." Why don't you buy one....its much easier "
>
>or " Why don't you build an ant. instead "
>
>How about finding an ng where the folks really are interested in rolling
>their own ?
>
>Wilf Roberts G3LOE
>
>
>
>> > > I don't know, post your resume here and we'll take a vote to see if
>we
>> > > think you are qualified to homebrew a 2 meter amp. But why would
>> > > you want to, you can buy one for $40. Homebrew a 20 meter quad,
>> > > you'll get more enjoyment from it.
>

3346. ITT Mackay 403A lifeboat radio info wanted....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <36FC2FDB.59AF4D25@seidata.com>
Source record: 71942

Hello. I have a chance to buy one of these and was
wondering the following:
Is it solid state or tube type?
Is it CW only or if voice capable AM or SSB?
How many watts output?
The approximate age.

This is a marine lifeboat radio with a crank generator and
antenna kit in a portable suitcase.
I thought it might be a novel rig for field day, emergency
use or just for fun. Any info
greatly appreciated.

Randy.

3347. Re: ITT Mackay 403A lifeboat radio info wanted....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990326182942.18453B-100000@oso.slonet.org>
Source record: 71943

This is NOT a fun radio but one that still is in service. Unless you
fully understand the original function of that radio----leave it alone!

On Fri, 26 Mar 1999, Randy and Cara Randall wrote:

> Hello. I have a chance to buy one of these and was
> wondering the following:
> Is it solid state or tube type?
> Is it CW only or if voice capable AM or SSB?
> How many watts output?
> The approximate age.
>
> This is a marine lifeboat radio with a crank generator and
> antenna kit in a portable suitcase.
> I thought it might be a novel rig for field day, emergency
> use or just for fun. Any info
> greatly appreciated.
>
> Randy.
>
>
>
>
>

3348. BC-221 eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FC4358.F4B82918@uswest.net>
Source record: 71944
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82219099

Thanks

3349. Orginal FT 101 manual eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FC43B0.4734F332@uswest.net>
Source record: 71945
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82215391
Thanks

3350. Variac 5 AMP eBAY

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FC4432.49CF3388@uswest.net>
Source record: 71946
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82212706

Thanks

3351. Need Kenwood VFO knob

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Steven Baker <pacman@bcl.net>
Message-ID: <36FBF308.F511879@bcl.net>
Source record: 71947

Hello,
I am looking for a vfo knob for the Kenwood ts-520s. Also looking for
the khz dial
also. If you have either of these please e-mail me. Thanks!

Steve KB9HGI
kb9hgi@qsl.net

3352. Re: LOW power duplexer circuit???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: gmills <gmills@mdsroc.com>
Message-ID: <7dhh1v$g84$1@node17.cwnet.frontiernet.net>
Source record: 71948

Here is my attempt at one, but I see I have not added the parts list. I will do this tomorrow, as my parts list is at work.

http://www.frontiernet.net/~gmills/diplexer_in_a_can.htm

KF4FDJ (Mike in Ft. Myers, FL) wrote in message
<36FBA6F4.F91C6515@gate.net>...
>Good morning group,
>
>I thought I'd go right to the experts. I'm looking for a low power
>pc-board circuit for a 2M/440cm duplexer. I know there is one out
>there, but can't seem to locate the URL.
>
>Thanks in advance, and 73! Mike
>--

3353. General Radio Multifilters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: willis <5560@notsonet.com>
Message-ID: <36FC4D99.77E4@notsonet.com>
Source record: 71949

Two General Radio Multifilters For Sale, spectrum shaper/equalizer, 25 - 20KH, in 30 bands, +/- 25Db each band in1Db steps. Output summed (equalizer) or parallel for monitoring each band seperately. Gain adjust: +6 to-12 Db. Input voltage +/-17Vpk. Input Z=100K ohms, Output Z=600ohms Has peak monitor panel meter Power from 100-125VAC or 200-250Vac. Rack mount. With manual (copy) , $150 Each plus shipping (50 lbs) from RI. Please e-mail to: shiso@sneplanet.com. Thanks Bruce..

3354. Re: AM-6155 / AM-6154 FA e-Bay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Gary <catlink@erols.com>
Message-ID: <7dhpfe$83g$1@winter.news.rcn.net>
Source record: 71950
Cross-posted to: alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

For general information, Fair Radio Sales currently sell these items for
$235. Their wbesite is located at---

http://www2.wcoil.com/~fairadio/

Arthur Moe wrote in message <36F84D70.54C900C1@uswest.net>...
>I have placed one of each of these amplifiers on e-bay they are clean
>and
>not beat up. They are just as received from the FAA.
>
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=81376582
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=81384430
>
>Thanks
>Art
>KB7WW
>

3355. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Brian <schousek@geocities.com>
Message-ID: <7dhpqp$d9m$1@jair.pressenter.com>
Source record: 71951

Well I had the hardest time doing that in the graphical version of Pspice for a long time (I could easily do it in the text based spices, but I guess that starts to show my age.)

A solution to your problem is to place a parameter block (PARAM) on your schematic via place part (ctrl-P).
-double click on the parameter block, and set Name1 to SET and Value1 to 1p
-now place your capacitor and double click on the capacitance value, set the value to {SET} (note the curly brackets around the word SET... they are above the square brackets [] on your keyboard.)
-Now go into the Analysis-Setup menu. Click on the Parametric button
-Set 'Swept Var. Type' radio button to 'Global Parameter'
-Set 'Name' box to SET (no curly brackets)
- choose appropriate start, end, and increment variables, and your sweep type
-now run your simulation and be happy- now that you know the basic steps you can start to improvise

The magic is in the curly brackets around SET. I used the full version of Pspice at a former job and hence had complete documentation, but it was still difficult to track down this technique. Don't feel bad if it wasn't apparent :-)

KB9TBB

JD wrote in message <36fc62ed.4121032@news.atl.mindspring.com>...
>Hello all I am trying to get the hang of microsim designlab ver 8.
>Is it possible in a circuit to specify the min and max values for
>a passive component such as a capacitor then tune it and
>see the results update via probe...
>
>Right now every time I have to change the value then re simulate..
>
>any help woulb be appreciated..
>
>tia JD..

3356. Re: Looking for PLL VFO 5-5.5 mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: crabtreejr@aol.com
Message-ID: <19990325205409.26411.00000148@ng61.aol.com>
Source record: 72018

ljl160@aol.com (LJL160) on Wed, Mar 24, 1999 14:17 EST wrote:

>Im trying to stabilize old Ten Tecs with PLL vfo-any help appreciated.

You might want to consider an improved version of the 'huff and puff' stabiliser originally developed by PA0KSB. See 'The "Fast" Digital Oscillator Stabilizer', by Pete Lawton, G7IXH, QEX Nov/Dec 1998, pp 17-23.

Unless the drift rate of the original TenTec oscillator is truly horrible, then this should sort it out. You can get a copy of the magazine from the ARRL for $4 shipped. It is not mentioned in the article, but you can get a PCB from FAR Ciruits <http://www.cl.ais.net/farcir/> for $11.

73's
John Crabtree

3357. Re: How to get a repeatable T/R delay?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990225164621.OUI17.ejune@intuitive-data.com>
Source record: 72019

A 555 timer might do the trick. The application notes for the chip will give you all the circuit examples that you should need. Not sure if you can maintain a 1uSec repeatability spec, but if you choose components that don't drift much with temperature, you might be OK.

--
Regards,

Eric June
KU6J

3358. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990326010536.16922.00000186@ngol01.aol.com>
Source record: 72020

In article <36F968EA.50E3@pop.removethistomailme.net>, John Miles
<jmiles@pop.removethistomailme.net> writes:

>Subject: Re: What constitutes Homebrew?
>From: John Miles <jmiles@pop.removethistomailme.net>
>Date: Wed, 24 Mar 1999 14:36:26 -0800
>
>Allan Kaplan wrote:
>>
>> That definition does not necessarily describe a "homebrewer" but rather
>> a person who understands radio electronics fairly well -- a very useful
>> quality in homebrewers, technicians, engineers, and a minority of
>> hams. 73 de W1AEL, Allan.
>
>I think you guys missed my point, though -- nobody, but NOBODY, is going
>to pass my little "test" without a heck of a lot of hours spent with the
>books and on the bench as well. "Understanding" electronics is not the
>same as "doing" electronics. Even someone who builds a complete station
>from scratch from ARRL Handbook project articles and such could very
>well fail to pass the test. Likewise, someone with an MSEE but little
>hands-on interaction with components and circuits would almost certainly
>fail. I've seen plenty of examples at both ends of the spectrum.

John,

I can guarantee you I'd get at least a 99 score on your test. On every component in every piece of gear in my station. Been that way since I was a Novice.

73 de Jim, N2EY

3359. Yaesu 7011

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Edi <yourmail@netscape.net>
Message-ID: <01be775f$31dcb960$fe0110ac@edi>
Source record: 72021

Does anyone have interface schematic for Yaesu 7011 ?
PLs reply to mailto:edi@citra.co.id, mailto:yd0hle@qsl.net
Tks
73, de YD0HLE

3360. Re: Internet Phone and Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36fb9a5c.39745377@news.erols.com>
Source record: 72022

On Thu, 25 Mar 1999 22:20:40 -0800, "Ryan Ashline"
<Ashline@sprintmail.com> wrote:

>I have heard that some hams are connecting the internet phone program from
>volcaltech to a radio. Does anyone know how this is done?
>
>
There is an article on this subject on my web page:

http://www.erols.com/wmeara>

3361. Re: Looking for Elmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Fred <peerenbf@dma.org>
Message-ID: <2AKK2.32$R2.464@news14.ispnews.com>
Source record: 72023

If you have specific questions you need answers for just email them to elmer@febo.com as we have a pretty extensive list of email elmers that will attempt to answer those questions.

--
Fred

peerenbf@dma.org
http://www.dma.org/~peerenbf/
KU4YP wrote in message <19990324165238.01103.00001080@ng-ca1.aol.com>...
>hello,
>
> i have been reading about homebrew and building your own equipment
for
>some time. i can't wait to start doing this, however, i have no experience
in
>building, kits or otherwise. i can wire my own mike plugs and i am preety
good
>with a soldering iron.
>
> i am just looking for a place to start. i don't have alot of $$$
which
>probably qualifies me for homebrew/qrp very well. i am however very willing
to
>learn.
>
> are all elmers sk??
>
> any help is very appreciated.
>73 de KU4YP
>Mike Prevatt
>Lake Hendry, Fl.

3362. Re: Charging NiCADs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: &NM7U <&NM7U@pcez.com>
Message-ID: <36FB9DD6.8D66C8D2@pcez.com>
Source record: 72024

Shawn Upton wrote:
>
> Hello all,
> I'm wondering about how to make a low cost NiCAD charger for charging
> up AA's. I have a wall cube that likes to put out about 17V (w/a slight
> load on it) that I used recently to charge up my lead acid 4Ah battery.
> For charging the lead acid, I simply used about 50 ohms to limit the
> current to something like 110mA, which took about 4 days to charge. Can
> I do something like that to charge up NiCADs, or do I have to spend
> money on this project? I don't want to buy a fast charger; I'd rather
> have a slow charger and get more life out of my batteries.
> --
> **********
> Shawn Upton
> Electrical Engineering Student
> University of Maine at Orono
> webpage: http://www.eece.maine.edu/~supton/
> mail: supton@eece.maine.edu
> KB1CKT Tech Plus
> **********

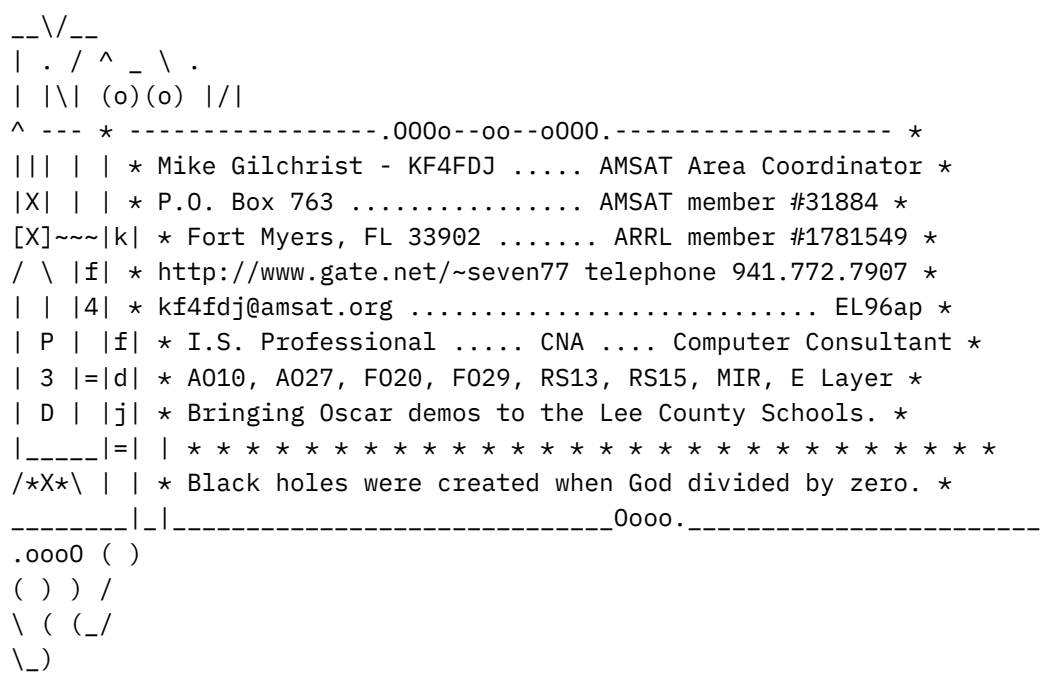
Adjust your resistor for a charge rate of cell_capacity/10
and let 'er rip.
miker
--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

3363. LOW power duplexer circuit???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <36FBA6F4.F91C6515@gate.net>
Source record: 72025

Good morning group,

I thought I'd go right to the experts. I'm looking for a low power
pc-board circuit for a 2M/440cm duplexer. I know there is one out
there, but can't seem to locate the URL.

Thanks in advance, and 73! Mike
--


3364. FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: napoli@i-2000.com
Message-ID: <36fda905.18731798@news.i-2000.com>
Source record: 72026

F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
with rectangular face 0--10 amp- scale..brand new..pse remove the
(ns) from my address..thanks..Bob ..on Long Island....$40.00

3365. Re: Charging NiCADs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36FBB50E.63DE@eece.maine.edu>
Source record: 72027

AC6V wrote:

> --- Hi Shawn -- maybe read the care and feeding of Nicads at URL:
> http://www.cc.columbia.edu/~fuat/cuarc/NiCd.html
>
> 73
> Rod in San Diego
> --
> AC6V INDEX TO DX AND HAM RADIO
> FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
> Over 320,000 visits on the counter
> http://www.ac6v.com/pageas.html -- Alphabetical Index
> http://www.ac6v.com/ -- Home Page

Thanks. It seems that I can do a trickle charge at about 50mA for
something like 10-15 hours, since that is the it used to be done. Maybe
I should look around for a used charger; I just don't want to pay $30
for a quick charger that might result in less battery life; and also
because another NiCAD pack for the HT would be a cheaper investment than
buying the 6 NiCAD's and a charger.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3366. VOX clipped syllable fix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-26 00:00:00 UTC
From: DJohnson@DJandAssoc.Com
Message-ID: <7dgfr8$2ij$1@nnrp1.dejanews.com>
Source record: 72028

Many years ago an electronic technician who was working for me had an idea for a product. He wanted to build a box that would be placed between a microphone and the microphone input of a radio transceiver that was equipped for standard push to talk operation. The device he had in mind would allow a radio transceiver to operate in a VOX mode and would prevent the delays associated with switching from receiving and transmitting modes from clipping the first syllable spoken. His device would use a bucket brigade charge coupled device as an analog delay. When the person first spoke, a relay contact would switch the transmitter on, but the box circuit would generate a short delay between the actual speech into the microphone and the signals sent to the microphone input of the transceiver. With his device the transmitter would be switched on before the speech signals arrive. His device would give hands free VOX operation without ever missing the first syllable. My question is, this idea sounds like something that more modern radio transmitters may already have built into them. Do the latest radio transceivers have such a feature?

David A. Johnson, P.E. &#65533; Consulting Engineer

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3367. FA: Motorola CB AM/SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <3705041e.62881782@207.217.77.140>
Source record: 71829
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83429171

3368. FA: Drake TR7A W/PS7 & Desl Mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <3703038f.62738573@207.217.77.140>
Source record: 71830
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83432906

3369. FA: Kenwood TS-440S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <3706045c.62943668@207.217.77.140>
Source record: 71831
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83428410

3370. FA: RFC 2/70 Hi Power DualBand Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370002d1.62548903@207.217.77.140>
Source record: 71832
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83435787

3371. FA: Icom 900 29/50/144/220/440

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <3702034e.62673894@207.217.77.140>
Source record: 71833
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83434525

3372. FA: Kenwood PS-430 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370a051f.63138682@207.217.77.140>
Source record: 71834
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83431147

3373. FA: Kenwood PS-50 Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370904e8.63083468@207.217.77.140>
Source record: 71835
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83430519

3374. FA: Pyramid Gold Series Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370b054b.63182682@207.217.77.140>
Source record: 71836
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83431747

3375. FA: Kenwood AT-230 Ant.Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370804b6.63033695@207.217.77.140>
Source record: 71837
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83266013

3376. FA: RCI 2950

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <37070492.62997517@207.217.77.140>
Source record: 71838
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83261748

3377. FA: Motorola Desk Mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370c057b.63230393@207.217.77.140>
Source record: 71839
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83430811

3378. Re: FYI: 60 Plus HomeBrew Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <36FD0A1F.38F7@ix.netcom.com>
Source record: 71840

Dave Hinerman wrote:
>
> On Tue, 23 Mar 1999 16:01:40 -0800, AC6V <ac6v@ix.netcom.com> wrote:
>
> >Just finished searching for Ham HomeBrew Pages -- the 60 that didn't
> >include Home Brewing Beer are linked at URL:
>
> But, but, but... oh, never mind.

> Dave

Oh alright Dave -- here is the homebrew beer page
Hickup -- guess I had too many beers -- forgot to include the link
It is at URL:
http://www.storeybeer.com/

7 and hick 3
Rod The Mellow
--
AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 320,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3379. Re: FA: RFC 2/70 Hi Power DualBand Amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: n1mnm@wtvl.net
Message-ID: <36fd0b7f.3910571@news.ctel.net>
Source record: 71841
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

This is a swap group...not a "Ebay rip-off auction" area !!!
Post this Ebay junk somewhere else, please!!

On Sat, 27 Mar 1999 16:11:33 GMT, richcom@earthlink.net (richcom)
wrote:

>Go to:
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83435787
>
>

3380. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Michael Gray Anthony <mganthon@unity.ncsu.edu>
Message-ID: <36FCE59D.5B07FD0E@unity.ncsu.edu>
Source record: 71842

Hey Ryan,
If you are running such low power, it might be best to feed your antenna with 450 ohm ladder line or something similar. It has substantially less loss over distance than coax, but you will need a balun or a balanced line tuner to handle it. Even if you go with coax, at miliwatt levels you want to go with something at least *better* than 58. For almost all of my 100W HF work I use RG-8X It has lower loss than the 58/59, and it still comes in a small package.

Good Luck and 72,

Gray KE4QIU

--
--One Man's Sunset is another Man's Dawn. -- Fievel Mouskawitz
--The art of flying is to throw yourself at the ground and miss. -- Douglas Adams
--"From what we get, we can make a living; what we give, however, makes a life." -- Arthur Ashe
--Don't cry because its over, smile because it happened.
--Have a nice day! :-)

ICQ # 22931469

-- M. Gray Anthony KE4QIU

3381. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <36FD1789.E30DA9F1@ibm.net>
Source record: 71843

The ammount of power does not matter. The ammount will be reduced
by the same ratio if it is 100 watts or 100 miliwatts. I would use
atleast the rg-8X type coax for 2 meters for that ammount of coax.
Even if you go with the rg-58, you wiii be beter off with an
external antenna up 20 or 30 feet than the antenna that normally
comes with a HT. The coax will loose about half the power, but the
antenna will give that back plus some and the height is more
important. I would normally have twice hte height even if I only
had 1/4 the power at the antenna.

Ryan Ashline wrote:
>
> I have a low power 150mw transceiver that I have been planning on
> connecting to an external antenna. I have tested the hieght (me on the roof
> with the radio) and I can reach all around town on 2m simplex. But today
> as I was getting the coax to run to a J-pole I questioned what the outcome
> might be when all said and done. Will the very low 150mw make itself all
> the way to the antenna? From where my radios are it takes 40 to 50 feet of
> coax to make it to the roof. Also do I need to go with something larger the
> rg-58?
>
>

3382. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7dj5oqheo1@winter.news.rcn.net>
Source record: 71844

Ryan

First, thanks for not giving up on Ham Radio!

To answer your question (you've provided enough
information by giving the frequency, type of coax
and length) I would suggest you look in any of the
ARRL handbooks that have data on coax losses
at various frequencies. RG-58 is a particularly poor
choice for VHF, it will have appreciable loss, even for
a fifty foot run. 3dB of loss is equal to 1/2 of your transmitter
power, or 1/2 of your received signal lost as heat!

I would suggest at a minimum you use RG8X (if size is
a problem). You will be gaining a lot by moving your antenna
out of the house and getting it up high and in the clear, so whatever
power you save in coax losses will only help you hear and reach out
further on simplex! There is another coax, 9913, that has a very low
losses at VHF.

Regards

Pete, K1ZJH
a member of the CQ Publishing Family

Ryan Ashline wrote in message <7die1jgph1@birch.prod.itd.earthlink.net>...
>I have a low power 150mw transceiver that I have been planning on
>connecting to an external antenna. I have tested the hieght (me on the
roof
>with the radio) and I can reach all around town on 2m simplex. But today
>as I was getting the coax to run to a J-pole I questioned what the outcome
>might be when all said and done. Will the very low 150mw make itself all
>the way to the antenna? From where my radios are it takes 40 to 50 feet of
>coax to make it to the roof. Also do I need to go with something larger
the
>rg-58?
>
>Thanks for any help or comments you can give!! 8>)
>Ryan KB5UUS
>
>>

3383. FA: MEISSNER ANALYST Vintage Test Gear, last day!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: indyno@spammytheriver.com
Message-ID: <36FD24AE.7BAE2884@spammytheriver.com>
Source record: 71845

Real nice!

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=81982001

To email, remove: nospammy from my address.

3384. Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <ufH3CAAAZS$2EwcM@g3uda.demon.co.uk>
Source record: 71846

Hello All

I'm reliving my youth! Am gradually trying to get together
various useful bits of test gear so as to restart an old HF transceiver
project.
I am seriously looking to spoil myself by obtaining a spectrum
analyser. I have been looking at a Marconi TF 2307 (normally they range
from 30 hz - 110 Mhz without the extender but one I have seen is a
special that covers up 200Mhz). I also have to consider the bandspread
of my wallet ;-)
Has anyone had experience with them please, any general
comments, WWW sites, a spectrum analyser FAQ perhaps. I have looked but
could not find much gen.

Many thanks ..
... Ken

3385. Re: FA: RCI 2950

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <36FD2AC0.319C718C@netdoor.com>
Source record: 71847
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

What is the black box with the red button that appears to be attached to
the 320?

Butch KF5DE

richcom wrote:

> Go to:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83261748

3386. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7djb95$sm5$1@news1.fast.net>
Source record: 71848

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Ryan Ashline <Ashline@sprintmail.com> wrote in message
news:7die1jgph1@birch.prod.itd.earthlink.net...
> I have a low power 150mw transceiver that I have been planning on
> connecting to an external antenna. I have tested the hieght (me on the roof
> with the radio) and I can reach all around town on 2m simplex. But today
> as I was getting the coax to run to a J-pole I questioned what the outcome
> might be when all said and done. Will the very low 150mw make itself all
> the way to the antenna? From where my radios are it takes 40 to 50 feet of
> coax to make it to the roof. Also do I need to go with something larger the
> rg-58?

RG-58 is quite lossy at 2m compared to the larger cables, with
RG-58 having about 7 dB loss per 100 ft., vs. about 3 dB per
100 ft. for RG-213 ... there are also even lower loss cables
such as Belden 9914 (which is about the same size as RG-8/RG213,
but considerably stiffer).

In short, with 50 ft. of RG-58, you'll have at least 3.5 dB of
loss, so you'll get about 67 mW of your 150 mW at the antenna.

With RG-213 at about 1.5 dB of loss for 50 ft., you'd get about
106 mW of your 150 mW at the antenna ...

The difference (between the two cable types) is roughly
2 dB ... you might notice some difference, it might be
hard to tell in your practical appliation.

It will depend on what sort of antenna the person at the other
end is using, path obstructions, and many other factors.

When you were on the roof with the radio, were you using the
J-pole antenna or a "rubber duck" on the radio (which I'm
assuming is an HT)??? If you were using the rubber duck, you
may well do better even with the higher loss of the RG-58,
since the J-pole will surely work better than a rubber duck.
(However, with that said, I'd spring for the RG-213 if it were
me.)

73 and good luck,

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse

NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

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0yPtTDyiEBLZepeyujJ0ej8m
=vQiZ
-----END PGP SIGNATURE-----

3387. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7djbdksnl1@news1.fast.net>
Source record: 71849

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Michael Gray Anthony <mganthon@unity.ncsu.edu> wrote in message
news:36FCE59D.5B07FD0E@unity.ncsu.edu...
> Hey Ryan,
> If you are running such low power, it might be best to feed your antenna
> with 450 ohm ladder line or something similar. It has substantially
> less loss over distance than coax, but you will need a balun or a
> balanced line tuner to handle it. Even if you go with coax, at miliwatt
> levels you want to go with something at least *better* than 58. For
> almost all of my 100W HF work I use RG-8X It has lower loss than the
> 58/59, and it still comes in a small package.
>
> Good Luck and 72,
>
> Gray KE4QIU

Gray ... I believe that Ryan is talking about 2m ... from an
HT to a roof-mounted J-pole ... I doubt that 450 Ohm ladder
line, baluns, and tuners were in line with his objective.

73,

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

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aaIEwbotxReavnI2+yQGIYUB
=zdI5
-----END PGP SIGNATURE-----
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3388. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <36FD32CD.2B7D8ED8@gate.net>
Source record: 71850

Ken et al,

I have a couple of museum quality pieces perfect for anachronistic
twiddling. A 40s vintage James Milnen noise bridge, and a 60s vintage
Megacycle meter (remember those?) Both have factory calibrated coils,
and manuals. Interested?

73, Mike

> I'm reliving my youth! Am gradually trying to get together
> various useful bits of test gear so as to restart an old HF transceiver
> project.

--
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| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________
.oooO ( )
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_)

3389. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990327144235.11589.00000368@ngol07.aol.com>
Source record: 71851

In article <36FC7D6B.16B6@megsinet.net>, "Clifton T. Sharp Jr."
<clifto@megsinet.net> writes:

>Subject: Re: What constitutes Homebrew?
>From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
>Date: Sat, 27 Mar 1999 00:40:43 -0600
>
>N2EY wrote:
>> I LIKE it! "Kitbuilder" or "kitbrewer" are other names to consider. There
>> should be easy to remember names for the major variations of "home built".
>
>Considering some of the kits that have come and gone, "kitbuilder" isn't
>exactly pejorative. :-)

Exactly.

>I did a Wersi organ some years ago for a friend,
>and that one was quite an accomplishment; not for the beginner.

Heathkit made everything from ham gear to color TVs - as kits. Some of the bigger EF Johnson ham rigs of the '50s cost several hundred bucks (quite a sum at the time) and were kits.

I know of at least one kit that was actually built twice. Many years ago I bought a used Viking Adventurer. It had some rather oddball problems and some undocumented mods. So after some unsuccesful troubleshooting and circuit tracing, I simply took it completely apart. Checked each component, replaced some dubious parts, sorted, straightened and cleaned others, and then proceeded to rebuild it according to the manual. Worked perfectly after that. Anybody else ever do that?

"So nice, they built it twice".

73 de Jim, N2EY

3390. Amateur television Repeater PI6ALK frequency change on Eutelsat-W2

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Rens Maas <rens@tss-telecom.nl>
Message-ID: <7djd2i$pr4@news3.euro.net>
Source record: 71852
Cross-posted to: nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.video.satellite.dbs

```
The Amateur television repeater PI6ALK changed frequency on Eutelsat-W2
For info please check: http://www.tss-telecom.nl/pi6alk
```

3391. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <36FD3795.9B84FB38@ix.netcom.com>
Source record: 71853

Hi Ken,

You will probably get more advice from the uk.radio.amateur news group. Those SA's were pretty common in the UK about 20 years ago, while in the US the ubiquitous hp 141T series is all you ever see. The uk group seems to have some pretty weird folk on it but you can usually get a sensible answer to a query like yours.

Enjoy it!

73 Dan AC6AO (and G3NCR)

3392. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <c+jrKFASqT$2EwpT@g3uda.demon.co.uk>
Source record: 71854

In article <36FD3795.9B84FB38@ix.netcom.com>, Dan Rae
<rae4@ix.netcom.com> writes
>Hi Ken,
>
>You will probably get more advice from the uk.radio.amateur news group.
>Those SA's were pretty common in the UK about 20 years ago, while in
>the US the ubiquitous hp 141T series is all you ever see. The uk group
>seems to have some pretty weird folk on it but you can usually get a
>sensible answer to a query like yours.
>
>Enjoy it!
>
>73 Dan AC6AO (and G3NCR)
>
>
Hello Dan / Mike (previously)

Thanks for the tip. Will go hunting for HP 1412T then. Its just
that the price is not too outlandish.
... Ken

3393. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36FD3F50.FF17E6EB@teleport.com>
Source record: 71855

N2EY wrote:
>
> I know of at least one kit that was actually built twice. Many years ago I
> bought a used Viking Adventurer. It had some rather oddball problems and some
> undocumented mods. So after some unsuccesful troubleshooting and circuit
> tracing, I simply took it completely apart. Checked each component, replaced
> some dubious parts, sorted, straightened and cleaned others, and then proceeded
> to rebuild it according to the manual. Worked perfectly after that. Anybody
> else ever do that?
>
> "So nice, they built it twice".

Nope. But my first transmitter was a Viking Adventurer with
undocumented mods. (Not the one you rebuilt, though. It eventually
supplied critical parts for my second transmitter, which was
homebrew.)

Roy Lewallen, W7EL

3394. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36FD41F0.1573A971@teleport.com>
Source record: 71856

Ken Linney wrote:

> Thanks for the tip. Will go hunting for HP 1412T then. Its just
> that the price is not too outlandish.

Around 3 years ago I was shopping for a plug-in for my 140T (non-storage tube version of the 141T) at Dayton so I noticed that there were lots of 141Ts for sale. Seems to me that with plug-ins, they were going for a bit under a kilobuck (around 600 pounds). I'm sure someone can give you a more current price.

Roy Lewallen, W7EL

3395. Heath model IM-11 VTVM meter bezel needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990327165736.01749.00001040@ng105.aol.com>
Source record: 71857

Hi, I have a real nice VTVM, a Heath IM-11. I need the clear plastic cover for the meter face itself. If anyone can provide one reasonably, please advise.
Thank you,
Joe Pratt, Tubecntral@aol.com

3396. FS: Boonton Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <8YcL2.1253$Ey1.2098@ndnws01>
Source record: 71858
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Original manuals for the UHF Q meter model 280A and sweep signal
generator model 240A. Excellent condition. $10 shipped ea.

Excellent manual copy for the Q meter model 260A $8 shipped.

regards,
Chuck...K1KW
coneal@ultranet.com

3397. HF Linear amp with MRF-150 ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Scott Hinks <hinks@execpc.com>
Message-ID: <7djfli$1ol@newsops.execpc.com>
Source record: 71859

I'd like information on anyone's experience building a HF linear amp (10-80) using Motorola MRF-150 Mosfets. Suggestions, plans, etc. would be great.

Scott Hinks, W9MRI
hinks@execpc.com

3398. Re: ITT Mackay 403A lifeboat radio info wanted....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <36FD9F40.6C84@nbnet.nb.ca>
Source record: 71860

Howdy Randy.....I don't know your lifeboat radio by model number...but as a working shipboard R/O during the 80's and early 90's (they've dumped us now), I used to check and test lifeboat radio's weekly as required...some of 'em were ITT MacKay units...some were Skanti's and Marconi's....All were geared up for the following output into the supplied telescoping antenna.....500kHz transmit / receive A2 emission (morse), 2182kHz transmit/receive A3 emission (voice using the headset's boom mic) and 8364kHz A1 emission (morse) transmit but with a tunable 8mHz receiver.
These radios generally had 2 power supply possibilities, either the detachable crank (UGGGGGHHHHHHHHHH better be mounted solidly AND you better have had your Wheaties for breakfast when you transmit!) or a DC supply (sometimes wide ranging) input via a front panel connector. The DC connector was the preferred source when the radio was permanently mounted inside an enclosed lifeboat. The power output was low and varied
according to frequency used....there was an option usually for a long or short length antenna wire and the coiled up stranded bronze wire with the
weight attached is for throwing overboard or a counterpoise if you were marooned on that desert island! All those attached straps were to allow you (in worst case) to hump yourself over the thing and, taking care NOT to bite your tongue off, headset tethering you, to crank AND send with the panel mounted key (TRY IT heheh!). The other options on the front panel were for automatically sending out the morse (radiotelegraph) alarm signal (12 four second dashes) on either 500kHz or 8364kHz or to send the voice (radiotelephone) alarm signal consisting of an alternating 2 tone alarm signal on 2182kHz. There was a provision for also connecting the antenna output to an internal dummy load (normal stowage) which was used for testing. Instructions inside the cover of 'em all. It was quite surprising how far you could work with these things even in crank mode and we had quite a bit of fun sometimes with sister ships on Sundays (typical test day) when your fellow R/O's would hear you huffin 'n puffin and the little generator whining up and down as you "tested" heheh. The 8 Mhz receiver was surprisingly sensitive and many coast stations all over the world could be heard even on the whip. Lots of memories you brought back.

73 - Gord VE1AJF

3399. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <36FDA3EE.2452@nbnet.nb.ca>
Source record: 71861

Howdy Ryan....your best bang for the buck would be to mount this little rig at the feed point to the antenna and remote its control....more difficult to be sure but your concern is very valid....50 feet of RG-58/U (plus or minus each manufacturers claims) is going to cause approximately 6dB of loss...plus some for your connectors (as much as 1/4 dB each or worse)...now you're down to 38mW AND have the added penalty of also having your receive signal level degraded by the same amount! You could opt for low loss large cables but then you face the physical dilema of mounting your little 150mW rig ONTO the end of the cable NOT the cable onto the rig :) Best of luck to ya!
73
Gord

3400. Re: VOX clipped syllable fix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <36FDA1DD.5BA6@nbnet.nb.ca>
Source record: 71862

Howdy Dave....the point missed in pursuit of this cure is that you
ALWAYS have to have some sort of audio input IN ORDER TO TURN THE DEVICE
ON...be it the vox unit itself or the bucket brigade device....the delay
is inherent.....What you'd need is a method of anticipating what the
person was going to say.....Dad used to call it
think-before-ya-speak...and to that end I rate PTT as the best of all!
73 (I've studied this prob some over the years....simplex patches etc
also and welcome any insight in return :)
Gord

3401. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <36FDA486.4308@nbnet.nb.ca>
Source record: 71863

Should've noted that I based my rough figs on 100 ft run Ryan...yours would of course be correspondingly less.....still you get the picture!

3402. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Wayne Faris <wfaris@inebraska.com>
Message-ID: <36FD8056.F09A93@inebraska.com>
Source record: 71864

Amen to using Belden 9913 coax for this rig/antenna combination. If the cost is a factor, Columbia Cable makes an equivalent coax with the same specs for a little less money. Don't recall the number right off since I don't feel like going out in the rain right now to take a look.

Keep us informed as to what you do and how it works.

Wayne Faris, KEï¿½BZ

3403. Future of HTX-202 in Canada

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Mike <stonb@sk.sympatico.ca>
Message-ID: <36FDC0F9.471D@sk.sympatico.ca>
Source record: 71865

Over the past little while, I've heard rumours flying about the future of the Radio Shack HTX-202. While many people are insisting that it's already been discontinued, why is it still being stocked in Canadian Radio Shack's? Is this discontinuation applicable to the USA only, or is this an international implication?

If anyone here knows anything in regards to the future of the HTX-202 2m Radio Shack Transceiver in Canada, any/all comments and messages would be much appreciated.

Thanks in advance;

Mike (VE5NWO)

3404. Modification in DSP-2232

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: chondeville@hotmail.com
Message-ID: <36FDAA88.40F2539E@hotmail.com>
Source record: 71866
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.equipment

Does anyone know how to modify the AEA DSP-2232 in order to get the best
of it when you operate the birds at 9600??. I've heard there is
something I can do to enhance it.
Please, make your comments to chondeville@hotmail.com

73,
Christian

3405. AN/PRC-10 and Motorola 25-54MC receiver dated 12/18/56

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36fc1e91.2284582648@news.online.no>
Source record: 71952
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Found a circuit diagram for a Motorola VHF receiver. It looks very much like AN/PRC-10, but covers the larger range. I am not certain about how much similar the receivers are. The Motorola receiver uses almost the same modules and valves, it is marked ISSUE F Part No.63E845727. 'AN/PRC-10' transceiver seems to have been manufactured in Sweden (which is a non-NATO country) as Ra105, perhaps the technique is not as secret as we were told when I was in the army 32 years ago....

I would be interested to modify the selectivity using readily available 455kHz ceramic filter. Circuit says "permakay wave filter", but 50kHz bandwidth may be somewhat too much - even for the antique 6m net.
73
Jan_Martin

3406. AN/PRC-10 and Motorola 25-54MC receiver dated 12/18/56

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36fc388d.2291235390@news.online.no>
Source record: 71953
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Found a circuit diagram for a Motorola VHF receiver. It looks very much like AN/PRC-10, but covers the larger range. I am not certain about how much similar the receivers are. The Motorola receiver uses almost the same modules and valves, it is marked ISSUE F Part No.63E845727. 'AN/PRC-10' transceiver seems to have been manufactured in Sweden (which is a non-NATO country) as Ra105, perhaps the technique is not as secret as we were told when I was in the army 32 years ago....

I would be interested to modify the selectivity using readily available 455kHz ceramic filter. Circuit says "permakay wave filter", but 50kHz bandwidth may be somewhat too much - even for the antique 6m net.

tried http://www.home.earthlink.net/~af4k/hamfiles.html, but almost all routes were closed from this end

73
Jan_Martin

3407. Re: Q of ferrite inductor versus air-core inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: bix@san.rr.com
Message-ID: <36fc3b00.42249508@news-server>
Source record: 71954

"Charlie T." <xctx@onr.com> wrote:

>The "Q" I'm talking about refers
>to the losses in the ferrite core. Not the "bandwith" of the resonant
>circuit.

The are the same thing. The coil will have losses from core losses, dc resistance in the winding, skin effect in the winding, dielectric losses, eddy current losses for currents induced in the ferrite (negligible) and currents induced in surrounding metal (usually not negligible). All of these losses combine into the real part of the impedance of the inductor. At resonance, the shunt capacitance from the winding and any external shunt capacitance cancel the inductive reactance, and you are left looking at a pure resistance which is solely from the losses. The -3db points are where the magnitude of the reactive impedance of the (ideal) LC tank equals the resistance. So when you measure the 3 db bandwidth to get the Q, you are measuring all the losses. You can measure the DC resistance, and you can calculate the skin effect loss for the winding, but it is very hard to separate core losses from eddy current losses. I've seen one paper which reports that the typical Q degradation from moving a magnetically "open" inductor from free space to the vicinity of other electronics and a chassis is typically on the order of 50%.

Jim Bixby
bix@san.rr.com
http://home.san.rr.com/bix

3408. Re: VOX clipped syllable fix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <36fc4755.49453041@news.azstarnet.com>
Source record: 71955

On Fri, 26 Mar 1999 17:24:05 GMT, DJohnson@DJandAssoc.Com
wrote:

>Many years ago an electronic technician who was working for me had an idea
>for a product. He wanted to build a box that would be placed between a
>microphone and the microphone input of a radio transceiver that was equipped
>for standard push to talk operation. The device he had in mind would allow a
>radio transceiver to operate in a VOX mode and would prevent the delays
>associated with switching from receiving and transmitting modes from clipping
>the first syllable spoken. His device would use a bucket brigade charge
>coupled device as an analog delay. When the person first spoke, a relay
>contact would switch the transmitter on, but the box circuit would generate a
>short delay between the actual speech into the microphone and the signals
>sent to the microphone input of the transceiver. With his device the
>transmitter would be switched on before the speech signals arrive. His
>device would give hands free VOX operation without ever missing the first
>syllable. My question is, this idea sounds like something that more modern
>radio transmitters may already have built into them. Do the latest radio
>transceivers have such a feature?

To answer your last question first, in a word, no.

I too have considered the bucket brigade for just such a
purpose. I have a homebrew electronic Morse keyer (with
memory) that I used almost 20 years or so ago in my
two-meter moonbounce station. To protect the sensitive
preamp, it was necessary to ensure relay changeover prior to
the generaton of rf. The keyed data is passed through a
shift register that is used as a delay element. The first
keyed character also begins triggering a retriggerable
oneshot that controls the changeover relays. The (delayed)
code out of the shift register keys the transmitter. After
the message ends, the one shot holds for a bit then drops
out the relays. The clock speed for the shift register was
adjustable and controlled the receive to transmit delay,
while the time constant of the one shot controlled the
transmit to receive delay.

I envisioned the same scheme for an audio device, bought the
BBDs but never finished it. Should work just fine but as
you can see, it's not a new idea.

N7WS
>
>David A. Johnson, P.E. &#65533; Consulting Engineer
>

>----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3409. Re: 572B Driving Impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19990326234012.29285.00000683@ng18.aol.com>
Source record: 71956

Hi Marty,
I am going thru the same thing myself, as
I am trying to convert the sb200 with
572b's to a 6m amp.

According to the ARRL handbook,
the tube imedance is equal to the
plate voltage (2100V?) divided by
the product of the Plate current you
will be driving (about .5A) times the
constant (in AB grounded grid this
is 1.5). So you get 2100/(.5 * 1.5) =
2800 ohms.
It would be nice to check something
close to it in a book, but the ARRL
handbook doesnt say what the Plate
to plate impedance is.
Hope it helps. (hope it works).
I still have trouble getting the right
values of the tune cap and coil for
right resonance for 6m.
Good luck.

Bennett ko2ok,
in NJ

3410. Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: im@home.now
Message-ID: <36fc62ed.4121032@news.atl.mindspring.com>
Source record: 71957

Hello all I am trying to get the hang of microsim designlab ver 8.
Is it possible in a circuit to specify the min and max values for
a passive component such as a capacitor then tune it and
see the results update via probe...

Right now every time I have to change the value then re simulate..

any help woulb be appreciated..

tia JD..

3411. Mil Tube Tester I-177 for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <36FC6EA2.3594@ix.netcom.com>
Source record: 71958
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors

In excellent condition with tube chart. $175
Jpegs available on request. This one is like new.
73 Chris VE3NGW/W4 Florida

3412. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990327010540.03862.00000292@ngol04.aol.com>
Source record: 71959

In article <36FAB328.59E2B600@my-dejanews.com>, Martin Meserve
<meserve@my-dejanews.com> writes:

>Subject: Re: What constitutes Homebrew?
>From: Martin Meserve <meserve@my-dejanews.com>
>Date: Thu, 25 Mar 1999 15:05:28 -0700

(snip of old stuff)
>>
>
>Everyone in this discussion seems to have some good points.

Hello Martin,
>
>Those that build from scatch should have some kind of distinction
>that sets them apart.

Agreed.
>
>On the other hand, kit builders/circuit modifiers also deserve
>some kind of credit.

Agreed as well.
>
>I have been a designer/builder for over 30 years now. I build some
>things from scratch and other things from kits, magazine articles,
>etc. I don't believe that my way of designing something is the
>best and only way. Sometimes I really like someone elses design,
>so I might incorporate some or all of it in something I make.
>Sometimes I like the features offered by a kit and don't want
>to be bothered ordering all the parts and be put on hold for
>months while things are back ordered. The only thing I can be
>sure of is that, everything I have is going to have a modification,
>sooner or later.

That's almost exactly what I do. Been at this radio stuff since I was age 10 or
11. Licensed since 13. Building stuff ever since my first "foxhole radio".
(1965?) I don't mean to put anybody down by wanting separate definitions of the
various types of building.
>
>So, why not just let "HOMEBREW" describe the things that are
>completely "built from scratch". Let's add another another
>word, to give credit to those that may not have the knowledge,
>or abilities, to build completely from scratch, but have the
>willingness to learn and get their hands in the guts of a piece
>of equipment. Why not describe this middle ground with the

>word "HAMBREW".

I LIKE it! "Kitbuilder" or "kitbrewer" are other names to consider. There should be easy to remember names for the major variations of "home built".

73 de Jim, N2EY

3413. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: im@home.now
Message-ID: <36fc766a.9111097@news.atl.mindspring.com>
Source record: 71960

Brian thanks for the excellent help I really appreciate it.
I did as you said with the {set} but found in designlab 8
that I did not require the curley braces Perhaps they changed
something from a previous versions.... They also include a pre
canned symbol for the param function called parameters.

This is pretty cool it works good... I guess you have been using
p-spice for awhile... I am curious have you done any rf based
work with it.... Right now I am trying to design a simple buffer amp
for a vhf oscilator using a 2n2219a mot transistor...

Do you know of any books that would be good for a novice like
me to get so as to get up to speed with the tool... I am interested
in using the tool for some RF based simulation..

thanks again JD

****
On Fri, 26 Mar 1999 23:15:51 -0600, "Brian" <schousek@geocities.com>
wrote:

>Well I had the hardest time doing that in the graphical version of Pspice
>for a long time (I could easily do it in the text based spices, but I guess
>that starts to show my age.)
>
>A solution to your problem is to place a parameter block (PARAM) on your
>schematic via place part (ctrl-P).
>-double click on the parameter block, and set Name1 to SET and Value1 to 1p
>-now place your capacitor and double click on the capacitance value, set the
>value to {SET} (note the curly brackets around the word SET... they are
>above the square brackets [] on your keyboard.)
>-Now go into the Analysis-Setup menu. Click on the Parametric button
>-Set 'Swept Var. Type' radio button to 'Global Parameter'
>-Set 'Name' box to SET (no curly brackets)
>- choose appropriate start, end, and increment variables, and your sweep
>type
>-now run your simulation and be happy- now that you know the basic steps you
>can start to improvise
>
>The magic is in the curly brackets around SET. I used the full version of
>Pspice at a former job and hence had complete documentation, but it was
>still difficult to track down this technique. Don't feel bad if it wasn't
>apparent :-)
>
>KB9TBB
>

>JD wrote in message <36fc62ed.4121032@news.atl.mindspring.com>...
>>Hello all I am trying to get the hang of microsim designlab ver 8.
>>Is it possible in a circuit to specify the min and max values for
>>a passive component such as a capacitor then tune it and
>>see the results update via probe...
>>
>>Right now every time I have to change the value then re simulate..
>>
>>any help woulb be appreciated..
>>
>>tia JD..
>
>

3414. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36FC7D6B.16B6@megsinet.net>
Source record: 71961

N2EY wrote:
> I LIKE it! "Kitbuilder" or "kitbrewer" are other names to consider. There
> should be easy to remember names for the major variations of "home built".

Considering some of the kits that have come and gone, "kitbuilder" isn't
exactly pejorative. :-) I did a Wersi organ some years ago for a friend,
and that one was quite an accomplishment; not for the beginner.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

3415. vernier lube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <36FC79FA.7A58@megsinet.net>
Source record: 71962

Not exactly a homebrew question, but what's good to use to lubricate an old vernier drive? I just acquired a Yaesu FRG-7 receiver with a sluggish tuning vernier.

Normally, for a light, non-gumming lube, I use Singer sewing machine oil, but I'm not sure if that's appropriate around the tuning caps if the vernier (whose construction I never understood) manages to leak.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

3416. Re: VOX clipped syllable fix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <36fc8a97.3391508@news.magiclink.com>
Source record: 71963

"A Smooth Voice Controller", in the April 1992 issue of QST, describes
a CCD bucket brigade delay line-based circuit to permit the VOX and
T/R circuits to operate before the microphone audio reaches the rig.
Variable clocking permits delay approaching 0.1 second if you needed
that much. A&A Engineering makes a PCB. It works very nicely and
provides something close to "full QSK" on SSB.

The CCD is VERY expensive, nearly $50 in 1-piece from Digikey,
probably because there is not high volume in this technology today.
One could almost justify a codec and DSP processor to get the same
delay, and have a microphone equalizer "free".

Bill - W7AAZ

On Fri, 26 Mar 1999 11:51:47 -0600, "William E. Sabin"
<sabinw@mwci.net> wrote:

>
>
>DJohnson@DJandAssoc.Com wrote:
>
>> The device he had in mind would allow a
>> radio transceiver to operate in a VOX mode and would prevent the delays
>> associated with switching from receiving and transmitting modes from clipping
>> the first syllable spoken. His device would use a bucket brigade charge
>> coupled device as an analog delay.
>
>Some IF/RF noise blankers use a delay method so that when a noise pulse appears
>the signal switch is open-circuited before the desired signal arrives at the
>switch.
>
>One scheme uses a glass delay line for the desired signal. A multi-section LC
>lowpass- or bandpass-filter also delays the signal.
>
>An active opamp filter could be used at audio frequencies.
>
>Bill W0IYH
>

3417. Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Ryan Ashline <Ashline@sprintmail.com>
Message-ID: <7die1jgph1@birch.prod.itd.earthlink.net>
Source record: 71964

I have a low power 150mw transceiver that I have been planning on connecting to an external antenna. I have tested the hieght (me on the roof with the radio) and I can reach all around town on 2m simplex. But today as I was getting the coax to run to a J-pole I questioned what the outcome might be when all said and done. Will the very low 150mw make itself all the way to the antenna? From where my radios are it takes 40 to 50 feet of coax to make it to the roof. Also do I need to go with something larger the rg-58?

Thanks for any help or comments you can give!! 8>)
Ryan KB5UUS

PS. Thanks to all who stop in this newsgroup and take time out to anserw questions! In the april 99 of CQ VHF there is an editorial about a two new young hams who were having trouble getting help from their local hams in Chicago. I know how they feel. When I first got my ticket at 15 I never was able to get help from the much older hams. At club meetings I felt like I didnt belong. That resulted in me putting my radios away until about a year ago. Now when I come to this newsgroup I see many hams helping others and I think thats great! I am sure that if I could have come to this newsgroup to get the help I needed the radios would have never been put away. One thing that bothers me. When asking questions on the local nets I am now getting help and lots of it. Is this becuase my voice is deeper and I sound older or have all the old farts died. Remember not all young hams have ham parents. I never saw a ham until I went to take the tests. So with that if you see or hear a young ham out there go out of your way to help them and make them feel welcome.

Well thats just something I had to get out. 73's and thanks again to all that take time out to help young and new hams.

3418. 1000 PF VACUUM VARIABLE CAP ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FCC5E2.CD182E99@uswest.net>
Source record: 71965
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

1000 PF VACUUM VARIABLE CAP

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82201803

Thanks

3419. Vacuum Variable Cap 300pf 10 KV eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FCC63C.FE9C3C98@uswest.net>
Source record: 71966
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82190542

3420. Roller inductor LARGE!!! eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FCC6AB.CAC1CC1@uswest.net>
Source record: 71967
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82194342

Thanks

3421. Hammarlund "38" Catalog

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FCC70D.67829E34@uswest.net>
Source record: 71968
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82197458

Thanks

3422. DSP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7dihsr$p4d$1@arachne.labyrinth.net.au>
Source record: 71969

I have a TI 320C31 DSP starter kit. I haven't seen much TI stuff
around on the internet; most/all of the stuff at tapr.org is for
the Motorola 56K chips.

I'm interested in CW filters and FSK filters mostly.
Has anyone seen any source around?

I've tried generating FIR filters using software, Matlab etc,
and put the generated co-efficients into the FIR.ASM example supplied.
Sometimes this works but mostly I get silence out. I haven't experimented
with it a lot though.

73,
Hamish VK3TYD
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

Rising Software Australia Pty. Ltd.
Developers of music education software including Auralia & Musition.
31 Elmhurst Road, Blackburn, Victoria Australia, 3130
Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

3423. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7dil61$407@eldborg.rhi.hi.is>
Source record: 71970

On Fri, 26 Mar 1999 11:48:07 -0500, Shawn Upton <supton@eece.maine.edu> wrote:
>I know how Class A, AB, and C are biased, and the rough operation of
>each, but what are the Class D and up amplifiers? From my

An active device is operating in class D when it is used as a
swictch. The idea is to drive f.x. a mosfet with a square wave
with the frequency that you want to transmit. By doing that
you switch the device from fully conducting (that is 0 voltage drop
over it => no dissipated DC power) to an open circuit
(no current flows through the device => no dissipated DC power).
Ideally this should result in 100% of the power being transmitted
to the load (f.x. an antenna).

A square wave has many harmonics of the basic frequency so a
LC tank (and more filtering probably) is needed in the output
to select the frequency (usually the fundamental harmonic) you want to
transmit. These amplifiers/switches are usually high level modulated,
that is by changing the DC voltage from the power supply.

Work on these kind of amplifiers was pioneered by
N.O. Sokal. I think published his article about class D/E amplifiers
in "IEEE Journal of solid state circuits" in June 1975.

A friend of mine built an amplifier like that few weeks ago.
It was about 96% efficient he told me (although only with output
power of 1W :)

Take a look at http://eustice.caltech.edu/mmic/full/davisfull.html
for an example.

--
//----------------------//--
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

3424. Re: FYI: 60 Plus HomeBrew Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <36FCDB34.81559E0@tir.com>
Source record: 71971

Actually,

I have known people who *DID* make their own tubes....

....(now considering the foolish discussion about what constitutes homebrew)...

I was going to mention this in a different thread but thought better of it...

If we don't make our own transistors and caps from dirt are we really .... oh never mind.

Some of those beer bottles look really sturdy.

Bill KU8H

3425. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <7dipc5dt6@alice.walrus.com>
Source record: 71972

Shawn Upton (supton@eece.maine.edu) wrote:
: How do the manufactures make the antennas 50 ohms? I mean, what kind of
: matching network do they use to make up for the minimumal ground plane?
: My friend made his own 1/4 wave antenna for his HT, and noticed that it
: made a huge difference between holding the radio (and providing a ground
: plane for the antenna) and not holding the antenna (loss of signal
: strength, etc).

: I played around a store bought 1/4 wave antenna, to see if I could
: improve it by using some coax sheild (w/o any of the other coax stuff in
: it) to provide some ground radials. It seemed to improve it, but the
: SWR did not decrease that much, went from 1.5 to 1.1.

: I'm kinda interested in this, as I've noticed (being in a area not
: populated by repeaters) that my HT is a bit range limited. I would like
: to do some work on antennas to get more range, hence my questions.
: --
: **********
: Shawn Upton
: Electrical Engineering Student
: University of Maine at Orono
: webpage: http://www.eece.maine.edu/~supton/
: mail: supton@eece.maine.edu
: KB1CKT Tech Plus
: **********

You might be surprised how much difference a 1/4 wave wire connected to
the outside of the BNC connector can make on HT performance!

3426. Re: FYI: 60 Plus HomeBrew Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: timolmst@cyberramp.net
Message-ID: <456C7B66E9D7FA9B.BEF7EDF7C7E97777.4B8A7AC9E4A2B857@library-proxy.airnews.net>
Source record: 71973

Bill <wrc@tir.com> wrote:

>Actually,
>
>I have known people who *DID* make their own tubes....
>
>....(now considering the foolish discussion about what constitutes
>homebrew)...
>
>I was going to mention this in a different thread but thought better of
>it...
>
>If we don't make our own transistors and caps from dirt are we really

It's just symantics. A rose by any other name would smell as sweet.

Tim Olmstead WP5PFJ
email : timolmst@cyberramp.net
Visit the unofficial CP/M web site.
MAIN SITE AT : http://www.devili.iki.fi/cpm
PRIMARY US MIRROR AT : http://www.mathcs.emory.edu/~cfs/cpm
SECONDARY US MIRROR AT : http://CPM.INTERFUN.NET

3427. Re: VOX clipped syllable fix

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <36FCF236.AF4E913B@mlecmn.net>
Source record: 71974

The Holtek 8955A "voice echo" chip offers a practical alternative to the bucket brigade device. It's available for about 5 bucks (page 160 of the TechAmerica catalog), and with the addition of a two-dollar DRAM chip you can have 10-bit audio quality with an adjustable delay of up to 0.8 seconds. I've built a delayed VOX circuit using this chip and it seems to work just fine. However, a PCB layout with lots of bypassing/decoupling and a good ground plane is advisable to keep the digital noise out of the audio output.

Lyle, K0LR

Bill Carver wrote:

> "A Smooth Voice Controller", in the April 1992 issue of QST, describes
> a CCD bucket brigade delay line-based circuit to permit the VOX and
> T/R circuits to operate before the microphone audio reaches the rig.
> Variable clocking permits delay approaching 0.1 second if you needed
> that much. A&A Engineering makes a PCB. It works very nicely and
> provides something close to "full QSK" on SSB.
>
> The CCD is VERY expensive, nearly $50 in 1-piece from Digikey,
> probably because there is not high volume in this technology today.
> One could almost justify a codec and DSP processor to get the same
> delay, and have a microphone equalizer "free".

3428. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: Mark Garrett <mgarrett@pdnt.com>
Message-ID: <Ka7L2.49$o35.54557@sol.pdnt.net>
Source record: 71975

Ryan Ashline wrote in message <7die1jgph1@birch.prod.itd.earthlink.net>...
>I have a low power 150mw transceiver that I have been planning on
>connecting to an external antenna. I have tested the hieght (me on the
roof
>with the radio) and I can reach all around town on 2m simplex. But today
>as I was getting the coax to run to a J-pole I questioned what the outcome
>might be when all said and done. Will the very low 150mw make itself all
>the way to the antenna? From where my radios are it takes 40 to 50 feet of
>coax to make it to the roof. Also do I need to go with something larger
the
>rg-58?
>
>Thanks for any help or comments you can give!! 8>)
>Ryan KB5UUS

Ryan:
It would be better to use something other than RG-58 on your run. If it is the only thing you have on hand then use it but you may not have the range you need to hit a distant station. I do not have the figures of loss for RG-58 as I write this (I am sure someone will post these) but I would suspect if you just want to chat on the local repeaters it may work out for you. My advice would be to try and get the best quality RG-8 or Beldon 8214 for your run. Good luck Ryan.

3429. Re: FYI: 60 Plus HomeBrew Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <36FD047F.9AB@ix.netcom.com>
Source record: 71976

Dave Hinerman wrote:
>
> On Tue, 23 Mar 1999 16:01:40 -0800, AC6V <ac6v@ix.netcom.com> wrote:
>
> >Just finished searching for Ham HomeBrew Pages -- the 60 that didn't
> >include Home Brewing Beer are linked at URL:
>
> But, but, but... oh, never mind.
> Dave

Oh Alright Dave -- here is the homebrew beer link.

All in good fun
73
Rod in San Diego

--
AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 320,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3430. FS HEATH SB-610 MONITOR SCOPE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: edron1@aol.com
Message-ID: <19990327113040.27179.00001080@ng09.aol.com>
Source record: 71977

FOR SALE

HEATH SB-610 MONITOR SCOPE AND MANUAL(COPY).

BOTH IN GOOD CONDITION.

$125.00 + SHIPPING.

EDRON1@AOL.COM

3431. FA: Drake UV3 144/220/440

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-27 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370403d9.62812492@207.217.77.140>
Source record: 71978
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83430060

3432. Re: HF Linear amp with MRF-150 ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Sid Boyce <szb50@amdahl.com>
Message-ID: <36FD8250.8342A238@amdahl.com>
Source record: 71867

Scott Hinks wrote:
>
> I'd like information on anyone's experience building a HF linear amp (10-80)
> using Motorola MRF-150 Mosfets. Suggestions, plans, etc. would be great.
>
> Scott Hinks, W9MRI
> hinks@execpc.com
Try www.communication-concepts.com who sell a kit (EB104) for a 600W amp
for 6W input (4x MRF150's). They sell only the bare kit, you'd have to
supply your own filters and 50V power supply.
The filter parts can be had from www.surplussales.com (Surplus Sales of
Nebraska).
When I again have time, I shall have a go at completing mine. The
problem I have is with a warped heatsink that isn't a snug fit with the
copper heat spreader, a problem caused when I was trying to mate the
two, before I got a fellow ham's son to put the copper spreader under a
2-ton press.
I built a regulated 50V power supply, then I saw someone publishing a
2m Amp using MOSFETS and driving it from a supply with just diodes and
smoothing capacitors (like a tube amp), I can't even remember a choke in
line.
Anyhow, both companies advertise in QST and 73 Mag.
Best of luck....73....G3VBV.
--
... Sid Boyce...Amdahl(Europe)...44-121 422 0375
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

3433. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: maddog@io.com
Message-ID: <36fd7531.21937228@news.io.com>
Source record: 71868

On Fri, 26 Mar 1999 11:48:07 -0500, Shawn Upton
<supton@eece.maine.edu> wrote:

>I know how Class A, AB, and C are biased, and the rough operation of
>each, but what are the Class D and up amplifiers?

Hi Shawn!

You've gotten several good explanations, but here's another way of looking at amplifier classes that might be helpful. (Please forgive any over-simplifications)

Linear amplifiers, like class A and Class B/AB, try to reproduce a true copy of the input signal, with more power, or more voltage, or more current into the load.

Non-linear amplifiers for CW and FM output, take a different tact that relies heavily on a well-known phenomenon of tuned circuits. If you ever took a college level "Fundamental AC Circuits" course, you would have been exposed to the following experiment.

Take a series or parallel LC circuit. When you apply a step voltage to it (usually by switching battery in or out with a mechanical switch), while watching the voltage (or current) in the LC circuit with an oscilloscope, you will see a nice sine-wave which oscillates at the natural resonant frequency of the LC combination. If there were no loading and no losses in the circuit, it would oscillate forever, but because we have a load (the oscilloscope, or any resistances in the L or C, or any load resistor), it "damps"; that is, it oscillates at the natural resonant frequency, and decays to nothing, usually within a handful of cycles. The more loss (or load) there is, the quicker the oscillation decays.

If you could switch the mechanical switch at (or close to) the natural resonant frequency, you could "tickle" the LC circuit's natural oscillation to keep it going. You could also extract some power from it (for your speakers, or antenna, or other load circuit), making it "damp" or decay more, but not so much that you don't get a full sine wave for each tickle.

Here's where it gets really interesting. It turns out that you don't necessarily have to switch the switch on or off very long. Sometimes, only a small percentage of the entire cycle. So you can "tickle" it only a tiny bit (5-45%, typically), and the resonant LC circuit will naturally provide the rest of the waveform. Hey! Switched pulse (digital signal) in, sine-wave out!

Turns out some devices, like Power Mosfets for example, don't take much power to drive, and are well suited to acting like switches. So you drive the input of a MosFet switch with short pulses at the rate of your LC circuit, and put the LC circuit in series/parallel with your switch, and take as much power as you can from it for your load (antenna). If you make the switching time (pulses) as short as possible, only as long as you need to replace the energy you're taking out of the LC tank circuit, you'll have a maximally efficient design.

As others have mentioned, these amplifiers can be very efficient (up to 95%, although 70-80% is more typical). Unfortunately, there are lots of variables, mostly in component characteristics, which degrade the switching, or make it difficult to get power out of the LC circuit efficiently. Also, some portion of the switched pulse itself tends to make it into the output circuit, and to the extent it does, it needs to be filtered out. Mostly these are odd multiples of the switching frequency, so low-pass filtering can remove the unwanted energy, but it still contributes to the overall losses, and reduction in efficiency. Still, for single-band RF amplifiers at HF frequencies, these type amplifiers are quite easily within the realm of the amateur homebrewer, and well-worth the effort for CW and FM.

(As an aside, you can make *very* efficient regulated and unregulated power supplies using these principles, using the inductances in a transformer, and resonating them with a capacitor to form the tuned circuit.)

By the way, low-pass filters are just re-arranged resonant circuits (yes, somewhat of an over-simplification), and can be used to provide the same effects as a resonant LC circuit, albeit less efficiently. But if you want really high efficiencies, you probably need to stick with resonant LC tanks. Hence, most such amplifiers with efficiencies in the 80-90% range will be single-band amplifiers.

Have fun with your amplifiers! And let us know of your homebrewing progress and success!

monty, N5FC

3434. Protek 2GHz RF Field Strength Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: "Charlie T." <xctx@onr.com>
Message-ID: <01be78c9$10ad3920$7c0cc8cf@ct>
Source record: 71869
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Does anyone have experience with the Protek 2GHz handheld field strength analyzer? It covers from 100KHz to 2GHz. Is it really calibrated for measuring RF fields in uV/meter??? Seems like a cool instrument.

thanks in advance,

-W5CDT

--
>>>Remove the X's from my email address before using<<<

XctX@onr.com

3435. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: melus@esi.us.es
Message-ID: <36fda133.8333809@wingate>
Source record: 71870

On Mon, 22 Mar 1999 13:12:11 -0500 "Jim" <jbolinger@Nloisnptaemk.com>
wrote:

>By the way, how many of you know that a male N plug will plug into a female
>BNC socket? They were intentionally designed that way.

But the N pin have more diameter, so the BNC socket don't hold well
the BNC plug anymore!
73's de Luis

mail: melus@esi.us.es
Ampr: (sorry shut down)
AX25: (sorry shut down)
http://www.esi.us.es/~melus/

3436. High impedance Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <36FDC4A5.75E6@snet.net>
Source record: 71871

I have been recently troubleshooting some RF equipment with a spectrum analyzer. I noticed that the manual calls for a high impedance probe to reduce loading. The input to my spectum analyzer is 50 ohms. Too low. Can anyone direct me to a Ham project or some ideas on building one of these? To purchase a commercial unit would be cost prohibative.
Thanks
Vince N1VC

3437. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.00000128.010cab2b@gto.gto.net.om>
Source record: 71872

Marconi TF2370

Hi,

The TF2370, if my memory serves me aright, was built to a Royal Navy specification but was also sold in largish numbers into the private sector. It probably didn't penetrate the U.S. market very much and so will not be well known there. IMHO it is a superior instrument performance-wise to the HP140/141T, possibly because it is of a later design and uses refreshed screen memory with a bright, white TV display rather than a long persistence phosphor or storage tube. We switched some time ago to Anritsu together with some of the HP8xxx series machines.

Having said all that, I don't like the machine myself very much although we still have several in service here on our test jigs for IF and filter alignment. I have found their operation to be not particularly intuitive and the plethora of buttons for sweep and attenuation settings something of a pain. In my experience, it is not one of those instruments that you can walk up to and use straight off or setup easily first go.

From a maintenance standpoint, our calibration and repair facility keep them going OK although Marconi occasionally claim that certain spare parts are obsolete and we have to go elsewhere. About the only part that defeated us recently was a frequency readout assembly but as that only had a defunct decimal point it didn't matter much.

Anyway, you pays your money and you takes your choice. I am sure though that there are folks out there who just love them.

73 de G3LLV

Muaskar Al Murtafa'a
Sultanate of Oman

3438. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: webmaster <webmaster@lmorocz.com>
Message-ID: <01be78bb$9da97ae0$ecdf04d0@p133>
Source record: 71873

It might be more cost-effective to make a weather-proof container for the transceiver, mount it directly at the antenna and to run control lines (audio in/out. PTT, etc.) down to the shack.

73,

Laszlo, KF4PV/8

Ryan Ashline <Ashline@sprintmail.com> wrote in article <7die1jgph1@birch.prod.itd.earthlink.net>...
> I have a low power 150mw transceiver that I have been planning on
> connecting to an external antenna. I have tested the hieght (me on the roof
> with the radio) and I can reach all around town on 2m simplex. But today
> as I was getting the coax to run to a J-pole I questioned what the outcome
> might be when all said and done. Will the very low 150mw make itself all
> the way to the antenna? From where my radios are it takes 40 to 50 feet of
> coax to make it to the roof. Also do I need to go with something larger the
> rg-58?
>
> Thanks for any help or comments you can give!! 8>)
> Ryan KB5UUS
>
>
> PS. Thanks to all who stop in this newsgroup and take time out to anserw
> questions! In the april 99 of CQ VHF there is an editorial about a two new
> young hams who were having trouble getting help from their local hams in
> Chicago. I know how they feel. When I first got my ticket at 15 I never
> was able to get help from the much older hams. At club meetings I felt like
> I didnt belong. That resulted in me putting my radios away until about a
> year ago. Now when I come to this newsgroup I see many hams helping others
> and I think thats great! I am sure that if I could have come to this
> newsgroup to get the help I needed the radios would have never been put
> away. One thing that bothers me. When asking questions on the local nets I
> am now getting help and lots of it. Is this becuase my voice is deeper and
> I sound older or have all the old farts died. Remember not all young

hams
> have ham parents. I never saw a ham until I went to take the tests. So
> with that if you see or hear a young ham out there go out of your way to
> help them and make them feel welcome.
>
> Well thats just something I had to get out. 73's and thanks again to all
> that take time out to help young and new hams.
>
>
>
>

3439. Plessey PR 2250 failure

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: kurt.brandstetter@teleweb.at
Message-ID: <36fde243.9721407@news.teleweb.at>
Source record: 71874

Good morning from Vienna!

I have troubles with my PR 2250 receiver.
I cannot save frequencies over 9999.99 kc and also AGC and Mode values are not saved.
Since ysterday I cannot select a channel. When I power on frequency is 0000, no mode no AGC.

Can anybody help?
Thanks for now.

3440. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: barryo@fastlink.com.au
Message-ID: <7dkusb$n6e$1@nnrp1.dejanews.com>
Source record: 71875
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7d4mcq$6bt$1@oak.prod.itd.earthlink.net>,
"Jaw Jabber" <jawjabber@earthlink.net> wrote:
>
> What better way is there to start off your morning except by drinking a cup
> of coffee using your very own CALLSIGN MUG. See at
> http://home.earthlink.net/~jawjabber

There are too many mugs with callsigns already.

> If you what to buy your personal callsign mug all you will have to do is
> send a check or money order for the amount of the mug plus $4.00 for

I don't mind sending a check since you can't get money out of a check.
What you need if you want to make money is a cheque.

Barry

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3441. ask an information pi-l

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Herv&#65533; Stevens <f5rfq@club-internet.fr>
Message-ID: <7dktbo$7v6$1@front2.grolier.fr>
Source record: 71876

I would like to know the informations for calcul the PI-L netwoks.
If exist a programm to calcul this, thanks to send the adress or the
information

Thanks a lot

Herv&#65533; STEVENS F5RFQ

f5rfq@club-internet.fr

3442. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36fe43cf.54334885@news.erols.com>
Source record: 71877

On 27 Mar 1999 19:42:35 GMT, n2ey@aol.com (N2EY) wrote:

>I know of at least one kit that was actually built twice. Many years ago I
>bought a used Viking Adventurer. It had some rather oddball problems and some
>undocumented mods. So after some unsuccesful troubleshooting and circuit
>tracing, I simply took it completely apart. Checked each component, replaced
>some dubious parts, sorted, straightened and cleaned others, and then proceeded
>to rebuild it according to the manual. Worked perfectly after that. Anybody
>else ever do that?
>
>"So nice, they built it twice".

Jim: I picked up a Heathkit VF-1 VFO that looked like it had been
assembled by a demented, soldering school drop out intent on creating
more instability in the world. I stripped it down almost completely
to the component level and rebuilt it from a schematic. I ended up
using a few more terminal strips than the boys at Benton Harbor
intended. It was fun and the thing works. Pictures at:
http://www.eols.com/wmeara

3443. Re: High impedance Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36FE0B41.1578069C@teleport.com>
Source record: 71878

Depending on the frequency and how critical your measurements are, you can make a very serviceable probe by simply connecting a carbon film, metal film, or carbon composition resistor to the center conductor of a piece of small-diameter coax (the other end of the coax to your spectrum analyzer) and probing with that. Use about 450 ohms (430 or 470, say) for a 10X voltage attenuation (20 dB) 500 ohm input probe, or about 4950 ohms (use 5.1k) for a 100X attenuation (40 dB) 5k ohm input probe, and so forth. You'll likely pick up more error from your ground connection than from the resistor. Keep the ground connection extremely short if you want quantitative results. It's best to touch the braid directly to ground right next to the point being probed. Also for best accuracy, use very short resistor leads and a physically small resistor such as a 1/8 watt. You could even use a chip resistor, although it would be fragile. If all you need is an idea of relative signal strength and a look at what's there, you can be more casual about it.

While you can still get a signal with larger value resistors, at some high resistor value the accuracy will suffer from coupling around it.

This really is how it's done. Tektronix sells a 500 ohm probe for hundreds of dollars (rated at several GHz) that's nothing more than a 450 ohm resistor (thick film) and a piece of coax. One of the tricks is that the probe tip surrounds the resistor, making the resistor part of the coaxial structure. And the coax itself is premium quality. But these refinements are necessary only if you need to make precision measurements at microwave frequencies. For HF or even into UHF, the coax and resistor will work fine if you're careful to keep connections very short.

Roy Lewallen, W7EL

Vincent Coppola wrote:
>
> I have been recently troubleshooting some RF equipment with a spectrum
> analyzer. I noticed that the manual calls for a high impedance probe to
> reduce loading. The input to my spectum analyzer is 50 ohms. Too low.
> Can anyone direct me to a Ham project or some ideas on building one of
> these? To purchase a commercial unit would be cost prohibative.
> Thanks
> Vince N1VC

3444. Re: BC-221 eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: sb@zip.com.au
Message-ID: <36fe1546.4480232@news.zip.com.au>
Source record: 71879
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

On Fri, 26 Mar 1999 18:32:56 -0800, Arthur Moe <kb7ww@uswest.net>
wrote:

>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=82219099
>
>Thanks
>
I am a little surprised that these would be auctioned on Ebay (I was
not able to find the link quoted). The collector price for one of
these in working condition, and reasonable but not perfect
cosmetically is $5 - 10, maybe a bit more sometimes, in this country.
Add shipping and it is hardly worth the exercise.

BTW did this item sell and if so what for?

Simon
// VK2UA : Simon BUXTON, Sydney, Australia \\
// Email : sb@zip.com.au \\
// simon.buxton@workcover.nsw.gov.au \\
// Web Sites: <http://www.zip.com.au/~sb/w_hobby.htm> \\
// <http://www.zip.com.au/~sb/hec4.htm> \\
// <http://www.zip.com.au/~sb/wars> \\
// <http://www.zip.com.au/~sb/anars> \\

3445. Re: FYI: 60 Plus HomeBrew Pages

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <36fe2593.1180595@netnews.worldnet.att.net>
Source record: 71880

On Sat, 27 Mar 1999 08:41:03 -0800, AC6V <ac6v@ix.netcom.com> wrote:

>Dave Hinerman wrote:
>>
>> On Tue, 23 Mar 1999 16:01:40 -0800, AC6V <ac6v@ix.netcom.com> wrote:
>>
>> >Just finished searching for Ham HomeBrew Pages -- the 60 that didn't
>> >include Home Brewing Beer are linked at URL:
>>
>> But, but, but... oh, never mind.
>
>> Dave
>-----
>Oh alright Dave -- here is the homebrew beer page
>Hickup -- guess I had too many beers -- forgot to include the link
>It is at URL:
>http://www.storeybeer.com/
>
>7 and hick 3
>Rod The Mellow

Thanks, but I was really joking. I don't do beer. But I recall how
popular the beer truck was at the Dayton Hamvention.

Thanks for the links!

Dave

3446. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be7919$700e9620$671e3bcb@default>
Source record: 71881

```
--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

N2EY <n2ey@aol.com> wrote in article
<19990326010536.16922.00000186@ngol01.aol.com>...
> In article <36F968EA.50E3@pop.removethistomailme.net>, John Miles
> <jmiles@pop.removethistomailme.net> writes:
>
> >Subject: Re: What constitutes Homebrew?
> >From: John Miles <jmiles@pop.removethistomailme.net>

What does it matter as long as you enjoy yourself?
Anyway we are all here on the net now instaed of building radios
```

3447. Re: Looking for PLL VFO 5-5.5 mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be791c$ba931880$671e3bcb@default>
Source record: 71882

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Crabtreejr <crabtreejr@aol.com> wrote in article
<19990325205409.26411.00000148@ng61.aol.com>...
> ljl160@aol.com (LJL160) on Wed, Mar 24, 1999 14:17 EST wrote:
>
> >Im trying to stabilize old Ten Tecs with PLL vfo-any help appreciated.
>
There was a design in Elektor Jan 1998 for a freq readout /stabilizer by
Eamon Skelton
I am working on a new version of this with automatic lockup and user
settable offsets though I havent yet managed to cram all the code into the
512 byte space of the AVR AT90S1200. The automatic "huff and puff"
stabilizer and freq readout works a treat though. Unless your VFO drifts
more than +\-5 KHz or >300 Hz/min (in which case it needs repair!) this
bord should handle it.
PCBs and programmed micros should be available soon
E mail me if you are interested

Richard

3448. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36fe242c.2417110490@news.online.no>
Source record: 71883

anybody having tried Class-D for SSB on HF using Envelope Elimination
and Restoration technique? QST 10/70 pp32-35 by DJ4ZC K. Meinzer. It
would perhaps not work efficient enough?
73
Jan-Martin LA8AK

3449. Re: ask an information pi-l

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <36FE3A6A.1DD7A179@uswest.net>
Source record: 71884

Try here under RF amps

http://www.ifwtech.demon.co.uk/g3sek/

"Hervï¿½ Stevens" wrote:

> I would like to know the informations for calcul the PI-L netwoks.
> If exist a programm to calcul this, thanks to send the adress or the
> information
>
> Thanks a lot
>
> Hervï¿½ STEVENS F5RFQ
>
> f5rfq@club-internet.fr

3450. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <p50W7AANek$2Ewf3@g3uda.demon.co.uk>
Source record: 71885

In article <VA.00000128.010cab2b@gto.gto.net.om>, Joe McElvenney
<joemac@gto.net.om> writes
>Marconi TF2370
>

[Much snipped]

> 73 de G3LLV
>
> Muaskar Al Murtafa'a
> Sultanate of Oman
>
>

To Joe / Roy in previous posts

Thanks for your advice
... Ken

3451. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7dlhm1$r17$1@winter.news.rcn.net>
Source record: 71886

>I know of at least one kit that was actually built twice. Many years ago I
>bought a used Viking Adventurer. It had some rather oddball problems and
some
>undocumented mods. So after some unsuccesful troubleshooting and circuit
>tracing, I simply took it completely apart. Checked each component,
replaced
>some dubious parts, sorted, straightened and cleaned others, and then
proceeded
>to rebuild it according to the manual. Worked perfectly after that. Anybody
>else ever do that?
>
73 de Jim, N2EY

Came damn close with a few large Philcos and a few SX-28s. Not unusual when
restoring some vintage radios to have to completely strip the chassis, and
sand
repaint with grey primer and galva-coat. depends on the rust damage....

Peter

3452. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7dlhtdsfb1@winter.news.rcn.net>
Source record: 71887

It is time to seperate the men from the boys
in this endless discussion. The guy with
the biggest assortment of Greenlee Chassis
Punches wins. Extra points given for meter
sizes and square IF transformer punches.

Peter

(running and ducking from resultant flames)

3453. Homebrew vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: kenk@primenet.com
Message-ID: <7dlkqgho1@nnrp02.primenet.com>
Source record: 71888

Without (please) getting into the merits and demerits of radial-less vertical antennas, has anyone seen plans for one of these multi-band antennae anywhere? My antenna books all only cover the standard verticals with radials. My property has no space for verticals (or low-band dipoles for that matter) and I have a hard time justifying all that money for a commercial unit.

TIA

73, Ken W9NPP

3454. FS Weston RF Ammeter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: napoli@i-2000.com
Message-ID: <370d5be0.19693032@news.i-2000.com>
Source record: 71889

F.S. Brand New...Weston RF Ammeter Mod 803 3 1/4 round
with rectangular face 0--10 amp- scale..brand new..pse remove the
(ns) from my address..thanks..Bob ..on Long Island....$40.00

3455. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Mike Lucas W5CHR <lucascom@email.msn.com>
Message-ID: <#X4nWsTe#GA.213@upnetnews03>
Source record: 71890

CommQuart wrote in message <7dlhtdsfb1@winter.news.rcn.net>...
>
>It is time to seperate the men from the boys
>in this endless discussion. The guy with
>the biggest assortment of Greenlee Chassis
>Punches wins. Extra points given for meter
>sizes and square IF transformer punches.
>
>Peter
>
>(running and ducking from resultant flames)
>
>
Peter: I was gonna remain on the sidelines on this thread, but..... I am an electrician/electronics/maintainance man for the largest metal fabrication shop (so I'm told) in North America. We can punch, shear, plasma burn or laser cut ANY size up to say, 10 ft. square. We decoil, flatten, and shear one inch plate, or 16 ga. sheet metal, as the customer requires. Our presses run up to 2000 ton capacity, enough to create a 3 ft. square hole in one inch stainless easily.
My normal job task is CNC lathe/ milling machine/ laser cutter troubleshooting.

Any question as to why I build my own antennas/ homebrew stuff???

73 de
Mike Lucas W5CHR
Memphis, Tenn
lucascom@email.msn.com

3456. Re: Homebrew vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990328115811.29286.00001170@ng18.aol.com>
Source record: 71891

If your looking for verticals for upper HF, a Jpole should do good for you.
Otherwise, using a vertical w/ a groundscreen (10' X 10 ' copper screening w/
#10 wire soldered in X fashion, also solder the wire around the perimeter.)
connect a coil of 20' - 30' of # 8 solid CU. wire about 2 " in diameter & 1' -
2' long.
Connect this to the shield of the coax.
Use a shorting wire w/ alligator clip to short to resonance.

You can also use a tapped inductor for the driven vertical element.

I've never used this, but just made it up(Too much CAFFIENE).

Give it a shot, cant be much worse than no antenna at all.

Also, see if you can get an Antenna Analyzer for speedily finding the resonant
pionts for the different bands.

You can fashion some relays, once the final workings are figured out, but
remember that high voltages can exist at the taps.

Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

3457. Collins HF-8020 & HF-8030

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: quatsein@island.net
Message-ID: <36fe63f1.160277685@news.cr.island.net>
Source record: 71892

Fore sale (1) each of the following

Rockwell/Collins HF-8020 , amplifier
Rockwell/Collins HF-8030 , power supply
Rockwell/Collins HF-80 , systems maintenance manual

condition , removed from service, not currently
operational, clean condition and no obvious
signs of damage. Complete, without interconnect
cables.

Price, $2000.00 US dollars, FOB Vancouver, B.C. Canada

Will consider offers.

Steve Carlisle VE7AHL

3458. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37327403.396166994@news.atl.bellsouth.net>
Source record: 71893

On Sun, 28 Mar 1999 03:28:14 GMT, melus@esi.us.es (Luis Yanes) wrote:
>On Mon, 22 Mar 1999 13:12:11 -0500 "Jim" <jbolinger@Nloisnptaemk.com>
>wrote:
>
>>By the way, how many of you know that a male N plug will plug into a female
>>BNC socket? They were intentionally designed that way.
>
>But the N pin have more diameter, so the BNC socket don't hold well
>the BNC plug anymore!
>73's de Luis

BNC and N fittings are available in 50 ohm and 75 ohm styles. The
difference is the center pin diameter. You will trash a 75 ohm BNC
female by inserting a 50 ohm N male because the pin is larger and
will spread the female pin in the BNC. If you try it the other way, 75
ohm pin in 50 ohm socket, the pin will be loose. So remember, only
mate 50 ohm with 50 ohm and 75 ohm with 75 ohm. That works.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3459. Re: Rubber duck antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36FE7CC7.41C6@eece.maine.edu>
Source record: 71894

marc_k wrote:

> You might be surprised how much difference a 1/4 wave wire connected to
> the outside of the BNC connector can make on HT performance!

A while back, I took some coax that I had scrounged up, stripped it down for just the inner braid, and cut off a piece that was about 1/2 wavelength for 2m. I took a pen, and poked it through the braid about halfway, and worked it around, so that the coax could slip over the BNC antenna mount, and give 2 radials. Even with it not being cut to proper length, and just hanging there, I noticed a significant improvement in TX strength--I could bring up some repeaters that I couldn't before. The RX was a bit better also (I know, I know, it should have increased the same amount, but I really wasn't interested in improving the RX capabilties, just the TX).

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3460. High Current Low Voltage PS Constructions Plans needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: oldgear@aol.com
Message-ID: <19990328141723.02909.00000532@ng-fc1.aol.com>
Source record: 71895

Does anyone know of any web sites that have High Current Low voltage Power supplies construction plans. Would like to build one that would be rated to 35 Amps and the voltage could be adjusted from 0-30. Please reply to my email address.

Thanks

3461. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990328150254.27106.00001249@ng135.aol.com>
Source record: 71896
Body handling: HTML body converted to readable text

```
>HTML>
Subject: Re: Spectrum
>Analysers (Marconi TF 2370 Series)
>From: Ken Linney
>Date: Sun, Mar 28, 1999 10:15 EST
>Message-id:
>
>In article , Joe McElvenney
> writes
>>Marconi TF2370
>>
>
>[Much snipped]
>
>> 73 de G3LLV
>>
>> Muaskar Al Murtafa'a
>> Sultanate of Oman
>>
>>
>
>To Joe / Roy in previous posts
>
> Thanks for your advice
>... Ken
>

Whaddtheysay?

W4ZCB
```

3462. TRANSFORMER Literature F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: tubelit@aol.com
Message-ID: <19990328151347.19162.00001342@ng120.aol.com>
Source record: 71897

Hello, I have the following literature that is out of print,
and very hard to find. These are very high resolution LASER
monochromatic reprints of the rare originals. All are professionally
done with original style binding. All sales final on literature,
and I'm sure you'll be pleased. All prices INCLUDE POSTAGE, in the
continental USA. Others by actual quote.
Thanks, and if you need tubes, visit our sister screename,
Tubecntral@aol.com

TRANSFORMER BULLETINS/CATALOGS/MANUALS:

KENYON "Quality transformers",23 pages,has some writing in numbers
on the front cover by the original owner,but a real information
getter. Covers ALL transformers available in Dec.1st,1941.
Even has the "blown in" price update sheet! Price $9.00.

PEERLESS Transformers, Catalog 1948 - 1,original owners name
on upper right hand corner, nice info, not perfect but nice,
Price $8.00.

SNC Transformers, January 1, 1947,13 pages plus original owners name
spelt on upper right hand corner,beautiful copy, has "blown in"supplimentary
catalog page,price sheet, and August price update sheet! Price $8.00

STANCOR Essex #2,069,42 pages, a REAL NICE MANUAL/CATALOG,has EVERY thing!
A real good info source,Price $10.00

STANCOR Essex Catalog # 140 H, 21 pages plus Numerical index and
October 1, 1948 price update list, very nice, $9.00

THORDARSON "Transformers by Thordarson, No. 400-FX 1942, A beautiful
source of info, 27 pages, Price $9.00

THORDARSON 1941"Tru-Fidelity by Thordarson, an UNBELIEVABLE catalog, real
nice pictures of early Broadcast transmitters and an excellent source
of audio info, 19 pages,real nice. Price $10.00

UTC Transformers, reactors, filters, Catalog# 500,looks like early 40's
another real nice, illustrated Catalog/manual, 22 pages, Price $9.00

UTC transformer components, Spiral-bound Excellent catalog/manual,
really in depth, Bulletin# PS-405,)ct. 15, 1941, includes "blown in"
price update for Dec. 6, 1946.Another excellently illustrated info
source, 34 pages, Price 11.00

EITEL-McCullough's "THE CARE AND FEEDING OF POWER TETRODES", 1951
25 pages crammed full of information IN DEPTH! Has everything you
ever wanted or needed to know about running these tubes, a real

nicely illustrated easy to understand manual, Price 10.00

Thanks for reading, if you have any questions or need to order,
Please respond to my mailbox...
Thanks, Joe Pratt,
Tubelit@aol.com

3463. 50 mhz low pass filter schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: milo17@aol.com
Message-ID: <19990328155200.06871.00001233@ng68.aol.com>
Source record: 71898

I am looking for a schematic for a low pass filter to be used on 6 meters. Power will be 10 watts. Does anyone have a diagram that uses common parts or can give me some insight on how to accomplish this ? Thanks in advance !

Mike

3464. Re: BC-221 eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <36fea086.14527364@news.earthlink.net>
Source record: 71899
Cross-posted to:
alt.ham-radio.marketplace,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

On Sun, 28 Mar 1999 11:44:57 GMT, sb@zip.com.au (Simon Buxton) wrote:

>I am a little surprised that these would be auctioned on Ebay

No S%&*T!!

We have someone with a great sense of humour!

Next will come an eBay auction for a 1/4 watt resistor!

I'll start the bidding at 0.385 cents!

3465. Re: Homebrew Rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <36FEA960.81D24828@erols.com>
Source record: 71900

1) A friction brake - when not energized, the motor armature drops by gravity onto a brake pad. The resistance to the motor turning is multiplied by the gear ratio to prevent the antenna from turning.

2) A wedge brake - A spring pushes a steel wedge into grooves in the rotor housing. During rotation, an electric solenoid pulls the wedge clear of the housing. Hygain uses this method. You may be able to find some drawings on the Internet - Hygain page or Rotor Doctor perhaps.

Terry Gaff wrote:

> Hi all,
> I'm building my own light antenna rotator and am quite near to
> completion. I am considering some possibilities for the inclusion of
> some sort of brakeing mechanism. Can anybody tell me what type of
> brakeing systems are used in commercial rotators.
>
> Regards from Dublin, Ireland.
>
> Terry

3466. FA: Icom 900 29/50/144/220/440MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <3701a0af.78171738@207.217.77.140>
Source record: 71901
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83434525

3467. Q: Rewinding microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: AAAjdc3538@osfmail.isc.rit.eduAAA
Message-ID: <36feb661.0@isc-newsserver.isc.rit.edu>
Source record: 71902

Have any of you tried rewinding microwave oven transformers for
different voltages? It seems like a good way to get a cheap 12 volt
supply going.

Thanks and 73,
Jim N2VNO

When replying, remove the leading and trailing AAA
--

When replying, remove the leading and trailing AAA

3468. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36fe9de0.2448271268@news.online.no>
Source record: 71903

On Tue, 23 Mar 1999 00:11:24 +0000, Doug Smith <w9wi@bellsouth.net>
wrote:

>
>For a *passive* design, about the only thing I can think of is a
>series-resonant circuit for whatever frequency you want to listen at.
>The big problem is, the tolerance of components with enough inductance
>and capacitance to resonate at (say) 800Hz is *really* wide. You could
>buy components that, according to their markings, should resonate at
>800Hz, and find them resonating at 300Hz instead... Anyway, the active
>filter is probably cheaper, it can be built with a dual op-amp and a
>handful of resistors & capacitors..

it seems rather unlikely you have any experience using tuned LC
circuits at all. If you wish to build a 800Hz tuned circuit with 88mH
and 0.47µF, and it resonnate at 300Hz, you must have picked a 3.2 or
3.3µF capacitor.
I have built many lousy active filters, they measure fine, but in
practice they don't give much help, ear selectivity is difficult to
improve, but most passive filters have been quite successful, I stick
to those; ex-telecom inductors are cheap, 88mH toroids as you have in
USA, and the smaller 77mH pot cores which is the standard for pupin
coils in Europe. But for RTTY active filters seems to work quite
satisfactorily.

73 jan-martin

3469. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36fea100.2449070832@news.online.no>
Source record: 71904

On Sun, 28 Mar 1999 18:24:09 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:

>On Sun, 28 Mar 1999 03:28:14 GMT, melus@esi.us.es (Luis Yanes) wrote:
>>On Mon, 22 Mar 1999 13:12:11 -0500 "Jim" <jbolinger@Nloisnptaemk.com>
>>wrote:
>>
>>>By the way, how many of you know that a male N plug will plug into a female
>>>BNC socket? They were intentionally designed that way.
>>
>>But the N pin have more diameter, so the BNC socket don't hold well
>>the BNC plug anymore!
>>73's de Luis
>
>BNC and N fittings are available in 50 ohm and 75 ohm styles. The
>difference is the center pin diameter. You will trash a 75 ohm BNC
>female by inserting a 50 ohm N male because the pin is larger and
>will spread the female pin in the BNC. If you try it the other way, 75
>ohm pin in 50 ohm socket, the pin will be loose. So remember, only
>mate 50 ohm with 50 ohm and 75 ohm with 75 ohm. That works.
>
>Gary

No, Gary, your are wrong. You will only trash a 75 ohm N female with a
50 ohm N male. 30 years ago I was happy to find many 75 ohm N
connectors used with video equipment, but wasn't so happy when I
started to use them, particularly difficult to understand why 75 ohm
cable connector give a 'break' in the feedline.
I use many 75 ohm BNC cables in my shack together with 50ohm, in most
cases the impedance does not matter for the short cables, some
atternuators are designed for 75 ohm, and they give quite little
measuring fault - even on VHF.
The only difference I could see between BNC connectors is that the 50
ohm connectors have more PTFE

73
Jan-Martin LA8AK

3470. WTB COLLINS 312B5

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <36feb6d7.83844986@207.217.77.140>
Source record: 71905
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

```
Wanted: Collins 312B5
Reply Email.
Rich
```

3471. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: "Edward L. Dowdy" <eldowdy@net66.com>
Message-ID: <wKBL2.553$iX5.29934@news12.ispnews.com>
Source record: 71906
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

You will notice not everyone uses "American" English.

Monty Northrup <maddog@io.com> wrote in message
news:36fedd02.3228595@news.io.com...
> On Sun, 28 Mar 1999 10:05:02 GMT, barryo@fastlink.com.au wrote:
>
> >In article <7d4mcq$6bt$1@oak.prod.itd.earthlink.net>,
> > "Jaw Jabber" <jawjabber@earthlink.net> wrote:
> >I don't mind sending a check since you can't get money out of a check.
> >What you need if you want to make money is a cheque.
>
> Barry, in American English, "cheque" is properly spelled "check".
>
> But thanks for being so helpful...
>
> monty N5FC
>
>
>

3472. Mil Tube Tester I-177 for sale $150

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <36FEFEB3.3C26@ix.netcom.com>
Source record: 71907
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors

In excellent condition with tube chart. $150
Jpegs available on request. This one looks like new.
73 Chris VE3NGW/W4 Florida

3473. Callsign Mugs For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7dn002$33e$1@birch.prod.itd.earthlink.net>
Source record: 71908
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber
All mugs are made with quality control in mind. They are dishwasher and microwave safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber for details.
If you what to buy your personal callsign mug all you will have to do is send a check or money order for the amount of the mug plus $4.00 for shipping. Remember to send your callsign so I can place it on the mug.(The mug you see on my web sit is just a sample mug. Your callsign will be placed on the mug you order.) Please USA orders only. See at http://home.earthlink.net/~jawjabber
To see a picture of the Callsign Mug and to get the order forms please click on the link below.

http://home.earthlink.net/~jawjabber

--
Georges Mug Shop
http://home.earthlink.net/~jawjabber

3474. Re: High impedance Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <36FF0FAC.87EBB041@teleport.com>
Source record: 71909

Monty Northrup wrote:
>
> On Sun, 28 Mar 1999 02:58:09 -0800, Roy Lewallen <w7el@teleport.com>
> wrote:
>
> >Tektronix sells a 500 ohm probe for
> >hundreds of dollars (rated at several GHz) that's nothing more than a
> >450 ohm resistor (thick film) and a piece of coax. One of the tricks
> >is that the probe tip surrounds the resistor, making the resistor part
> >of the coaxial structure. And the coax itself is premium quality. But
> >these refinements are necessary only if you need to make precision
> >measurements at microwave frequencies. For HF or even into UHF, the
> >coax and resistor will work fine if you're careful to keep connections
> >very short.
>
> Weeeellllllll.... not really...
>
> Probes, even cheap ones, usually have compensation circuitry (a
> trimmer capacitor as a minimum) at the connector end, where it
> connects to the test equipment. Sometimes, that circuitry is quite
> complex, and justifies the expense. Occasionally, there are even
> active devices at the probe end. Ask anyone who has tried to chase
> down a bus problem on a piece of digital equipment, using an
> oscilloscope. A poor or unmatched probe can seriously mislead you.
>. . .

Sorry, Monty, but I do know what I'm talking about. I helped evaluate the probes. They were initially designed for use with the TDS820 sampling scope (8 GHz bandwidth), which I designed the delay line compensation and trigger pickoff for. The probe tip is a gold-plated shell about the size of an M-16 cartridge. The inside is nothing more than a 450 ohm thick-film resistor (for the 10x version). I've seen lots of them up close and personal, assembled and disassembled, and worked with the folks who developed it. The probe has a rated bandwidth of 9 GHz. It's a P6150, and you can see the specs at http://www.tek.com/Measurement/accessories/, although they of course don't describe what's inside. I suspect that the P6158, is also constructed this way, although I wasn't involved in its development so don't know for sure.

Now, this kind of probe can only work with an instrument that has a 50 ohm resistive input impedance. This is the case for virtually all spectrum analyzers, as it is for high-speed sampling scopes like the TDS820, which is why I recommended it. It would definitely not work for an ordinary oscilloscope, which typically has an input resistance

of 1 megohm, shunted by 20 pF or so. Oscilloscope probes are much more complex, involving a good deal of carefully-designed compensation and even very special coax. (It's lossy to reduce reflections, and has carbon-filled dielectric to reduce triboelectric and piezoelectric effects, among other things.) I agree completely that cheap scope probes are often a very bad bargain, since they can cause you to troubleshoot problems that don't exist. I wouldn't begin to try making my own except for very crude qualitative measurements.

Ya do pick up a few things by working at Tek for 17 years as a design engineer.

Roy Lewallen, W7EL

3475. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <36FF1B28.BEED8499@mindspring.com>
Source record: 71910
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Nor "English" english, for that matter!

"Edward L. Dowdy" wrote:
>
> You will notice not everyone uses "American" English.
>
> Monty Northrup <maddog@io.com> wrote in message
> news:36fedd02.3228595@news.io.com...
> > On Sun, 28 Mar 1999 10:05:02 GMT, barryo@fastlink.com.au wrote:
> > >
> > >In article <7d4mcq$6bt$1@oak.prod.itd.earthlink.net>,
> > > "Jaw Jabber" <jawjabber@earthlink.net> wrote:
> > >I don't mind sending a check since you can't get money out of a check.
> > >What you need if you want to make money is a cheque.
> > >
> > Barry, in American English, "cheque" is properly spelled "check".
> > >
> > But thanks for being so helpful...
> > >
> > monty N5FC
> > >
> > >
> > >

3476. MiniCircuits VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-28 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7dojdi$n0j$1@news.netcologne.de>
Source record: 71911

Hi,

will MiniCircuits POS VCOs be destroyed or affected if the tuning voltage is present and there is no Vcc voltage applied?

Peter

3477. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: bshort@speedchoice.com
Message-ID: <1A28CD54E41770C4.E7EB14A7AC0F56FA.0EE123D34A944A88@library-proxy.airnews.net>
Source record: 71779

> >Do kits count, or must it be built from plans, or must you design the
> >circuits?

For another possible answer, please see:
http://www.qex.net/k7on/homebrew/homebrew.htm

--
Brian Short, K7ON 1994 E. Laguna Dr. Tempe, Az 85282
bshort@speedchoice.com >or< http://www.qex.net/k7on/
--

3478. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <36ff8c35.0@news.netwalk.com>
Source record: 71780

Monty Northrup wrote in message <36fd7531.21937228@news.io.com>...

>Linear amplifiers, like class A and Class B/AB, try to reproduce a
>true copy of the input signal, with more power, or more voltage, or
>more current into the load.
>

B and AB are not linear in the true definition, but the distortion that they produce is at a tolerable level. The reason they are used is that they are more efficient than class A. If you wanted 2 kW , for example, with a class A amplifier it would be drawing 2 kw from the power supply at all times (when turned on). A class B or AB, however, would be drawing 2 kW only when a signal is present.

Jim
N8EE

3479. Re: 50 mhz low pass filter schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7do65p$a8m$1@nnrp1.dejanews.com>
Source record: 71781

In article <19990328155200.06871.00001233@ng68.aol.com>,
milo17@aol.com (MILO17) wrote:
> I am looking for a schematic for a low pass filter to be used on 6 meters.
> Power will be 10 watts. Does anyone have a diagram that uses common parts or
> can give me some insight on how to accomplish this ? Thanks in advance !

The low-pass equations and tables in the Handbook are good to 50 MHz.
Remember to allow/compensate for stray inductance and capacitance.

Plain ol' dipped silver mica caps stripped from an old TV set should work FB,
as will plain ol' solid-conductor copper wire.

There's a Japanese ham with an extensive home-brew web page -- I don't have
the URL, but it's linked from Harry Lythall's page and many others -- he has
a lot of 6 meter stuff, and you can borrow one of his filter plans.

N6OTQ

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3480. Re: WTB: RF Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <36FF9866.5D7235C8@ix.netcom.com>
Source record: 71782

John,

I have an old but never used RS Rf probe somewhere, (in plastic wallet with accessories etc), do you want I should open up the parcel and include it?

Dan

3481. Re: Q: Rewinding microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <36FF9937.6758@pop.valley.net>
Source record: 71783

AAAjdc3538@osfmail.isc.rit.eduAAA wrote:
>
> Have any of you tried rewinding microwave oven transformers for
> different voltages? It seems like a good way to get a cheap 12 volt
> supply going.
>
> Thanks and 73,
> Jim N2VNO

Hello--
I recall reading an article describing a procedure to do this-- the author removed the HV secondary. leaving the primary intact. Then, the author wound a few turns of insulated hookup wire over the primary winding to measure the core/primary turns-per-volt ratio. From there, it became a matter of fitting the appropriate number of turns of wire of appropriate gauge to get the desired output voltage.

Cautions included:
1.) Not overloading the core's VA rating;
2.) Noting that the core VA rating may be overstated;
3.) Allowing for low line/high line-voltage tolerances on the output winding's voltage.

That's all I can recall-- further comments, anyone?

73,
Brad AA1IP

3482. Need circuit for reduction of noise squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: lrbrandt@statestreet.com
Message-ID: <7dob5keok1@nnrp1.dejanews.com>
Source record: 71784

Hi All,

I need a cicruit that works as a noise squelch. It would use the random pink noise that comes out of a receiver and when this noise is reduced by X amount (or eliminated, if full quieting) I would get a digital (1/0) indication. When the signal was gone and the noise returned, the indication would be "0".

This would run with the built-in squelch of the receiver wide open. It would not _actually_ squelch the audio, I don't care about the audio, only that a signal is present.

I remember a similar circuit, one that used a meter to indicate the amount of noise on the signal. This was used for fox hunting by inverting the indication (i.e. all noise=0% on meter, no noise=100% on meter.)

The circuit I'm looking for would would work in a similar manner, except that the threshold that the 1/0 indication was given would be variable (like a regular squelch).

If anyone has this book (it's called "Transmitter Hunting & Radio Direction Finding" - or something similar) [I have one _somewhere_ but have been unable to find it!] please let me know and we can arrange a way to get me the schematic (it's simple enough to use ascii chars so we could email it!)

Thanks es 73,

Larry
AA1EA

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3483. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ffa9d0.56494593@news.online.no>
Source record: 71785

On Mon, 29 Mar 1999 05:48:55 -0600, "William E. Sabin"
<sabinw@mwci.net> wrote:

>
>
>Monty Northrup wrote:
>
>> Typical winding tolerance on toroidal coils is +/- 5%. Typical
>> tolerances on capacitors are +/- 10%, +/- 20%, or +80/-20% (for
>> aluminum electrolytics).

I am surprised to see this mentioned, just wonder who is stupid enough
to use electrolytics in tuned circuits? On the other hand it does not
prove that if such capacitor was used could hit 300Hz instead of 800;
using proper value capacitor, the range with 0.47 F and 88mH might be
710-1045Hz, another problem is unlinearity

A local amateur used disc ceramic capacitors and had a struggle to
catch up with frequency drift of his RTTY converter. Another used
pin-up capacitors in VFO, and later he wrote a long article to tell
how instable normal tuning capacitors were compared to varactor
diodes. With such components a digital C-meter has only illusionary
mission
>
>Everyone should have a digital C meter so that caps can be hand picked or
>combined. The one that I have is specified at +/- 0.5 % accuracy for values
>of 100 pF or greater.
>
>Also, speaking from experience, I don't agree that active filters are not
>good enough. They can easily be made as good as you like, using only R and C
>components plus opamps.
>
>Bill W0IYH
>
Yes, but such arguments should not be used when showing some simple
filters which will not work satifactorily - popular filters are easy
to build, but may not have any valuable improvement. I am very
satisfied using DSP-59 for 1.8-2320MHz CW/SSB operation

73 Jan-Martin LA8AK

3484. Re: FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: "Ryan T. Faricy" <ryan@faricy.net>
Message-ID: <36FFAE89.5CE1DA52@faricy.net>
Source record: 71786
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

HI, Brad. I have a couple friends who own 470s. One does use it for 9600bps backet.

Brad Kellison wrote:

> the HT won't handle the speed.. you need to get a radio that is already
> set for it.
>
> Daniel Lavoie wrote:
> > Does anyone know how to modify the Yaesu FT-470 HT for 9600bps?

RTF
kc0dsz

3485. Re: FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: "Ryan T. Faricy" <ryan@faricy.net>
Message-ID: <36FFAF44.D93DD688@faricy.net>
Source record: 71787
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

I wrote:

> HI, Brad. I have a couple friends who own 470s. One does use it for 9600bps
> backet.

Sorry, I meant "packet".

RTF

3486. Re: Protek 2GHz RF Field Strength Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Michael Gladu <mgladu@warwick.net>
Message-ID: <36FFB4BD.5F78@warwick.net>
Source record: 71788
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Charlie T. wrote:
>
> Does anyone have experience with the Protek 2GHz handheld field strength
> analyzer? It covers from 100KHz to 2GHz. Is it really calibrated for
> measuring RF fields in uV/meter??? Seems like a cool instrument.
>
> thanks in advance,
>
> -W5CDT
>
> --
> >>>Remove the X's from my email address before using<<<
>
> XctX@onr.com

Charlie,

I just got one last week. I have played around with it. It does not
display uV/M, it will display in dBuV, dBmV, or dBm. It is a pretty
neat instrument though. Hope this helps.

73 de N1fbz
Michael Gladu

.............................mgladu@warwick.net.....................

3487. Re: Spectrum Analysers (Marconi TF 2370 Series)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <A2os4HA827$2Ewqx@g3uda.demon.co.uk>
Source record: 71789
Body handling: HTML body converted to readable text

In article <19990328150254.27106.00001249@ng135.aol.com>, JohnsonHE
writes
>>HTML>
Subject: Re: Spectrum
>>Analysers (Marconi TF 2370 Series)
>>From: Ken Linney
>>Date: Sun, Mar 28, 1999 10:15 EST
>>Message-id:
>>
>>In article , Joe McElvenney
>> writes
>>>Marconi TF2370
>>>
>>
>>[Much snipped]
>>
>>> 73 de G3LLV
>>>
>>> Muaskar Al Murtafa'a
>>> Sultanate of Oman
>>>
>>>
>>
>>To Joe / Roy in previous posts
>>
>> Thanks for your advice
>>... Ken
>>

>
>Whaddtheysay?
>
>W4ZCB

More info to follow Harold via Email cheers
... Ken

3488. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7dof4e$ha9$1@news1.rmi.net>
Source record: 71790
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
: "Edward L. Dowdy" wrote:
:>
:> You will notice not everyone uses "American" English.

That can be attributed to the 'product' turned out
by the american public education system now-a-days.

Jonesy

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
277 days to go until the Year 2000 -- So what!
643 days to go until the 3rd Millennium of the C.E.
```

3489. Re: Q: Rewinding microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7doj12$m0v$1@nnrp1.dejanews.com>
Source record: 71791

In article <36FF9937.6758@pop.valley.net>,
Brad.Thompson@Valley.Net wrote:
> AAAjdc3538@osfmail.isc.rit.eduAAA wrote:
> >
> > Have any of you tried rewinding microwave oven transformers for
> > different voltages? It seems like a good way to get a cheap 12 volt
> > supply going.
>
> Hello--
> I recall reading an article describing a procedure to do this-- the
> author removed the HV secondary. leaving the primary intact. Then,
> the author wound a few turns of insulated hookup wire over the primary
> winding to measure the core/primary turns-per-volt ratio. From there,
> it became a matter of fitting the appropriate number of turns of wire
> of appropriate gauge to get the desired output voltage.
>
> Cautions included:
> 1.) Not overloading the core's VA rating;
> 2.) Noting that the core VA rating may be overstated;
> 3.) Allowing for low line/high line-voltage tolerances on the output
> winding's voltage.

Brad,

Just to elaborate on your first caution: mind the duty cycle! Microwave ovens usually run a minute or two, or twenty, but not continuously. While it would seem reasonable to assume that the transformer in a 600-watt is capable of 600 VA, the fact is that 600 watts is only on part of the time. It's most likely NOT 600 VA continuous.

And for goodness sake, be CAREFUL of those filter caps in the oven! Those things hold enough charge to make some serious holes in a big screwdriver. They'll think nothing of poking a hole in your fingertip, or your EKG trace.

Other than that, it seems like a decent idea. Maybe one can get cheap enameled wire for the new secondary at a motor rewinding shop. My uncle used to be a maintenance supervisor at a power plant, and he used to bring me "burned out" motor windings for the wire. The wire was usually fine, just burned away where it was attached to the terminal.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3490. Book for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36FFBB05.E8543384@mwci.net>
Source record: 71792
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.swap

I have an extra (second) copy of Sevick's book:

"Transmission Line Transformers"

that I will sell for $20, including postage in CONUS.

Condition, like new.

Regular price is $34 plus $6 for S/H.

Bill W0IYH

3491. Re: Need circuit for reduction of noise squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7dojj4$mi8$1@nnrp1.dejanews.com>
Source record: 71793

In article <7dob5keok1@nnrp1.dejanews.com>,
lrbrandt@statestreet.com wrote:
> Hi All,
>
> I need a cicruit that works as a noise squelch. It would use
> the random pink noise that comes out of a receiver and when
> this noise is reduced by X amount (or eliminated, if full
> quieting) I would get a digital (1/0) indication. When the
> signal was gone and the noise returned, the indication would
> be "0".
>
> This would run with the built-in squelch of the receiver wide
> open. It would not _actually_ squelch the audio, I don't care
> about the audio, only that a signal is present.
>
> I remember a similar circuit, one that used a meter to indicate the
> amount of noise on the signal. This was used for fox hunting by inverting
> the indication (i.e. all noise=0% on meter, no noise=100% on meter.)
>
> The circuit I'm looking for would would work in a similar manner, except
> that the threshold that the 1/0 indication was given would be variable
> (like a regular squelch).
>
> If anyone has this book (it's called "Transmitter Hunting & Radio
> Direction Finding" - or something similar) [I have one _somewhere_
> but have been unable to find it!] please let me know and we can
> arrange a way to get me the schematic (it's simple enough to use
> ascii chars so we could email it!)

Larry,

I have the book, by Curlee and Moell, but not right here with me. I'll try to remember to dig it out tonight and locate the schematic.

One trick I've seen in Motorola's literature, used by their FM receiver chips (some of them, anyway), is to detect frequencies above the voice passband (I think they used 10 kHz) with a fairly narrow op-amp filter, and use a simple envelope detector (aka diode detector, just like your old crystal radio) to sense the presence or absence of noise.

This -does- require that you connect the detector ahead of the audio amp of the receiver, or at least ahead of any low-pass circuits. If you don't want to tap into the receiver's internal circuitry, you could try sampling at the speaker output and try to detect something within the audio passband but that isn't going to be very common. You may get some false trips that way,

however.

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3492. WTB Tubes # 810

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: John P Russo <jprusso@acsu.buffalo.edu>
Message-ID: <36FFC649.53083666@acsu.buffalo.edu>
Source record: 71794

Hi Gang

I need 2 or more good used or NOS tubes # 810 for a homebrew project.

Thanks.....John KF2JQ

3493. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36FFD941.2781@eece.maine.edu>
Source record: 71795

Sorry about the long time before I responded...

Anyhow, if what I was describing was a class c amplifier (it is switched
so that it is either on or off) is in reality a class d, then what is
considered a class c? The amplifier that I am building was designed as
a class c; no bias of any sort on the final. Just driven as hard as
possible when "on".
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3494. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <36FFDB16.15FB@eece.maine.edu>
Source record: 71796

Hrafnkell Eiriksson wrote:

> A square wave has many harmonics of the basic frequency so a
> LC tank (and more filtering probably) is needed in the output
> to select the frequency (usually the fundamental harmonic) you want to
> transmit. These amplifiers/switches are usually high level modulated,
> that is by changing the DC voltage from the power supply.
>
> Work on these kind of amplifiers was pioneered by
> N.O. Sokal. I think published his article about class D/E amplifiers
> in "IEEE Journal of solid state circuits" in June 1975.
>
I'll try to look this up sometime.

> Take a look at http://eustice.caltech.edu/mmic/full/davisfull.html
> for an example.
>
> --

Very interesting webpage; thanks for the link. The resonant circuit in
the output filter (Ls and Cs), is that for filtering or is used a
resonant circuit somehow? I mean, a resonant circuit only passes
frequencies inside of its passband (attenuates the others, amount
dependent upon bandwidth); is this just a filter design to pass the
13.65MHz or is used somehow otherwise?
--
****
Shawn Upton
Electrical Engineering Student
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webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3495. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36FFE102.3EB9B3A9@fallschurch.esys.com>
Source record: 71797

I have no argument with you folks in principle -- just quibbling a
bit...
73 de W1AEL

3496. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <36FFE267.4D5E9CC2@fallschurch.esys.com>
Source record: 71798

All Hail the MIGHTY Builder!
73 de W1AEL

3497. Re: 50 mhz low pass filter schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ffaef6.57812606@news.online.no>
Source record: 71799

On Mon, 29 Mar 1999 15:28:04 GMT, jstrohm@texas.net
<jstrohm@texas.net> wrote:

>In article <19990328155200.06871.00001233@ng68.aol.com>,
> milo17@aol.com (MILO17) wrote:
>> I am looking for a schematic for a low pass filter to be used on 6 meters.
>> Power will be 10 watts. Does anyone have a diagram that uses common parts or
>> can give me some insight on how to accomplish this ? Thanks in advance !
>
>The low-pass equations and tables in the Handbook are good to 50 MHz.
>Remember to allow/compensate for stray inductance and capacitance.
>
>Plain ol' dipped silver mica caps stripped from an old TV set should work FB,
>as will plain ol' solid-conductor copper wire.
>
>There's a Japanese ham with an extensive home-brew web page -- I don't have
>the URL, but it's linked from Harry Lythall's page and many others -- he has
>a lot of 6 meter stuff, and you can borrow one of his filter plans.
>
>N6OTQ
>
since second harmonic from 6m is likely to cause bad BCI it is a good
idea to use an extra halfwave notch filter integrated with the LPF,
the halfwave filter is quarterwave length on 50MHz and has very high
impedance. One end is shorted. RG213 filter may add some 40dB extra
attenuation

73
Jan-Martin LA8AK

3498. Small BCB variable capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Dan Walker <SciCon@ix.netcom.com>
Message-ID: <7doqsr$mu8@dfw-ixnews7.ix.netcom.com>
Source record: 71800

I have one of the small variables that I took out of an old clock radio. There are several sets of plates and it looks like this was designed to be used for many different applications.

I'm trying to get 365pf out of this cap, but no matter how I wire it I can't get more than 330pf out of it.

Does anyone have any info on these caps? They seem to be in just about every radio I've taken apart, and I'd like to use them for receiver antenna tuners.

Thanks!

3499. Re: High impedance Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: david@slack.com
Message-ID: <36fffeeb.0@news.spies.com>
Source record: 71801

As usual, a bunch of different things have gotten mixed up in this thread.

The original poster seems to be looking for a high impedance probe, which to me means a FET probe. The most commonly available are the Tek P6201 (900MHz) and P6202/P6202A (500MHz). Both make excellent spectrum analyzer probes if you're careful not to burn them out :-) Typical price is $50-300. The P6202 comes with its own power supply, so it's most desirable if you don't have a Tek 7000 mainframe handy.

If the bandwidth and accuracy requirements are not too stringent (200MHz, 2-3dB?), a homemade FET follower probe would probably do the job.

A couple of other posters started talking about low impedance probes, which could be useful with spectrum analyzers, but are perhaps more commonly used for time domain measurements.

I'm sure the Tek P6150 described by Roy Lewallen is a fantastic probe, but don't turn up very often in the used market.

The earlier generation P6056 (10X, 3.5GHz) and P6057 (100X, 1.4GHz) probes are obviously adequate for most measurements around the home, and are sometimes available at reasonable prices ($25-35). Note, if the nose resistor on one of these probes is broken, it will be very difficult to find a replacement (at least I haven't been able to find one; does anyone have a source?).

3500. MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: w5rg@swbell.net
Message-ID: <36FFFE81.4D65B6F4@swbell.net>
Source record: 71802

Does anyone know where I can find mesh diodes?
I'm working on a conversion for the FT-980 and
need some..Thanks Bob

3501. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: david@slack.com
Message-ID: <370001fd.0@news.spies.com>
Source record: 71803

>I am trying to increase the max frequency of my oldish Gould TC12 counter
>(currently about 25 MHz) by replacing the first decade counter with a faster
>chip. Is the 74F160 or 74F162 currently the fastest BCD decade counter
>chip around that is TTL compatible or does anyone know of a faster BCD
>decade counter ? Also what is the fastest variety 74S or 74F or other ?

The 74S196, 74F160/162, 74F168, and 74AC162/74ACT162 are all rated 100MHz
worst case. I'd suggest the 74AC162 since you can probably speed it up by
increasing the supply voltage to just below breakdown. Second choice would
be the 74F162 since it has the highest typical rating (125MHz).

3502. FS: ITT/JENNINGS VAC CAPS 7-1000 PF 5 KV $125 EA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2903991438350001@murphy1.cts.com>
Source record: 71804
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

ITT/JENNINGS CVCH-1000-5N885 7-1000 PF 5 KV. NEW, PACKAGED, EXELLENT COND.

$125 EA.

2 FOR $225

4 FOR $360

INFO AND PICT AT:

http://209.239.34.153/murphyjunk/5_VAC_CAPS_RELAYS_MIS_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3503. Re: Schematic to pcb software info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: im@home.now
Message-ID: <37020981.2600249@news.atl.mindspring.com>
Source record: 71805

Go to http://www.protel.com and download there fully functional
demo for free. I do beleive it runs for 30 days before the eval
period expires...

regards. JD

On Mon, 29 Mar 1999 05:58:53 GMT, daveh@inspire.net.nz (Dave Hellberg)
wrote:

>Im looking for a basic software package to draw schematics and then
>convert to them to pcb's
>Mainly for home use ie ham projects
>Any info please
>
>Cheers Dave Hellberg
>ZL2Vau
>Palmerston North
>New Zealand

3504. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37001150.59E2@eece.maine.edu>
Source record: 71806

Jim wrote:

> B and AB are not linear in the true definition, but the distortion that they
> produce is at a tolerable level. The reason they are used is that they are
> more efficient than class A. If you wanted 2 kW , for example, with a class
> A amplifier it would be drawing 2 kw from the power supply at all times
> (when turned on). A class B or AB, however, would be drawing 2 kW only when
> a signal is present.
>
> Jim
> N8EE

Class B and AB do waste power when no signal is present, due to their biasing. Their quiesent current is what is the culprit here; the harder they are biased, the more linear they become but they also approach becoming class a amps.

--
****
Shawn Upton
Electrical Engineering Student
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webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3505. Re: CB to 29 MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Russ Freeman <jrf9949@garnet.acns.fsu.edu>
Message-ID: <370045B8.4C7679BD@garnet.acns.fsu.edu>
Source record: 71807
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Don't let 'em get to you, Willie. It seems that some persons can only be empowered by hurling anonymous insults. CRB Research has excellent books that deal with your situation. I don't know the exact web site address, but I think that it is: www.crb-books.com. I have used them myself.
Russ, KF4ZFS

wpeloqui@ismi.net wrote:

> Hey, wait a minute! I have held a amateur license for 18+ years and I don't
> know how to convert a CB to 10M. Actually I have just started using 10M mobile
> and think it is great fun. I want to put an inexpensive radio in my Jeep and I
> would appreciate learning the answer to this question.
>
> BTW: He did sign his message with his call, UT0IY.
>
> Willie
> N8MDY
>
> In article <7d9f6q$rg4$1@news.itis.com>,
> "Paul K" <pjktg@itis.com> wrote:
> > Yes . No Problem. Just place it carefully behind a truck wheel and back
> > up. Thats all theres to it. Easy Huh?? Try it. Im sure youll be pleased
> > with the results.
> > You can repaint later after you give it a test on the 10 meter AMATEUR
> > BAND where you need a license. If you had a license you would know how to
> > do this simple feat.
> >
> > Paul K. N9EMX
> >
> >
>
> Willie Peloquin
> Senior Software Engineer - Contract
> http://www.ismi.net/~wpeloqui
>
> "It is unwise to
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3506. Re: FT-470 mod for 9600bps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: Mark Waldron <bogart@nationwide.net>
Message-ID: <370039ED.7EAFF084@nationwide.net>
Source record: 71808
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

Hey Ryan--
Any links or information on the modifications necessary, if any?
Any pointers on connections, etc?
Thanks for your time,
Mark N5YJP

"Ryan T. Faricy" wrote:

> I wrote:
>
> > HI, Brad. I have a couple friends who own 470s. One does use it for 9600bps
> > backet.
>
> Sorry, I meant "packet".
>
> RTF

--
-= Banging your head against a wall uses 150 calories an hour =-

3507. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36fedd02.3228595@news.io.com>
Source record: 71912
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 28 Mar 1999 10:05:02 GMT, barryo@fastlink.com.au wrote:

>In article <7d4mcq$6bt$1@oak.prod.itd.earthlink.net>,
> "Jaw Jabber" <jawjabber@earthlink.net> wrote:
>I don't mind sending a check since you can't get money out of a check.
>What you need if you want to make money is a cheque.

Barry, in American English, "cheque" is properly spelled "check".

But thanks for being so helpful...

monty N5FC

3508. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36fede05.3487951@news.io.com>
Source record: 71913

On Fri, 19 Mar 1999 14:28:20 -0700, "D.Pearce" <depearce@netscape.net>
wrote:

>Do kits count, or must it be built from plans, or must you design the
>circuits?

Wow, what a variety of responses you've gotten!

I'm a little puzzled by the energy developed around a word-label.

When I'm in QSO with someone who says he built a kit, I applaud that person, pat him/her on the back, and laud her/him with as much praise as possible. If I built a kit, I wouldn't claim it as my own design, but DID I BUILD IT? You bet. At home? You bet. With my own two hands? You bet. Am I a homebrewer? You bet! Is it a "homebrew rig"?... well, it's definitely a "home-built" rig, and it's also a kit. Is a kit a worthy learning experience? Absolutely! Are they fun to build? Sure are!

Back 30+ years ago, I tried to "design and build" my own gear before I had the slightest idea of what I was doing. (My first homebrew rig was a 1-tube AC/DC-line-operated rig, which nearly killed me, and blanketed every TV within 5 miles). It was very discouraging. Then my elmer suggested I build some Heathkits, and some *simple* projects from QST. I learned to read a schematic and solder correctly, learned to select and/or substitute components, and learned basic troubleshooting. I read the theory of operation in the Heathkit manuals or the QST articles, and tried to make sense of them. Gradually, I gained experience and knowledge, and was able to build increasingly complex projects, and eventually made a career designing electronics. It got to be fun, and still is.

You know what? I still think I was "homebrewer" way back when I built that first killer-transmitter. Not because it was successful, though. Why? Because I had a homebrewer's attitude. You see, I think it's the attitude, and the willingness to do-it-yourself (if only partially), that makes it "homebrew".

I say "go for it!" (but don't try an AC/DC-line-operated transmitter ;-)

regards,
monty N5FC

3509. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36fee45b.5110451@news.io.com>
Source record: 71914

On Sun, 28 Mar 1999 18:24:09 GMT, ke4zv@bellsouth.net (Gary Coffman) wrote:

>BNC and N fittings are available in 50 ohm and 75 ohm styles. The
>difference is the center pin diameter. You will trash a 75 ohm BNC
>female by inserting a 50 ohm N male because the pin is larger and
>will spread the female pin in the BNC. If you try it the other way, 75
>ohm pin in 50 ohm socket, the pin will be loose. So remember, only
>mate 50 ohm with 50 ohm and 75 ohm with 75 ohm. That works.

Gary,

Hmmm... I was completely unaware that an "N" type plug was intended to mate in any way to a BNC plug; for one thing, the "N" type is a screw-on connector with a diameter of about 1/2 inch, and the BNC is a 1/4-turn bayonet connector with a much smaller cylindrical diameter. However, I must admit I've never tried to mate the two.

Secondly, I think you're partially mistaken about the pin diameters on the 50 vs 75 ohm connectors, at least in this respect: The MATING (i.e., contacting) portion of the connectors is the same on 50 ohm vs 75 ohm connectors of the same series. Behind the mating portion (where the soldering or crimping is done during assembly to a cable) is indeed different. Therefore, you should never have to worry about mating any BNC plug to any BNC jack, or any "N" series plug to any "N" series jack.

Mis-alignments, poor assembly, and el-cheapo connectors are more likely reasons for connector damage.

73,
monty N5FC

3510. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36fee9f1.6540336@news.io.com>
Source record: 71915

On 28 Mar 99 01:44:19 GMT, "webmaster" <webmaster@lmorocz.com> wrote:

>It might be more cost-effective to make a weather-proof container for the
>transceiver, mount it directly at the antenna and to run control lines
>(audio in/out. PTT, etc.) down to the shack.

At least transmission line losses will no longer be an issue ;-)

3511. Re: High impedance Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36feeb50.6891662@news.io.com>
Source record: 71916

On Sun, 28 Mar 1999 02:58:09 -0800, Roy Lewallen <w7el@teleport.com>
wrote:

>Tektronix sells a 500 ohm probe for
>hundreds of dollars (rated at several GHz) that's nothing more than a
>450 ohm resistor (thick film) and a piece of coax. One of the tricks
>is that the probe tip surrounds the resistor, making the resistor part
>of the coaxial structure. And the coax itself is premium quality. But
>these refinements are necessary only if you need to make precision
>measurements at microwave frequencies. For HF or even into UHF, the
>coax and resistor will work fine if you're careful to keep connections
>very short.

Weeeellllllll.... not really...

Probes, even cheap ones, usually have compensation circuitry (a
trimmer capacitor as a minimum) at the connector end, where it
connects to the test equipment. Sometimes, that circuitry is quite
complex, and justifies the expense. Occasionally, there are even
active devices at the probe end. Ask anyone who has tried to chase
down a bus problem on a piece of digital equipment, using an
oscilloscope. A poor or unmatched probe can seriously mislead you.

Nonetheless, Roy is right about the el-cheapo homebrew probe, provided
you're doing relative measurements on sinusoidal signals in a narrow
band, and at HF frequencies. Anything else, be *very* suspicious
about the results you see.

73,

monty N5FC

3512. Re: Homebrew vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36feee83.7710848@news.io.com>
Source record: 71917

On Sun, 28 Mar 1999 16:21:10 GMT, kenk@primenet.com (Ken Knecht)
wrote:

>Without (please) getting into the merits and demerits of radial-less vertical
>antennas, has anyone seen plans for one of these multi-band antennae anywhere?
>My antenna books all only cover the standard verticals with radials. My
>property has no space for verticals (or low-band dipoles for that matter) and
>I have a hard time justifying all that money for a commercial unit.

Hi Ken!

Well, the penance for getting an answer is that you have to listen to
the explanations (it is a homebrew / antenna newsgroup, after all)...
but if you just don't care about the "why's", skip down to the 5th
paragraph ("I'm sure there are...")

Not having a counterpoise is kind of like not having a return path on
your AC outlets. The voltage gets to the equipment, but doesn't
supply current to the load, because it has no return path to the AC
supply.

In the case of an RF transmitter and a 1/4 wave vertical antenna,
having a a counterpoise provides a matched return path for RF
currents, and allows the maximal portion of RF energy to get into the
load (which in the case of an antenna, means it is radiated into
space).

If you take away the return path in the case of your AC outlet,
chances are nothing happens (i.e., the equipment doesn't turn on).
But when you take away the counterpoise from a 1/4 wave vertical
antenna, there are enough stray reactances around that the RF finds
its own return path. The trouble is, these return paths are likely to
be through the power supply of your transmitter, back to the AC line,
to whatever ground the RF finds along the way. Usually very lossy
(meaning not much RF gets radiated from the antenna), and often
causing RFI/TVI, and maybe even RF burn hazards to the operator (if
you happen to be the most convenient counterpoise).

If you really don't care about all of this, stick your vertical pole
in the ground (with an insulating base), make it any convenient
length, feed it with a piece of wire, and tune it with a transmatch.
You'll get results comparable to a vertical with a poor ground and/or
no counterpoise, and at some frequencies, that will be pretty good
results.

I'm sure there are plans or kits or commercial antennas for 1/4 wave
verticals that claim not to need grounds or counterpoise. I've seen

them for 35 years, but I'm not buying, for the reasons noted above. Fact is, you can use the plans for any vertical you want.

Having done your penance, here's the solution I promised:

If you have good ground conductivity in your area (not sandy soil, and not gravelly soil), an 8 ft ground rod (or two or three at 5-6 ft intervals would be even better) will provide a reasonable RF return path for your vertical. Use copper clad rods for better conductivity (Radio Shack or your local electrical supply house will have them). Assuming you're mounting the vertical on the ground, put the first rod right next to it. Try to keep the areas around the ground rod(s) damp, by watering them about once a week. Don't use salts.

Lacking that possibility, have you considered one of the mini-loop antennas? They generally take power pretty efficiently, radiate surprisingly well, are very compact, and don't generally need a counterpoise (the return path in a resonant loop is inherent). They're a tad tricky to operate (they don't have much bandwidth, typically 10-15 KHz, so they have to be re-tuned a lot if you move around the band much), but if you can live with the operating inconveniences, they're a pretty darned good compromise.

Let us know how things work out!

monty N5FC

3513. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36fefaf6.10898635@news.io.com>
Source record: 71918

On Sun, 28 Mar 1999 23:08:53 GMT, la8ak@online.no (J M Noeding) wrote:

>On Tue, 23 Mar 1999 00:11:24 +0000, Doug Smith <w9wi@bellsouth.net>
>wrote:
>
>>For a *passive* design, about the only thing I can think of is a
>>series-resonant circuit for whatever frequency you want to listen at.
>>The big problem is, the tolerance of components with enough inductance
>>and capacitance to resonate at (say) 800Hz is *really* wide.

Well, I was curious about that myself, so I cranked some numbers.

Typical winding tolerance on toroidal coils is +/- 5%. Typical tolerances on capacitors are +/- 10%, +/- 20%, or +80/-20% (for aluminum electrolytics). If you were building a resistive device, the component tolerances would "stack", or add, but since we're looking at resonant frequency, and the component tolerances are under the square-root sign, we'll add the tolerance, then square-root it. So for a +/-5% L and a +/-20% C, the resonant frequency will be within *approximately* SQUAREROOT (1 + (0.05 + 0.20)) - 1) = +/- 0.99 = +/- 10%

Real world example:

Let's try 88 mH +/-5% inductor and 0.47uF +/-20% capacitor. Given

fo = 2 * PI * SQUAREROOT (L * C) then for our example,

fo = 2 * PI * SQUAREROOT (0.088 * 0.00000047)
= 782 Hz (nominally, with exact values)

If both L and C are high by their respective tolerances:

fo = 2* PI * SQRT ((0.088 * (1 + 0.05)) * (0.00000047 * (1 + 0.20))

= 697 Hz (i.e., 9% low)

If both L and C are low by their respective tolerances:

fo = 2* PI * SQRT ((0.088 * (1 - 0.05)) * (0.00000047 * (1 - 0.20))

= 897 Hz (i.e., 15% high)

Not as bad as you thought, heh?

73,

monty N5FC

3514. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36ff00ee.12426299@news.io.com>
Source record: 71919

On Sun, 28 Mar 1999 23:08:53 GMT, la8ak@online.no (J M Noeding) wrote:

>On Tue, 23 Mar 1999 00:11:24 +0000, Doug Smith <w9wi@bellsouth.net>
>wrote:
>
>>
>>For a *passive* design, about the only thing I can think of is a
>>series-resonant circuit for whatever frequency you want to listen at.
>>The big problem is, the tolerance of components with enough inductance
>>and capacitance to resonate at (say) 800Hz is *really* wide. You could
>>buy components that, according to their markings, should resonate at
>>800Hz, and find them resonating at 300Hz instead... Anyway, the active
>>filter is probably cheaper, it can be built with a dual op-amp and a
>>handful of resistors & capacitors..
>
>it seems rather unlikely you have any experience using tuned LC
>circuits at all. If you wish to build a 800Hz tuned circuit with 88mH
>and 0.47�F, and it resonnate at 300Hz, you must have picked a 3.2 or
>3.3�F capacitor.
>I have built many lousy active filters, they measure fine, but in
>practice they don't give much help, ear selectivity is difficult to
>improve, but most passive filters have been quite successful, I stick
>to those; ex-telecom inductors are cheap, 88mH toroids as you have in
>USA, and the smaller 77mH pot cores which is the standard for pupin
>coils in Europe. But for RTTY active filters seems to work quite
>satisfactorily.
>
>73 jan-martin

3515. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <36ff015a.12534383@news.io.com>
Source record: 71920

On Mon, 29 Mar 1999 04:25:57 GMT, maddog@io.com (Monty Northrup)
wrote:

>fo = 2 * PI * SQUAREROOT (L * C) then for our example,

Whoops! Invert that 1/(2 * PI * SQUAREROOT (L * C))

My figures were correct, but my typing was not ;-)

>monty N5FC
>

3516. EBAY-Unbuilt Heath HD-1418 Active Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990329002341.20386.00001817@ng115.aol.com>
Source record: 71921

Yes, It's never been built and its on EBAY for your viewing pleasure, Hi!
The URL is>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83372079

Plus this Beautiful Twoer w/ Mike es Working. URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83364472

Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

3517. Schematic to pcb software info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: daveh@inspire.net.nz
Message-ID: <36ff15b7.1221920@news.inspire.net.nz>
Source record: 71922

Im looking for a basic software package to draw schematics and then
convert to them to pcb's
Mainly for home use ie ham projects
Any info please

Cheers Dave Hellberg
ZL2Vau
Palmerston North
New Zealand

3518. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <36ffa0a4.1474516@news.erols.com>
Source record: 71923

On Sun, 28 Mar 1999 15:03:48 GMT, wmeara@erols.com (Bill Meara)
wrote:

>
>Jim: I picked up a Heathkit VF-1 VFO that looked like it had been
>assembled by a demented, soldering school drop out intent on creating
>more instability in the world. I stripped it down almost completely
>to the component level and rebuilt it from a schematic. I ended up
>using a few more terminal strips than the boys at Benton Harbor
>intended. It was fun and the thing works. Pictures at:
>http://www.eols.com/wmeara
>
Oh Man, I mis-typed my own URL!
http://www.erols.com/wmeara
Sorry!

3519. Re: Will 150mw survive?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: la8ak@online.no
Message-ID: <36ff34bf.26521013@news.online.no>
Source record: 71924

On Mon, 29 Mar 1999 02:49:23 GMT, maddog@io.com (Monty Northrup)
wrote:

>On 28 Mar 99 01:44:19 GMT, "webmaster" <webmaster@lmorocz.com> wrote:
>
>>It might be more cost-effective to make a weather-proof container for the
>>transceiver, mount it directly at the antenna and to run control lines
>>(audio in/out. PTT, etc.) down to the shack.
>
>At least transmission line losses will no longer be an issue ;-)

it never has been a real issue - unless you are discussing VHF
operation, a friend (LA6VBA) has 250m coax (using 28MHz IF) up to a
VHF/UHF transverter......

3520. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <36FF68A6.CB50CCF1@mwci.net>
Source record: 71925

Monty Northrup wrote:

> Typical winding tolerance on toroidal coils is +/- 5%. Typical
> tolerances on capacitors are +/- 10%, +/- 20%, or +80/-20% (for
> aluminum electrolytics).

Everyone should have a digital C meter so that caps can be hand picked or combined. The one that I have is specified at +/- 0.5 % accuracy for values of 100 pF or greater.

Also, speaking from experience, I don't agree that active filters are not good enough. They can easily be made as good as you like, using only R and C components plus opamps.

Bill W0IYH

3521. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: ejune@intuitive-data.com
Message-ID: <09990229050140.OUI73.ejune@intuitive-data.com>
Source record: 71926

Martin,

I love it! A solution that seems to address the concerns of all
parties. If only our NATO negotiators were that good!

--
Regards,

Eric June
KU6J

3522. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7dnvdblhv2@news5.svr.pol.co.uk>
Source record: 71927

Mark Zenier wrote in message ...
>You could boost things a bit by using a 74F160 or 74F162 as the first
>stage. (The 74F90 doesn't seem to exist).

I am trying to increase the max frequency of my oldish Gould TC12 counter (currently about 25 MHz) by replacing the first decade counter with a faster chip. Is the 74F160 or 74F162 currently the fastest BCD decade counter chip around that is TTL compatible or does anyone know of a faster BCD decade counter ? Also what is the fastest variety 74S or 74F or other ?

John G3UGY

3523. WTB: RF Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-29 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7dnvhtlko2@news5.svr.pol.co.uk>
Source record: 71928

I'm looking for an RF Probe for use with my digital multimeter (10 Megohm input)

If you can help please let me know.

John G3UGY

3524. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <3700FCAF.4487@eece.maine.edu>
Source record: 71729

Hrafnkell Eiriksson wrote:

> The series LC circuit in the output is used to pass through the fundamental
> frequency of the swictch (that is 13.65MHz). A series LC circuit has
> a very low impedance on its resonance frequency so current can flow
> freely to the load. Harmonic currents of the fundamental frequency
> (mostly odd multiplies of the fundamental) will see a large impedance
> and therefor won't make it to the load. The output will therefore be
> a sinusoidal wave.
>

That is what I thought it was for; most of the output filters that I have seen are of the low pass response, not bandpass as that section would be. Although, if the components were of high Q, it would start to act sorta like a crystal filter, and really block the harmonics.

Which begs the question of me now, what are the effects of the upper harmonics on the amplifier? I mean, the amplifier wants to see a good, probably low impediance load (matched condistions); but the upper harmonics caused by the square wave drive do not see a good termination. The upper harmonics I realize are much smaller in amplitude, but are there any other effects to the amplifier (other than wasted power in the harmonics) due to these badly terminated harmonics?

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3525. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <3700FD78.6201@eece.maine.edu>
Source record: 71730

Monty Northrup wrote:

> Class 'C' is a *signal* amplifier which is biased (or not biased at
> all) to conduct for less than 180 degrees of the RF cycle. In
> general, the amplifier operates in the linear region of its operating
> curve while it's conducting, and usually isn't allowed to go into
> saturation.
>
> Class D and above comprise "amplifiers" with *digital* (i.e., On/Off)
> characteristics, that is, they act as switches, saturating for some
> portion of the RF cycle, up to 180 degrees.
>
> regards,
> monty N5FC

Ah, I am starting to see now. It sounds like my amplifier runs more
like Class D, as it is driven off/on as hard as possible.

So, the class c *does* have some linearity to it; I imagine this type of
amplifier would be possibly good for amplitude modulated frequency shift
stuff? I forget the names of those wild wacky digital modes, but I
imagine that this would be an applicable usage.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3526. Re: vernier lube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <37010ac7.0@news.netwalk.com>
Source record: 71731

Clifton T. Sharp Jr. wrote in message <36FC79FA.7A58@megsinet.net>...
>Not exactly a homebrew question, but what's good to use to lubricate an
>old vernier drive? I just acquired a Yaesu FRG-7 receiver with a sluggish
>tuning vernier.
>
>Normally, for a light, non-gumming lube, I use Singer sewing machine oil,
>but I'm not sure if that's appropriate around the tuning caps if the
>vernier (whose construction I never understood) manages to leak.
>

Go to a bicycle store and get some bearing lubricant in a small tube.

Jim
N8EE

3527. Re: HF Linear amp with MRF-150 ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: wb6eys@aol.com
Message-ID: <19990330124116.13367.00000080@ng-cd1.aol.com>
Source record: 71732

Hi . Stew here .
Contact : CCI (937)426-8600 or

cci.dayton@pobox.com
Tell them you want the Catalogue . Then look at EB104 . 600 Watt HF amp .

Incidently , if you sit and figure out that the costs involved may be a pre
mature poor house outcome . You may consider the iCom 2KL amp I have for sale .
Or the Hercules Amp I have for sale .

Let me know which way you decide to go in any case . Thanks , Stew...
rec.radio.swap

3528. WTB: MFJ-259B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: wb6eys@aol.com
Message-ID: <19990330124344.13367.00000083@ng-cd1.aol.com>
Source record: 71733

Wanted : MFJ-259B . Had the MFJ-259 , No thank you .

Stew ...
rec.radio.swap

3529. Re: HELP - Upper freq. on 6146B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <Au8M2.1715$JT1.2399@news3.voicenet.com>
Source record: 71734

Heath had a 2 meter transverter, in the late 60's called the SB500. It used two 6146's in push pull. I struggled with it for several years. Never even got close to the spec's power out of it (I don't remember the number now).

It is possible to use them at 2 meters but there would have to be a very large amount of money riding on the success before I would attempt it. If your time has any value, go to a 250 series tube or go all the way to an 8877 and skip the intermediate power levels.

73, Harry, W3IIT

ve6inm@telusplanet.net wrote in message <7dqq3ljfv1@nnrp1.dejanews.com>...
>Has anyone ever tried to "push" a 6146 up into the 2mx. range. I have an
>abundance of 6146B's and W's and was thinking about building up a linear
for
>2mx. Easier to develop the B+, etc. than on a 4CX250 series. I know the
specs
>say good to about 60mHz, but was curious if anyone ever tried to squeeze it
>into service above that range. Any and all opinions/help are appreciated.
>73 de
>VE6INM (Glenn)
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3530. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3700af66.123470324@news.online.no>
Source record: 71735

On Mon, 29 Mar 1999 16:28:17 -0600, w5rg@swbell.net wrote:

>Does anyone know where I can find mesh diodes?
>I'm working on a conversion for the FT-980 and
>need some..
>
Seems you have read some note in FoxTango-newsletter...(?)

3531. FS!-Pair GE 211/VT-4C NOS & sockets.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <922820015.334.78@news.remarQ.com>
Source record: 71736
Cross-posted to:
rec.audio.marketplace,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

These tubes were "Liberated" from a Master Case of twelve. NOS, unused now in generic white boxes. Sockets are E.F.Johnson Ceramic 123-XXX series, used but perfect!!!
$275.00 plus Shipping.

TNX for reading!

Steve

3532. [ebay] FS: Yaesu FT-23R w/ Accessories - 2 meter Handheld!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Burke Jones <burke@southwind.net>
Message-ID: <7dr7c9$9k7$1@opal.southwind.net>
Source record: 71737
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Yaesu FT-23R w/ FTT-4 DTMF keypad and two battery packs. See the following link for more information and pictures!

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?viewItem&item=84778324

==========
Burke Jones
N0HYD
remove NOSPAM from e-mail address to use.

3533. Wanted: 6GM5 Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Rosey Rosenbaum <bili@iquest.net>
Message-ID: <wu9M2.38$E4.235@news1.iquest.net>
Source record: 71738

I am in need of 4ea 6GM5 tubes or a substitute for these. Thanks for any help. bili@iquest.net

3534. FS: 4 - 1/2" round meter movements

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: ns51ley@snowhill.com
Message-ID: <37014B95.5ACA@snowhill.com>
Source record: 71739

I have at least 20 or 30 round meter movements from military v.o.m.s. Rugged steel constr with AC V, DC V, and ohms scales. 4-1/2'' o.d. with 3-1/2'' face, $4.00 each plus UPS. All are 50 uA movements made by Bruno, QVS, or Phaostron. The scale can be removed and reversed (or painted over) for a custom power meter, ammeter, etc. Four styles available, with blue or black bezel, and with entire meter visible under clear cover or with bottom third coverd by the bezel. Also have a few with an extra set of terminals to detect a "pegged" condition, for $6 ea. NOTE: Please REPLACE the "ns51" with "wor" to spell "worley" in my email or call 334-347-5281.

3535. FS: Plug-in relays or choppers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: ns51ley@snowhill.com
Message-ID: <37014CEE.358D@snowhill.com>
Source record: 71740
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have at least 200 plug-in relays or choppers,mil-spec, unused. All are in sealed metal cans about the size of a mini tube and plug into a 7-pin mini tube socket. They have a coil and a SPDT contact which will close with just a volt or two on the coil. I have three different makers, but all look interchangeable: 1) Hughes 992200-1, Airpax C-747 2)Oak Chopper type 610, with same Hughes p/n and 3) Collins 54-1021-00, Airpax 300. All are unused. 5/$4.00, 10/$7.00, 25/$15 or 100/$50. Shipping extra. NOTE: Please REPLACE the "ns51" in my email with "wor" to make "worley" or call 334-347-5281.

3536. electric diagram ampli TONO 2M 40 G

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: mpare1@aol.com
Message-ID: <19990330143341.19247.00000102@ng40.aol.com>
Source record: 71741

HELLO,

I'm looking for the electric diagram of the tono 2m40g 144 Mhz amplifier.
As the builder cannot send it to me perhaps somenone can send to me a copy
of the orinal document.

For all you will do, I send you the bests regards.

Marcel F6GNV

3537. Re: Senior RF Tech Job Opening - E. PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37012C37.DCBB8D65@fallschurch.esys.com>
Source record: 71742
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Hey, Brian, sign me up for NO SSB International!
CW Forever! 73.
W1AEL

3538. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37012F91.63DE@eece.maine.edu>
Source record: 71743

J M Noeding wrote:

> Seems you have read some note in FoxTango-newsletter...(?)

FoxTango?
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3539. Re: High impedance Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <370127d3.154304038@news.online.no>
Source record: 71744

On 29 Mar 1999 14:30:03 -0800, david@slack.com (David DiGiacomo)
wrote:

>
>If the bandwidth and accuracy requirements are not too stringent (200MHz,
>2-3dB?), a homemade FET follower probe would probably do the job.
>
for experiments I often must build high impedance 'probes' into the
equipment. It is experienced difficulties using simple FET circuits
because source-follower gain is low, somewhere in the region of
0.5-0.7, mosfets are better, but none can drive a 50 ohm line, it
would reduce the gain by another 6dB
To improve this I've chosen the combination of Dual-gate mosfet and
PNP transistor with heavy feedback to from collector to source.
Another difficulty is bandwidth, gain tends to fall 1dB on 10MHz, and
another 1-2dB on 50MHz

73
Jan-Martin LA8AK

3540. Re: tube data sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37012958.154693175@news.online.no>
Source record: 71745

On Tue, 30 Mar 1999 15:37:15 +0200, Norman Urs Baier
<baier@de.epfl.ch> wrote:

>Hi,
>
>Does anyone have data sheets for
>
>QQE 06/40
>YL 1060
>
>I need them and would be very grateful if you could send them
>Greets, Norman
>
5894=QQE06/40
believe YL1060 is Philips valve, almost similiar to Telefunken YL1070,
but has not so much gain, and is not designed for linear amplifier as
YL1070.
While 5894 will run with 150WPEP o/p on SSB, YL1060 and YL1070 may
deliver 190-195W PEP output
Believe the screen voltage for YL1060 is around 300-350V with -30V
grid bias for class AB2, while YL1070 requires only 220-250V for -30V
grid bias
I use EL90/6AQ5 shunt-type screen regulator with 220-330V o/p range,
it was built 25 years ago, today I would suggest EL84/6BQ5 a pwr
mosfet, inrush protection and time-delay is also included in the
circuit.

I used YL1060 for a period in my 2m linear, but now using YL1070

73 Jan-Martin LA8AK

3541. QST magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: turinib@wdni.com
Message-ID: <37012305.928394@news.weyer.com>
Source record: 71746
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Does anyone know of a source of indexes for QST, HR, and 73, CQ, etc?
The ARRL has indexes from 1970 or so. I thought that someone was
selling indexes going farther back. Anyone remember who?

Also, I'm looking for bibliographies of articles for BAs, i.e.
Johnson, Hammarlund, etc.

Thanks

Bill Turini KA4GAV/7 turinib@wdni.com

Always looking for Signal/One Accessories, equipment, publications,
advertisements, etc.

3542. Re: Schematic to pcb software info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7drkiacdq1@nnrp1.dejanews.com>
Source record: 71747

In article <36ff15b7.1221920@news.inspire.net.nz>,
daveh@inspire.net.nz (Dave Hellberg) wrote:
> Im looking for a basic software package to draw schematics and then
> convert to them to pcb's
> Mainly for home use ie ham projects
> Any info please
>
> Cheers Dave Hellberg
> ZL2Vau
> Palmerston North
> New Zealand
>

Hi Dave
Take a look at www.ivex.com
You will find "free" software that permits draw schematics and pcb
until 100 pins.
If you want more pins, you can buy.
73s and good look !

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3543. Re: QST magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <37014969.81C53058@mindspring.com>
Source record: 71748
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

There is a downloadable index, somewhere. Got it about a year ago and
put it in my PalmPilot. Problem is, I don't know where.

Will send you a message if I locate it.

Phil

3544. Re: QST magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <370149B0.2A1A4D66@mindspring.com>
Source record: 71749
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Try this website:

http://www.tp.net/tp/users/japple/qst.htm

Phil

3545. Re: Schematic to pcb software info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7drigu$9e4$1@scotty.tinet.ie>
Source record: 71750

Dave Hellberg wrote in message <36ff15b7.1221920@news.inspire.net.nz>...
>Im looking for a basic software package to draw schematics and then
>convert to them to pcb's
>Mainly for home use ie ham projects
>Any info please
>

Try www.cadsoftusa.com

73, Ed. EI9GQ

--
Eamon 'Ed' Skelton EI9GQ, Cork, Ireland

ANTI SPAM RETURN ADDRESS
Real e-mail address below

ei9gq@nettaxi.com

EI9GQ home brew radio page
www.nettaxi.com/citizens/ei9gq/
www.qsl.net/ei9gq

3546. WANT!! 3-20pf air variable 4kv

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990330181536.08711.00000188@ng22.aol.com>
Source record: 71751

Hi All, I am looking for a small value air variable like 3-20pf or 3-30pf with about 4kv or better spacing. If you have anything like this I am interested. Thanks 73 LOU

3547. Re: Hrlp: I need a PCB power supply switch for 3 voltages.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: peterbb@interchange.ubc.ca
Message-ID: <3701580e.2300803@newshost.ucs.ubc.ca>
Source record: 71752
Cross-posted to: sci.electronics.design,alt.radio.amateur.club,rec.radio.amateur,rec.radio.amateur.homebrew

On Tue, 30 Mar 1999 00:04:52 GMT, Tom <tom22@verio.com> wrote:

>Hi,
>
>I am currently working on a PCB which has 3 AC voltages coming into it
>from a wall mounted transformer (with several windings). The 3 voltages
>are fed to Linear regulators to produce +/- 15 and +5.
>
>The last version of this PCB just turned on when the unit was plugged
>in, but that is no longer acceptable. I need now to be able to turn
>on/off all voltages, via a front panel switch, with the wall mounted
>transformer plugged in.
>
>I would think that I need something like a single-throw-triple-pole
>switch, if such a thing exists. Or, perhaps I could use a SPST switch to
>control one supply and then use relays to control the other two, but
>that seems excessively complicated. If the transformer were on board I
>could just use one high voltage switch to tuen on the whole thing but I
>can't change what we have.

Three pole toggle switches should be readily available from Newark,
Allied, or other wholesalers.

--
Peter Bennett VE7CEI
GPS and NMEA info and programs: http://vancouver-webpages.com/peter/index.html
Newsgroup new user info: http://vancouver-webpages.com/nnq

3548. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37013e66.160084489@news.online.no>
Source record: 71753

>>On Mon, 29 Mar 1999 16:28:17 -0600, w5rg@swbell.net wrote:
>>
>>>Does anyone know where I can find mesh diodes?
>>>I'm working on a conversion for the FT-980 and
>>>need some..
>>

>J M Noeding wrote:
>
>> Seems you have read some note in FoxTango-newsletter...(?)
>
>FoxTango?

>KB1CKT Tech Plus
>**********

It was referring to an article in QSTNov 84*, copied and attached to
FT-newsletter, KY0A believes that meshdiodes are more quiet than
ordinary diodes, but I suspect it is a hoax from Hints&Kinks column.
FT980 was mentioned
Believe Yaesu re-invented the diode ring type product detector because
they had some problems applying PC1037H - which seems to be caused by
resistor values chosen. Changing few resistors will improve PC1037H -
as used in FT-726 (not for 736), and the RX sounds ufb on ssb/cw!

I borrowed the FT-newsletters from Edmund, DK3UZ, but I doubt they
have much interest today. Most of the articles is at a technical level
which can be compared to 'Hint&Kinks' in QST.

73
Jan-Martin LA8AK

*) Improving receiver noise floor

3549. Email SM0VPO ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37015eef.168414574@news.online.no>
Source record: 71754

all mails are returned, used a@sm0vpo.8m.com, seems like the local server don't like your domene, have some more info on ceramic element ladder filter - made some tests usin Murata CSB500E3 on 500kHz, seems possible to build a replacement for at least on of the Collins 500kc sidebandfilters....

3550. Narco debris good for parts for tube guys, junkbox exchange preoposal.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <37011BC4.5FD9@ns.atl.org>
Source record: 71755

I posted this to RRS and RRAB but forgot you guys.

I have a Narco Nav Com MK 12A. It covers 135.95 to 118.00 in 50KC steps plus 108.0 to 117.9 in 100KC steps. Other controls are volume, squelch, and ident.

Tubes are 6ar8,6ea8,6bj6x2,6cb6x2,6bh6,6ak5,7551,8106x2,6cw4
This is a nice handful of tubes.
Also has a bunch of crystals.

I like to build things but have too many projects and a plethora of junkbox parts. So, while this unit has good parts, I'd like to swap it for a 100' roll of needed ladder line. 450 or 600 ohm and either the stuff with the little spacers or the windows. If no takers it will go in the 'to be robbed' bin.

I'll pay postage to you on this, you pay postage to me on wire.

-bob

3551. EICO 751 ps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Nigle <evolx3@hotmail.com>
Message-ID: <7dro1jiur1@autumn.news.rcn.net>
Source record: 71756

Greetings, I am working on a Eico 751 power supply that matches the model 753 transmitter.

I would like to find a schematic for this unit to complete documentation. Schamatics are also good to have in case some of the parts in this unit go up in flames when I plug it in, hi hi, (actually I will bring it up to voltage with my trusty variac). ....

Please let me know if you know of the wearabouts of some schmatics for my project.

Thanks, Bruce

3552. Re: Hrlp: I need a PCB power supply switch for 3 voltages.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990330155514.11093A-100000@oso.slonet.org>
Source record: 71757
Cross-posted to: sci.electronics.design,alt.radio.amateur.club,rec.radio.amateur,rec.radio.amateur.homebrew

You probably want to sequentially turn on the voltages anyway, so why not use a relay to turn on the +5 from the +15 supply which in turn operates a relay to turn on the -5 volt supply. SPST will do fine! Cliff K7RR

On Tue, 30 Mar 1999, Peter Bennett wrote:

> On Tue, 30 Mar 1999 00:04:52 GMT, Tom <tom22@verio.com> wrote:
>
> >Hi,
> >
> >I am currently working on a PCB which has 3 AC voltages coming into it
> >from a wall mounted transformer (with several windings). The 3 voltages
> >are fed to Linear regulators to produce +/- 15 and +5.
> >
> >The last version of this PCB just turned on when the unit was plugged
> >in, but that is no longer acceptable. I need now to be able to turn
> >on/off all voltages, via a front panel switch, with the wall mounted
> >transformer plugged in.
> >
> >I would think that I need something like a single-throw-triple-pole
> >switch, if such a thing exists. Or, perhaps I could use a SPST switch to
> >control one supply and then use relays to control the other two, but
> >that seems excessively complicated. If the transformer were on board I
> >could just use one high voltage switch to tuen on the whole thing but I
> >can't change what we have.
>
> Three pole toggle switches should be readily available from Newark,
> Allied, or other wholesalers.
>
>
> --
> Peter Bennett VE7CEI
> GPS and NMEA info and programs: http://vancouver-webpages.com/peter/index.html
> Newsgroup new user info: http://vancouver-webpages.com/nnq
>
>

3553. Re: Ham Radio Callsign Mugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Karl Klingman <karl@mindspring.com>
Message-ID: <37016788.B208B533@mindspring.com>
Source record: 71758
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Phil Wheeler wrote:

> Nor "English" english, for that matter!
>
> "Edward L. Dowdy" wrote:
> >
> > You will notice not everyone uses "American" English.
> >

Someone recently asked John Cleese of Monty Python fame what the differences were between the English and Americans. He said:
1. We speak English -- you don't.
2. When we have World Championships -- we invite other countries.
3. When you meet English royalty you only have to get down on ONE knee.

3554. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3701657A.6581@pop.removethistomailme.net>
Source record: 71759

J M Noeding wrote:
>
> <snip>
> >***
> It was referring to an article in QSTNov 84*, copied and attached to
> FT-newsletter, KY0A believes that meshdiodes are more quiet than
> ordinary diodes, but I suspect it is a hoax from Hints&Kinks column.
> FT980 was mentioned
> Believe Yaesu re-invented the diode ring type product detector because
> they had some problems applying ï¿½PC1037H - which seems to be caused by
> resistor values chosen. Changing few resistors will improve ï¿½PC1037H -
> as used in FT-726 (not for 736), and the RX sounds ufb on ssb/cw!
>
> I borrowed the FT-newsletters from Edmund, DK3UZ, but I doubt they
> have much interest today. Most of the articles is at a technical level
> which can be compared to 'Hint&Kinks' in QST.
>
> 73
> Jan-Martin LA8AK
>
> *) Improving receiver noise floor

What exactly is a mesh diode? I have never heard of those.

Isn't the noise figure of a passive mixer simply the Johnson noise of an
equivalent attenuator? Could be wrong about that, but it's not clear
how one diode can be 'more quiet' than another, unless it delivers less
conversion loss.

-- jm KE5FX (opening mouth and removing all doubt)

Note: My E-mail address has been altered to avoid spam

3555. Re: High impedance Probe

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: david@slack.com
Message-ID: <3701979a.0@news.spies.com>
Source record: 71760

In article <370127d3.154304038@news.online.no>,
J M Noeding <LA8AK@Online.NO> wrote:
>>If the bandwidth and accuracy requirements are not too stringent (200MHz,
>>2-3dB?), a homemade FET follower probe would probably do the job.
>>
>for experiments I often must build high impedance 'probes' into the
>equipment. It is experienced difficulties using simple FET circuits
>because source-follower gain is low, somewhere in the region of
>0.5-0.7, mosfets are better, but none can drive a 50 ohm line, it
>would reduce the gain by another 6dB
>To improve this I've chosen the combination of Dual-gate mosfet and
>PNP transistor with heavy feedback to from collector to source.
>Another difficulty is bandwidth, gain tends to fall 1dB on 10MHz, and
>another 1-2dB on 50MHz

That is an interesting idea, but I wonder why the gain (and bandwidth) of
your JFET source follower circuits was so low. Did you bias them at VGS=0?

If the FET can't drive a 50 ohm load, an NPN or NPN/PNP emitter follower
can be used without much more loss.

3556. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: david@slack.com
Message-ID: <3701991a.0@news.spies.com>
Source record: 71761

In article <7ddnuf$l7j$1@nnrp1.dejanews.com>, <marsgal42@hotmail.com> wrote:
>Stuff like this is covered in all the usual references, like
>_Solid State Design for the Radio Amateur_ and _The Art of
>Electronics_ - both essential purchases. The first is cheaper. :-)

I don't have a copy of "SSDftRA" (yet), but this topic is not covered in our beloved "AoE".

However, the RSGB book "Test Equipment for the Radio Amateur", by H.L. Gibson, has a TTL frequency counter design that could still be built (substituting 7 segment displays for Nixies) and includes serviceable (if uninspired) input circuit designs.

The Motorola app note AN581 also includes some interesting input circuits. This is not on the web site, but is available from MFAX.

>Microcontrollers? Complicated? I guess I'm missing something.

Yes, you are :-)

3557. Manufacturer TMC ?? Looking for info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: VE7SEZ <tkpoustie@NOSPAMbc.sympatico.ca>
Message-ID: <kojM2.202$jO1.601180@news.bctel.net>
Source record: 71762
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello all, I am looking for info on my latest great hamfest acquisition---a TMC Model RFE 1 2@4CX350a HF amplifier. Anybody know how to contact them? I would like to obtain original manuals, schematics etc. The name on the tag is Technical Materiel Corp. Mamaroneck NY. Any info greatly appreciated!

Tim VE7SEZ

caution spamguard on! use this link to reply----------
tkpoustie@bc.sympatico.ca

3558. Re: 572B Driving Impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <37010859.A57A9C6C@cig.mot.com>
Source record: 71763
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a Freeware G.G. Triode RF Amplifier
Prgram on my site you can download. It
will give you the driving Impedance plus Matching
circuit needed plus othe info.

You can generate a 572B *.dat file using the utility
program and a data sheet with the characteristic curves.

See T.A.P. 2.0 on http://www.imaxx.net/~kd9jq

73 Chuck KD9JQ

martyt@pobox.com wrote:
>
> Can someone with a tube reference book tell me what the driving impedance is
> for a 572B tube (or tell me where I can find that info on the 'net)?
>
> I'd like to try adjusting the input networks on my SB-200, and can do so with
> the MFJ-259 antenna analyzer but must have a couple of resistors that are the
> same value as the driving impedance of the tubes (572Bs).
>
> Any help would be appreciated.
>
> 73,
>
> -Marty KI0LO
> martyt@pobox.com
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3559. CELLULAR ACCESSORIES CHEAP!!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: marcel <marcelrf@bellsouth.net>
Message-ID: <3700B0EF.3429@bellsouth.net>
Source record: 71764

CELLULAR ACCESSORIES CHEAP!!!!!!!!!

I have the following brand new accessories.

1)Leather cases with belt clips and plastic protective covers $15.00

Audiovox CM3000, MVX-502

Nokia 5120, 6120 , 2160, 2180

Motorola Profile 300, Startac (amps)

Nextel i1000, i370, i390

Qualcom QCP 800, QCP 1900 QCP820, QCP2700

Sony CM-M13004-ATH

2)Car Lighter charger $15.00 (with IC chip)

Audiovox CM3000, MVX-502

Nokia 5120, 6120 , 2160, 2180

Motorola Profile 300, Startac (amps)

Nextel i1000, i370, i390

Qualcom QCP 800, QCP 1900 QCP820, QCP2700

Sony CM-M13004-ATH

3)Portable Hands Free (Earphone amd lapel mic) $15.00

Nokia 5120, 6120 , 2160, 2180

Motorola Profile 300, Startac (amps)

Nextel i1000, i370, i390

4)Portable Hands Free (Earphone and Boom Mic) $15.00

Nokia 5120, 6120 , 2160, 2180

Motorola Profile 300, Startac (amps)

Nextel i1000, i370, i390

5)NIMH Batteries 39.00

Nokia 5120, 6120 , 2160, 2180

Motorola Profile 300, Startac 49.00 (amps)

Nextel i1000, i370, i390

Qualcom QCP 800, QCP 1900, QCP820, QCP2700

Sony CM-M13004-ATH

6)Vibrating NIMH Batteries 49.00

Nokia 5120, 6120 , 2160, 2180

7) Antennas 15.00

Nokia 5120, 6120 , 2160, 2180

Motorola Profile 300, Startac (amps)

Nextel i1000, i370, i390

Qualcom QCP 800, QCP 1900

Sony CM-M13004-ATH

E-Mail me to make for further information

Thanks Marcel

marcelrf@bellsouth.net

3560. Hrlp: I need a PCB power supply switch for 3 voltages.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Tom <tom22@verio.com>
Message-ID: <370015E4.D962E023@verio.com>
Source record: 71809
Cross-posted to: sci.electronics.design,alt.radio.amateur.club,rec.radio.amateur,rec.radio.amateur.homebrew

Hi,

I am currently working on a PCB which has 3 AC voltages coming into it from a wall mounted transformer (with several windings). The 3 voltages are fed to Linear regulators to produce +/- 15 and +5.

The last version of this PCB just turned on when the unit was plugged in, but that is no longer acceptable. I need now to be able to turn on/off all voltages, via a front panel switch, with the wall mounted transformer plugged in.

I would think that I need something like a single-throw-triple-pole switch, if such a thing exists. Or, perhaps I could use a SPST switch to control one supply and then use relays to control the other two, but that seems excessively complicated. If the transformer were on board I could just use one high voltage switch to tuen on the whole thing but I can't change what we have.

I would appreciate a suggestion.

Thank You
Tom
tomcip@concentric.net
KE6EXT

3561. Re: Hrlp: I need a PCB power supply switch for 3 voltages.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: bix@san.rr.com
Message-ID: <37003066.42755986@news-server>
Source record: 71810
Cross-posted to: sci.electronics.design,alt.radio.amateur.club,rec.radio.amateur,rec.radio.amateur.homebrew

Tom <tom22@verio.com> wrote:

>The last version of this PCB just turned on when the unit was plugged
>in, but that is no longer acceptable. I need now to be able to turn
>on/off all voltages, via a front panel switch, with the wall mounted
>transformer plugged in.

Well, one solution is to use regulators which can be turned on and off
with a logic signal, such as the National LM3940 for +5 and +15, and
and LP2952 for the -15. Then, a small switch or a processor could be
used to turn the regulators on and off, rather than switching the AC
side.

Jim Bixby
bix@san.rr.com
http://home.san.rr.com/bix

3562. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: maddog@io.com
Message-ID: <370037bc.1539643@news.io.com>
Source record: 71811

On Mon, 29 Mar 1999 14:49:21 -0500, Shawn Upton
<supton@eece.maine.edu> wrote:

>Anyhow, if what I was describing was a class c amplifier (it is switched
>so that it is either on or off) is in reality a class d, then what is
>considered a class c? The amplifier that I am building was designed as
>a class c; no bias of any sort on the final. Just driven as hard as
>possible when "on".

Class 'C' is a *signal* amplifier which is biased (or not biased at
all) to conduct for less than 180 degrees of the RF cycle. In
general, the amplifier operates in the linear region of its operating
curve while it's conducting, and usually isn't allowed to go into
saturation.

Class D and above comprise "amplifiers" with *digital* (i.e., On/Off)
characteristics, that is, they act as switches, saturating for some
portion of the RF cycle, up to 180 degrees.

regards,
monty N5FC

3563. PSK31 Interface Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: dougd@cros.net
Message-ID: <37004d3f.3959703@news.cros.net>
Source record: 71812

Right now, PSK31 is hot and getting hotter. On the suggestion of Tim, N8AHK, I've designed a nifty little pc board that will (when stuffed and wired) interface many modern transceivers to the sound card in your PC. It includes an adjustable audio amplifier to boost low level receive audio, a 100:1 pad for transmit audio, PTT keyer and LED transmit indicator. It is currently undergoing 'beta testing' between an ICOM 765 and a Soundblaster 16 but should work in many other setups since the main difference between rigs is just the accessory jack pinout and style. The PSK Interface kit would include pc board, parts and instructions. You would supply cables and connectors since every situation is different. Pricing would likely be well under $25 for the kit and about $25 for an assembled pcb. Is there any interest in this PSKI?
See the completed PCB at: http://www.cros.net/n8ahk/psk31.htm

Email: n8ahk@amsat.org

I have some used self-defense videos for sale.
I have placed a list of what I have on an autoresponder.
Just send an empty email to: 19992@smartbot.net and you
will receive a list in return. These are VHS, NTSC format.

3564. Re: 50 mhz low pass filter schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: bpn518@aol.com
Message-ID: <19990329233641.23431.00001980@ng156.aol.com>
Source record: 71813

Hi Mike,
As someone else eluded to,
there is a simple filter to build listed in
the ARRL handbook, at least as far back
as the mid-80's.
In my 1988 book, it is listed right after the
design of the 3cx800 6m amp.
Good luck.
Bennett ko2ok

3565. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990330010551.06981.00000845@ngol06.aol.com>
Source record: 71814

In article <01be7919$700e9620$671e3bcb@default>, "Richard Hosking"
<richardh@iinet.net.au> writes:

>What does it matter as long as you enjoy yourself?
>Anyway we are all here on the net now instaed of building radios
>
Hello Richard, (or should I write "G'day"?)

I think every type of home construction deserves credit, recognition and
praise. Using "homebrew" as a blanket description is simply inaccurate.

And while I'm here on the net, I'm still building, fixing, modifying, and
designing my rigs.

73 de Jim, N2EY

3566. Re: Class C vs Class D vs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7dq05p$1iq@eldborg.rhi.hi.is>
Source record: 71815

On Mon, 29 Mar 1999 14:57:10 -0500, Shawn Upton <supton@eece.maine.edu> wrote:
>Hrafnkell Eiriksson wrote:
>> Take a look at http://eustice.caltech.edu/mmic/full/davisfull.html
>> for an example.
>> --
>
>Very interesting webpage; thanks for the link. The resonant circuit in
>the output filter (Ls and Cs), is that for filtering or is used a
>resonant circuit somehow? I mean, a resonant circuit only passes
>frequencies inside of its passband (attenuates the others, amount
>dependent upon bandwidth); is this just a filter design to pass the
>13.65MHz or is used somehow otherwise?

The series LC circuit in the output is used to pass through the fundamental
frequency of the swictch (that is 13.65MHz). A series LC circuit has
a very low impedance on its resonance frequency so current can flow
freely to the load. Harmonic currents of the fundamental frequency
(mostly odd multiplies of the fundamental) will see a large impedance
and therefor won't make it to the load. The output will therefore be
a sinusoidal wave.

--
//----------------------//--
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

3567. Re: Need circuit for reduction of noise squelch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: hinermad@my-dejanews.com
Message-ID: <7dqj2h$d77$1@nnrp1.dejanews.com>
Source record: 71816

In article <7dob5keok1@nnrp1.dejanews.com>,
lrbrandt@statestreet.com wrote:

> I need a cicruit that works as a noise squelch.

<snip>

> If anyone has this book (it's called "Transmitter Hunting & Radio
> Direction Finding" - or something similar) [I have one _somewhere_
> but have been unable to find it!] please let me know and we can
> arrange a way to get me the schematic (it's simple enough to use
> ascii chars so we could email it!)

Larry,

I found the circuit you mentioned - do you have Circad? I could make a quick schematic from the book and e-mail it to you. ASCII art is a little out of my league.

(BTW, I highly recommend Circad for schematic capture and PC board layout. I've made one board with it so far, and it works well. Also, there are a number of ham radio project files on the Web that use it, so it's becoming an informal standard for electronic exchange of circuit ideas.

http://www.holophase.com

I am not associated with the company.)

Dave

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3568. tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Norman Urs Baier <baier@de.epfl.ch>
Message-ID: <3700CE23.E3A2DAC9@de.epfl.ch>
Source record: 71817

Hello,

I need data sheets for the tubes

QQE 06/40
YL 1060

i would be grateful for any help, greets Norm

3569. tube data sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Norman Urs Baier <baier@de.epfl.ch>
Message-ID: <3700D38B.CCCED2BE@de.epfl.ch>
Source record: 71818

Hi,

Does anyone have data sheets for

QQE 06/40
YL 1060

I need them and would be very grateful if you could send them
Greets, Norman

3570. HELP - Upper freq. on 6146B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7dqq3ljfv1@nnrp1.dejanews.com>
Source record: 71819

Has anyone ever tried to "push" a 6146 up into the 2mx. range. I have an abundance of 6146B's and W's and was thinking about building up a linear for 2mx. Easier to develop the B+, etc. than on a 4CX250 series. I know the specs say good to about 60mHz, but was curious if anyone ever tried to squeeze it into service above that range. Any and all opinions/help are appreciated.
73 de
VE6INM (Glenn)

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3571. trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Paul Martin <pmartin@bright.net>
Message-ID: <7dqoea$46b$1@cletus.bright.net>
Source record: 71820

I would like to trade an Icom 245 2m multimode 10w for an MFJ 6M rig. Any takers?
Paul N8ULS

3572. Re: MiniCircuits VCO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7dquc8nkn1@nnrp1.dejanews.com>
Source record: 71821

In article <7dojdi$n0j$1@news.netcologne.de>,
"Peter Bolch" <nc-bolchpe@netcologne.de> wrote:

> will MiniCircuits POS VCOs be destroyed or affected if the tuning voltage is
> present and there is no Vcc voltage applied?

No. At least, not the ones I've wired incorrectly and spent much time
trying to figure out why there was either no RF output, or RF
output at a constant frequency. :-)

Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3573. Re: HELP - Upper freq. on 6146B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3700F134.8DD@pop.valley.net>
Source record: 71822

ve6inm@telusplanet.net wrote:
>
> Has anyone ever tried to "push" a 6146 up into the 2mx. range. I have an
> abundance of 6146B's and W's and was thinking about building up a linear for
> 2mx. Easier to develop the B+, etc. than on a 4CX250 series. I know the specs
> say good to about 60mHz, but was curious if anyone ever tried to squeeze it
> into service above that range. Any and all opinions/help are appreciated.
> 73 de
> VE6INM (Glenn)

Hello--
The 1957 ARRL Handbook offered a schematic for a two-band, 125-watt
grounded-cathode amp using PP 6146s and plug-in coils; a screen-grid
circuit performs neutralization.

Ref.: pp.425-427

73,
Brad AA1Ip

3574. Re: HELP - Upper freq. on 6146B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3700F1B8.5F5F@pop.valley.net>
Source record: 71823

ve6inm@telusplanet.net wrote:
>
> Has anyone ever tried to "push" a 6146 up into the 2mx. range. I have an
> abundance of 6146B's and W's and was thinking about building up a linear for
> 2mx. Easier to develop the B+, etc. than on a 4CX250 series. I know the specs
> say good to about 60mHz, but was curious if anyone ever tried to squeeze it
> into service above that range. Any and all opinions/help are appreciated.
> 73 de
> VE6INM (Glenn)

Hello--
The 1957 ARRL Handbook offered a schematic for a two-band (six and two
meters), 125-watt grounded-cathode amp using PP 6146s and plug-in coils;
a screen-grid circuit performs neutralization. There's also a 12AU7
used as a screen-voltage clamping circuit

Ref.: pp.425-427

73,
Brad AA1IP

3575. Re: trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Paul Martin <pmartin@bright.net>
Message-ID: <7dqs3n$51g$1@cletus.bright.net>
Source record: 71824

Before I am inundated with the deserved flames I apologize for this posting.
I fully intended to post to rec.radio.amateur.equipment but had a severe
brain cramp. 73.

3576. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3700e017.2151204@news.buller.se>
Source record: 71825
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
=============================================================================
- L.O.S.A Contribution Form -
=============================================================================
New Contribution [ ] Update [ ]
-----------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-----------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-----------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=============================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

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* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

3577. Re: HELP - Upper freq. on 6146B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <3700F6D1.F5D3FA3C@hamradio.org>
Source record: 71826

General Electric successfully used a single tube (30 watts out) and a pair (60 watts out) in their VHF (130-174 MHz) Progress Line 2-way radio equipment for years.

Al - K8EUR

ve6inm@telusplanet.net wrote:

> Has anyone ever tried to "push" a 6146 up into the 2mx. range. I have an
> abundance of 6146B's and W's and was thinking about building up a linear for
> 2mx. Easier to develop the B+, etc. than on a 4CX250 series. I know the specs
> say good to about 60mHz, but was curious if anyone ever tried to squeeze it
> into service above that range. Any and all opinions/help are appreciated.
> 73 de
> VE6INM (Glenn)
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3578. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3700fb6d.0@news.netwalk.com>
Source record: 71827

Ian wrote in message <7do239fah1@supernews.com>...
>X-No-archive: Yes
>
>gbowne wrote in message <#w18$6QZ#GA.220@upnetnews05>...
>
>>I certainly will, Monty. It's taken a year and a half or more to get
where
>>I am in the design process, and the procurement of parts which I may need.
>>
>>The book has been a great help! I wish there was a web site based on the
>>book, but there isn't. I was thinking about making one for my rig once I
>>get it done.
>>
>>Anyone else read that book by Randy L. Henderson?
>>
>
>Yes must be one of the worst written non-fiction books I've read. Badly
>structured, uses a dozen words where 1 or 2 will do and badly explained.
>Even the front cover picture of the rig is badly taken with light
reflection
>right in the centre of the rig. Great idea but badly done.
>Sorry but thats my view... anyone else have a view on Randys' book ?
>

Not sure what book you are talking about, but sounds like a good description
of a Tab publication.

Am I right?

Jim
N8EE

3579. Re: Homebrew vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-30 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3700fcd0.0@news.netwalk.com>
Source record: 71828

Monty Northrup wrote in message <36feee83.7710848@news.io.com>...
>Not having a counterpoise is kind of like not having a return path on
>your AC outlets. The voltage gets to the equipment, but doesn't
>supply current to the load, because it has no return path to the AC
>supply.
>

Not exactly.

What the counterpoise does is to lower the resistance of the return path.

You should have at least a ground rod, as a minimum, but even a piece of wire at the end of the coax will work to some extent. Adding a counterpoise will lower the resistance of the return path and increase the efficiency of the antenna system.

Jim
N8EE

3580. Re: NE602 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7dtb2kpqo1@news1.exit109.com>
Source record: 71679

A 10 R to ground works just fine.
It is actually used like this quite often.

People have built AM and FM(using varactor) transmitters
like this.

Jim wrote in message <37022839.0@news.netwalk.com>...
>I have been looking at how the NE602 works and was wondering if anyone has
>tried this:
>
>The normal RF inputs to the mixer are internally biased and the
>'instructions' say to not make any DC connection to ground or it will upset
>the bias. Would it be possible to intentionally alter the bias, perhaps by
>a resistor from the input to ground?
>
>My idea is to allow the oscillator to pass thru the mixer, essentially
using
>the mixer as a buffer stage. This would permit the construction of a QRP
CW
>transceiver using only 3 active components (NE602, audio amp, RF final
amp).
>If surface mount components where used it would be quite tiny.
>
> I also think that it would be possible to build a AM mode transceiver
using
>this method---feed the microphone audio thru the audio amp to the input of
>the NE602 with the mixer slightly unbalanced---although the necessary
>switching may be too bulky.
>
>--
>Jim
>N8EE
>jbolinger@Nloisnptaemk.com
>Remove the letters 'Nospam' to reply directly
>
>

3581. FA: Drake TR7A W/Acc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <37023436.312585737@207.217.77.140>
Source record: 71680
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83432906

3582. WTB Barker & Williamson phase unit BW350

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: patterso@alpha.anser.org
Message-ID: <7dtfia$v7i$1@nnrp1.dejanews.com>
Source record: 71681

I am looking for an old BW350 phase shift network module. It was used in some old Handbook phasing SSB generators.

Gary W4AF

patterso@anser.org

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3583. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <370237A8.3925C03A@fallschurch.esys.com>
Source record: 71682

Please, Yaesu certainly did NOT invent the diode ring type product detector!!! That circuit is older than either of us. It goes 'way back before Yaesu. I will find my copy of QST, but what on earth os a "mesh diode" ? That is not a familiar electronic term on this side of the Atlantic Ocean. My guess would be that it might equate to "PIN Diode", because I have read articles that claimed improvement in receiver dynamic range based on replacing poorly chosen RF switching diodes with PINs.
Fraternally,
W1AEL

3584. FA: Drake UV3 144/220/440 W/Acc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: richcom@earthlink.net
Message-ID: <370236a2.313205508@207.217.77.140>
Source record: 71683
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Go to:
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83430060
Comes with remote setup as well.
Real Nice Drake!!

3585. Marine battery in UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Chris Davis <kb0wwp1@hamsnet.net>
Message-ID: <0%qM2.1245$4y3.1690@newscene.newscene.com>
Source record: 71684

I was given an older 550VA UPS. The batteries have pretty much lived out their useful life and need to be replaced. Could I just put in a deep-cycle marine battery? The box has enough space for one.

Thanks,
Chris KB0WWP

--
* remove the '1' from my address to respond *

3586. Re: 500kHz Ladder filter for SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37023C80.1372@eece.maine.edu>
Source record: 71685

J M Noeding wrote:
>
> Built the ladder filter shown using ceramic resonnators, believe they
> are series mode, parallel resonnance frequency seems to be 513-514kHz

Where did you get the resonators? Sounds like an interesting design.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3587. Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <3702469F.413000FD@gate.net>
Source record: 71686
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

RICHCOM,

I am not generally a grump, but your method of posting to the newsgroups regarding items you are selling on EBAY is getting tiresome. If someone wnats to peruse EBAY and see what's for sale, fine, but parallel postings to the newsgroups is not appropriate, especially since you have no description in your posts, just a link to EBAY! Based on the number of items you've been selling and parallel posting here, you must be in the business of selling used equipment. In such case, you are violating newsgroup rules twice, once for your own gain, and the second by promoting EBAY.

73, Mike

richcom wrote:
>
> Go to:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83432906

--
__\/__
| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_______________________________Oooo._________________________
.oooO ( )
( )) /
\ ((_/
_)

3588. Re: Marine battery in UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <3702496A.50AB4737@gate.net>
Source record: 71687

Chris,

That's an excellent idea. Because the UPS could be used as an inverter
for your station, powering items that will not run on 12V, you could add
a *FEW* batteries in parallel, and have a station that will stay powered
during the longest power outage. Calculate your average ah usage during
an average day, and current limit a trickle charge circuit delivering 5%
overcharge, and you'll always have topped off batteries in the event of
an extended need.

73, Mike

Chris Davis wrote:
>
> I was given an older 550VA UPS. The batteries have pretty much lived out
> their useful life and need to be replaced. Could I just put in a deep-cycle
> marine battery? The box has enough space for one.
>
> Thanks,
> Chris KB0WWP
>
> --
> * remove the '1' from my address to respond *

--
__\/__
| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_______________________________Oooo._________________________
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3589. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <37025022.C6ADD487@gate.net>
Source record: 71688
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

richcom wrote:
>
> At 11:00 AM 3/31/99 -0500, you wrote:
> MIND YOUR OWN BUSINESS
>

You tell me to mind my own business; actually, I do, but not in an inappropriate manner on the newsgroups.

Since you apparently think what you're doing is fine, I'll address the newsgroups instead:

Am I wrong? Is there anyone out there who will defend RICHCOM's shotgun posts to the newsgroups? Maybe I've lost touch with reality, and EVERYBODY who sells anything on EBAY should post a message with only a link to EBAY.

No, YOU MIND YOUR BUSINESS -- elsewhere!

> >I am not generally a grump, but your method of posting to the newsgroups
> >regarding items you are selling on EBAY is getting tiresome. If someone
> >wnats to peruse EBAY and see what's for sale, fine, but parallel
> >postings to the newsgroups is not appropriate, especially since you have
> >no description in your posts, just a link to EBAY! Based on the number
> >of items you've been selling and parallel posting here, you must be in
> >the business of selling used equipment. In such case, you are violating
> >newsgroup rules twice, once for your own gain, and the second by
> >promoting EBAY.

3590. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7dtkqi$3lm@groucho.cs.ubc.ca>
Source record: 71689
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

kf4fdj@amsat.org writes:
>Am I wrong? Is there anyone out there who will defend RICHCOM's shotgun
>posts to the newsgroups? Maybe I've lost touch with reality, and
>EVERYBODY who sells anything on EBAY should post a message with only a
>link to EBAY.

If I wanted to look at equipment that is being auctioned on Ebay, I'd look on Ebay. But I'm not, so all these Ebay posts are just a waste of Usenet for me.

Plain "forsale" posts, even if inappropriate for the newsgroup in question, at least have some information about what is being sold and the asking price. Articles with nothing but a pointer to Ebay contain absolutely *nothing* of value or even interest.

Dave

3591. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: "Tom C. Brown, Jr." <mmc@netdoor.com>
Message-ID: <S0tM2.18$UR6.30@axe.netdoor.com>
Source record: 71690
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I agree.

Dave Martindale wrote in message <7dtkqi$3lm@groucho.cs.ubc.ca>...
>kf4fdj@amsat.org writes:

[Text removed]

>
>If I wanted to look at equipment that is being auctioned on Ebay, I'd
>look on Ebay. But I'm not, so all these Ebay posts are just a waste
>of Usenet for me.
>

[Text removed]

> Dave

3592. Re: QST magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: nick@cs.unc.edu
Message-ID: <7dtmts$r85$1@altair.cs.unc.edu>
Source record: 71691
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

The rec.radio.amateur.boatanchors FAQ site has the following:
From Beveridge to Oscar
indexes to back issues of QST, 73, Ham Radio, and CQ magazines
also an index of equipment reviews - hard copy or floppy disk
versions
DiDah Publishing
PO Box 7368
Nashua, NH 03060
603-878-3628

Info on magazines, manuals, parts, web sites, etc - all kinds of
neat groovy stuff about boatanchors can be found on the FAQ site:
http://www.cs.unc.edu/~nick/rrab.faq.htm

Additions & Corrections welcomed
73 & Have Fun,
Nick KD4CPL

--
Nick England KD4CPL nick@cs.unc.edu Univ. Of North Carolina
http://www.cs.unc.edu/~nick Chapel Hill NC

3593. 10 METERS ANTENNA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: xe1jeo@my-dejanews.com
Message-ID: <7dtrilagb1@nnrp1.dejanews.com>
Source record: 71692

HI , I AM CARLO XE1JEO IN MEXICO CITY, I NEED SOME INFORMATIONS TO MAKE A 5 ELEMENTS MONOBAND FOR 10 METERS, HOPE SOMEONE CAN HELP ME !!!

73 DE XE1JEO

CARLO

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3594. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37026741.500F@eece.maine.edu>
Source record: 71693
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I find the letters in the subject line "FA" to be a nice thing for
people advertising ebay articles. If I see FA, I just unmark the post,
and that's that--no wasted time, as I don't care to use ebay (I've used
it before, but the thrill of auctioning doesn't do it for me--I'd rather
deal with the seller directly).

I've noticed that the people selling things on ebay and then posting
stuff in this newsgroup have either used FA in the subject line, or
plainly said something to the effect, for auction on ebay. So, I have
no qualms about people using this newsgroup to post stuff on ebay.

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3595. Re: Ham Radio magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3701f498.206733158@news.online.no>
Source record: 71694
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Wed, 31 Mar 1999 03:36:48 GMT, Sir Robin <nexus15@flash.net> wrote:

>Bill,
>
>I have a Ham Radio index that I put together just by copying the
>appropriate December multiple year indexes. It covers all 268 issues.
>The last year was a partial and I had to copy the table of contents for
>all those issues.
>
>I don't know of a downloadable one. I've worked a little on scanning it
>and OCRing it but little luck so far. It would be a monumental typing
>task.
>
>If you would like a copy of the Ham Radio Index I can probably get it
>copied for $6 plus a $1 for shipping. It is 30 double sided
>pages......Let me know...Rick...W5RH
>
I have written an index for Radcom for the period of 1972-1990,
available as wordperfect or txt file, believe it is available at
GM4ANB

3596. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <370279BD.1AE14CC4@cadvision.com>
Source record: 71695
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Well Said!
Irv VE6BP

"KF4FDJ (Mike in Ft. Myers, FL)" wrote:

> RICHCOM,
>
> I am not generally a grump, but your method of posting to the newsgroups
> regarding items you are selling on EBAY is getting tiresome. If someone
> wnats to peruse EBAY and see what's for sale, fine, but parallel
> postings to the newsgroups is not appropriate, especially since you have
> no description in your posts, just a link to EBAY! Based on the number
> of items you've been selling and parallel posting here, you must be in
> the business of selling used equipment. In such case, you are violating
> newsgroup rules twice, once for your own gain, and the second by
> promoting EBAY.
>
> 73, Mike
>
> richcom wrote:
> >
> > Go to:
> > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83432906
>
> --
> __\/__
> | . / ^ _ \ .
> | |\| (o)(o) |/|
> ^ --- * -----------------.OOOo--oo--oOOO.------------------- *
> ||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
> |X| | | * P.O. Box 763 .... AMSAT member #31884 *
> [X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
> / \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
> | | |4| * kf4fdj@amsat.org .... EL96ap *
> | P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
> | 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
> | D | |j| * Bringing Oscar demos to the Lee County Schools. *
> |_____|=| | *
> /*X*\ | | * Black holes were created when God divided by zero. *
> ________|_|_____________________________Oooo._________________________
> .oooO ( )
> ( )) /
> \ ((_/

> _)

3597. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37026ce8.237537599@news.online.no>
Source record: 71696

On Wed, 31 Mar 1999 08:24:37 -0500, Zack Lau <zlau@arrl.org> wrote:

>For better homebrew photographs, try the techniques in
>
>Light, Science, & Magic--An Introduction to Photographic Lighting
>by Fil Hunter and Paul Fuqua
>
>--Zack Lau W1VT
>
>
>Ian wrote:
>
>> Even the front cover picture of the rig is badly taken with light reflection
>> right in the centre of the rig. Great idea but badly done.
>> Sorry but thats my view... anyone else have a view on Randys' book ?
>
>
>
Photograph of equipment is best when taken in the garden when it is
overcast.
have scanned several circuits directly, just scanned AN/PRC-10 chassis
and photo quality is good as can be expected with lowest possible
quality grey-scale, pcb's are usually good provided it is maximum
distance from screen of 1cm. I use a cheap Primax 4800 scanner
Some of the direct scanned pictures have been used in local
publications
73
Jan-Martin
LA8AK

3598. Re: 500kHz Ladder filter for SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <370278ca.240580688@news.online.no>
Source record: 71697

On Wed, 31 Mar 1999 10:17:20 -0500, Shawn Upton
<supton@eece.maine.edu> wrote:

>J M Noeding wrote:
>>
>> Built the ladder filter shown using ceramic resonnators, believe they
>> are series mode, parallel resonnance frequency seems to be 513-514kHz
>
>Where did you get the resonators? Sounds like an interesting design.

it is several sources, I got mine from a LA3VW. Price at ELFA in
Sweden was about $1.- ea. in small quantities (1994 catalogue).
Just tested ladder filters for 960 and 250kHz. The application of
250kHz elements serves two purposes in my LW frequency standard
receiver, two elements are used in RF ladder filter with 4dB loss on
243kHz, but has at least 60dB rejection on 250kHz and higher
frequencies, and another two as bandpassfilter on 250kHz IF, with high
attenuation on 243kHz. The two elements are connected instead of coils
in an ordinary BPF circuit.
In the ladder filter some frequency adjustment may be done by adding
inductance in series with the resonnators. The 245kHz filter may be
moved to 243kHz by adding 100uH coils, and it will move 12kHz for
450uH value coils.

The elements are Murata CSB20D and an unknown marked 960J.
some info may be found on http://www.murata.com but it did not help me
much

73 jan-martin LA8AK

3599. Re: NE602 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37027c3d.241463257@news.online.no>
Source record: 71698

On Wed, 31 Mar 1999 08:51:11 -0500, "Jim" <jbolinger@Nloisnptaemk.com>
wrote:

>I have been looking at how the NE602 works and was wondering if anyone has
>tried this:
>
>The normal RF inputs to the mixer are internally biased and the
>'instructions' say to not make any DC connection to ground or it will upset
>the bias. Would it be possible to intentionally alter the bias, perhaps by
>a resistor from the input to ground?
>
>My idea is to allow the oscillator to pass thru the mixer, essentially using
>the mixer as a buffer stage. This would permit the construction of a QRP CW
>transceiver using only 3 active components (NE602, audio amp, RF final amp).
>If surface mount components where used it would be quite tiny.
>
> I also think that it would be possible to build a AM mode transceiver using
>this method---feed the microphone audio thru the audio amp to the input of
>the NE602 with the mixer slightly unbalanced---although the necessary
>switching may be too bulky.
>
>--
>Jim
>N8EE

>
>
would suggest NE614 as AM synchronous demodulator and SSB/CW product
detector, it may also serve as (balanced) modulator for AM/SSB
transmitter, not sure how much balance it has, but it doesn't matter
if it is for AM only. The limiting IF amplifier may function as
carrier oscillator. I have made similiar circuits with SN76660N and
MC1351P, it was possible to achieve 40dB balance as modulator/mixer.
The first IF amplifier (pin 1-14-15-16) if fine for RX IF amp.
An article in Radcom shows MC1351P as multimode detector; for
CW/AM/SSB/FM
73
Jan-Martin
LA8AK

3600. Re: QST magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37026ec4.238014480@news.online.no>
Source record: 71699
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 30 Mar 1999 14:01:20 -0800, Phil Wheeler <w7ox@mindspring.com>
wrote:

>Try this website:
>
>http://www.tp.net/tp/users/japple/qst.htm
>
>Phil
fb, but it does not cover index for "technical correspondence", the
most valuable part of QST

73 Jan-Martin
LA8AK

3601. Re: FA: Drake TR7A W/Acc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37028B57.23AC@pop.removethistomailme.net>
Source record: 71700
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

richcom wrote:
>
> Go to:
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83432906

For-sale ads for commercial ham gear, via ebay or otherwise, are not
appropriate on rec.radio.amateur.homebrew. Based on your earlier
responses to other people ("MIND YOUR OWN BUSINESS"), this and all other
ads for unrelated equipment you post to the group will be forwarded to
your ISP's postmaster and abuse accounts.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

3602. 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Ron Harshbarger <rnharsh@visi.com>
Message-ID: <pdwM2.761$7K6.122441@ptah.visi.com>
Source record: 71701

I have a pair of 4-400 tubes with sockets and chimneys. I would like to build an HF amp. How about some ideas on the best circuit? Maybe some references to published plans.

73
K3PID Ron

3603. bastard type ladder IF filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37029323.247326845@news.online.no>
Source record: 71702

A bastard filter was made for input selection on 243kHz LW receiver
it is important to have highest possible attenuation at 250kHz (IF)
and 257kHz (mirror frequency). A super selective (60Hz BW) 5 pole
BP-filter is used, 2x Murata CSB250D (paralell resonnance),
attenuation increases 60-70dB on 240 and 260kHz.

243kHz ladder filter:

75 ohm ---100uH--CSB250D--|--68uH--CSB250D--|--75 ohm
i/p | | o/p
.022 .022 F
|----------|---gnd

series resonnance of this type 243.4-244kHz, the used elements
selected and has 243.4 and 243.7kHz, series inductance is used to move
this down to 243kHz.
The correct inductance is believed to be 82 H, but it seems to work
using 100 and 68 H instead.

Filter loss = 6dB
0 243.0kHz
-3 242.24 243.3
-6 242.50 243.4
-10 242.16 243.57
-20 241.1 244.10
-30 238.9 244.9
-40 231.5 245.9
-50 147.9 247.1
-60 - 248.2
-70 - 249.2
-80 - 249.9
-90 - 250.41

73 Jan-Martin LA8AK

3604. Re: NE602 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <37029130.0@news.netwalk.com>
Source record: 71703

J M Noeding wrote in message <37027c3d.241463257@news.online.no>...
>>
>would suggest NE614 as AM synchronous demodulator and SSB/CW product
>detector, it may also serve as (balanced) modulator for AM/SSB
>transmitter, not sure how much balance it has, but it doesn't matter
>if it is for AM only. The limiting IF amplifier may function as
>carrier oscillator. I have made similiar circuits with SN76660N and
>MC1351P, it was possible to achieve 40dB balance as modulator/mixer.
>The first IF amplifier (pin 1-14-15-16) if fine for RX IF amp.
>An article in Radcom shows MC1351P as multimode detector; for
>CW/AM/SSB/FM

Perhaps I did not make it sufficiently clear as to my idea.

What I was thinking of was using the NE602 as a crystal controlled (or perhaps VXO) direct conversion receiver. In transmit mode the mixer would be unbalanced and act as a buffer for feeding the RF power amplifier.

This could possibly be as simple as grounding, through a resistor, one of the mixer inputs with the Morse code key.

Jim
N8EE

3605. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: King Pineapple <craigseuf@hotmail.com>
Message-ID: <01be7b86$fea03960$4d55d2d0@default>
Source record: 71704
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

I agree with you Shawn. If I see FA I just don't bother reading the post.
If you visit rec.antique.radio-phono (or whatever it's called) there's as
much stuff for sale there as there are posts about other things. I will
grant you that since this is already being posted in rec.radio.swap, it may
not be as relevant in rec.radio.shortwave, but since he is putting FA in
there I don't think it's a big deal.

Shawn Upton <supton@eece.maine.edu> wrote in article
<37026741.500F@eece.maine.edu>...
| I find the letters in the subject line "FA" to be a nice thing for
| people advertising ebay articles. If I see FA, I just unmark the post,
| and that's that--no wasted time, as I don't care to use ebay (I've used
| it before, but the thrill of auctioning doesn't do it for me--I'd rather
| deal with the seller directly).
|
| I've noticed that the people selling things on ebay and then posting
| stuff in this newsgroup have either used FA in the subject line, or
| plainly said something to the effect, for auction on ebay. So, I have
| no qualms about people using this newsgroup to post stuff on ebay.
|
| --
| **********
| Shawn Upton
| Electrical Engineering Student
| University of Maine at Orono
| webpage: http://www.eece.maine.edu/~supton/
| mail: supton@eece.maine.edu
| KB1CKT Tech Plus
| **********
|

3606. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Richard Drabble <richard@g1sle.freeserve.co.uk>
Message-ID: <7du5seven1@news7.svr.pol.co.uk>
Source record: 71705

Try looking at the cct. for Kenwoods TL-922
It uses 4-400 valves (ok toobs if you wish) and seems a good design.
73
Richard G1SLE

Ron Harshbarger wrote in message ...
>I have a pair of 4-400 tubes with sockets and chimneys. I would like to
>build an HF amp. How about some ideas on the best circuit? Maybe some
>references to published plans.
>
>73
>K3PID Ron
>
>

3607. Model 59 Grid Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <37029896.7529@ix.netcom.com>
Source record: 71706
Cross-posted to: rec.radio.swap,rec.radio.amateur,boatachors,rec.radio.amateur.homebrew

The very best in excellent condition. All the serial numbers match on the coils and the head. The head covers from 2MHz-425MHz. Cabinet restored like new. With a copy of the manual $150+ shipping.
73 Chris VE3NGW/W4 Florida

3608. Bird Model 43 $200

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <370298DA.2D8A@ix.netcom.com>
Source record: 71707
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Like new except for a small paint rub on one corner.
73 Chris VE3NGW/W4 Florida

3609. Re: WTB Barker & Williamson phase unit BW350

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9903311643390.9997-100000@Stratus.CAM.ORG>
Source record: 71708

On Wed, 31 Mar 1999 patterso@alpha.anser.org wrote:

> I am looking for an old BW350 phase shift network module. It was used in some
> old Handbook phasing SSB generators.
>
> Gary W4AF
>
> patterso@anser.org
>

Have you thought of making one? It will take some digging, but I'm sure the actual values used have been published in a number of places years ago. Components and the means of measuring them have improved since the B&W was popular, and it may not be the task it once seemed to be. Further, I wonder what kind of shape the originals would be in these days? If the components have changed value, I'm sure I've seen the values used but seen nothing about what kind of components were used originally, teh plug-in would not be particularly useful.

Another consideration is whether you are replacing one in an existing piece of equipment, or setting out to build something new. If it's the former, you don't have much choice but to replace it or build a substitute. But if you are building something new, there are plenty of other ways of doing the 90 degree audio phase shift, and some of them are bound to give better results.

MIchael VE2BVW

3610. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Marty <martyk@naples.infi.net>
Message-ID: <3702A503.F9A5E9FA@naples.infi.net>
Source record: 71709

Ron Harshbarger wrote:
>
> I have a pair of 4-400 tubes with sockets and chimneys. I would like to
> build an HF amp. How about some ideas on the best circuit? Maybe some
> references to published plans.
>
> 73
> K3PID Ron

I've built a grounded grid amplifier based upon the an ARRL Handbook circuit shown for a pair of 3-500's and later substituted 4-400's with the grids tied together. It worked quite well with an output only a bit less than I was getting from the 3-500's previously used.

Marty K1FHR

3611. FS: APS-104 radar modulators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: worley@52hill.com
Message-ID: <3702E624.7086@52hill.com>
Source record: 71710
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have 3 or 4 mil surplus modulator units from APS-104 search radar (likely from B-52 bomber - 1950s/60s vintage). These were used to fire a large pulse magnetron (in another unit). Contains a 4C35 thyratron, four 3B29 HV rectifiers and a few smaller tubes, oil caps, relays,transformers and other parts all in airtight aluminum canister. Also have copy of service manual. Unused, still in original box, collector's item, $65 (pick up only - exceeds UPS size limit) from southeast Alabama. 36330 zip. NOTE: Please REPLACE the "52" with "snow" to spell "snowhill" in my email or call 334-347-5281.

3612. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990331185022.19513A-100000@oso.slonet.org>
Source record: 71711

It is a simple 2800 diode by HP. Why make is so complicated?
Cliff K7RR

On Wed, 31 Mar 1999, Allan Kaplan wrote:

> Please, Yaesu certainly did NOT invent the diode ring type product
> detector!!! That circuit is older than either of us. It goes 'way
> back before Yaesu. I will find my copy of QST, but what on earth os a
> "mesh diode" ? That is not a familiar electronic term on this side of
> the Atlantic Ocean. My guess would be that it might equate to "PIN
> Diode", because I have read articles that claimed improvement in
> receiver dynamic range based on replacing poorly chosen RF switching
> diodes with PINs.
> Fraternally,
> W1AEL
>
>
>

3613. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <3702E98B.B440A203@att.net>
Source record: 71712

I have USED both 50 and 75 ohm Ns. The male "N" plugs I
used did have different pin diameters, just as Gary
described. And yes, a 50 male into a 75 female is
disaster. The inverse will yield, at best, an intermittant
connection. When in short supply of N-50 plugs (undemanding
application), I have thickened the center pin of a N-75 with
a carefully applied layer of solder to ensure contact.
...Don't think this technique is mil-spec. <g>
Woody

Gary Coffman wrote:
>
> On Sun, 28 Mar 1999 03:28:14 GMT, melus@esi.us.es (Luis Yanes) wrote:
> >On Mon, 22 Mar 1999 13:12:11 -0500 "Jim" <jbolinger@Nloisnptaemk.com>
> >wrote:
> >
> >>By the way, how many of you know that a male N plug will plug into a female
> >>BNC socket? They were intentionally designed that way.
> >
> >But the N pin have more diameter, so the BNC socket don't hold well
> >the BNC plug anymore!
> >73's de Luis
>
> BNC and N fittings are available in 50 ohm and 75 ohm styles. The
> difference is the center pin diameter. You will trash a 75 ohm BNC
> female by inserting a 50 ohm N male because the pin is larger and
> will spread the female pin in the BNC. If you try it the other way, 75
> ohm pin in 50 ohm socket, the pin will be loose. So remember, only
> mate 50 ohm with 50 ohm and 75 ohm with 75 ohm. That works.
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

3614. Re: Marine battery in UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <3702E815.1ADD92CF@seidata.com>
Source record: 71713

Depending on the UPS, if you intend to operate the unit for more than 5 min @
a time get a 12 volt DC fan and point it at the switching transistors. A UPS is
a
short term power supply and was never intended to run for an extended period
of time on the battery. I have a APC 520 ES on my computer and the thing would

have a short life indeed if run for a long time. Very poor air circulation.

Randy. KB8ASO Milan, In.

Chris Davis wrote:

> I was given an older 550VA UPS. The batteries have pretty much lived out
> their useful life and need to be replaced. Could I just put in a deep-cycle
> marine battery? The box has enough space for one.
>
> Thanks,
> Chris KB0WWP
>
> --
> * remove the '1' from my address to respond *

3615. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <G%CM2.8$R3.218@news9.ispnews.com>
Source record: 71714

Allan Kaplan wrote in message <370237A8.3925C03A@fallschurch.esys.com>...

>I will find my copy of QST, but what on earth os a "mesh diode" ?
>That is not a familiar electronic term on this side of
>the Atlantic Ocean. My guess would be that it might equate to "PIN
>Diode", because I have read articles that claimed improvement in
>receiver dynamic range based on replacing poorly chosen RF switching
>diodes with PINs.

A mesh diode is a type of Shottky diode. The semiconductor surface is passivated (oxide film) and then a mesh of fine connections is etched through the oxide to expose the semiconductor surface. A surface metal is sputtered on and you have a mesh diode. They are made by Hewlett-Packard.

Several authors have suggested PIN diodes for switching in HF gear. But they mainly do not know what they are talking about. They invariably suggest the use of PIN diodes with carrier lifetimes about 10 to 20 times too short to work on HF. In fact, at the lower frequencies, conventional silicon switching diodes work better having less junction capacitance.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

3616. Re: Q: Rewinding microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF9Irps.2q5@netcom.com>
Source record: 71715

In article <36feb661.0@isc-newsserver.isc.rit.edu>,
<AAAjdc3538@osfmail.isc.rit.eduAAA> wrote:
>Have any of you tried rewinding microwave oven transformers for
>different voltages? It seems like a good way to get a cheap 12 volt
>supply going.

There was an article in Electronics Now about 4 years ago for building an isolation transformer for repair work by taking two microwave transformers apart and using the two primary winding assemblies on one core for a 1:1 transformer.

One trick is that there are magnetic shunts in microwave oven transformers to act as built in current limiting, same as a neon sign transformer. Some have shunt blocks in the winding window that can be removed.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3617. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37024135.150B@pop.valley.net>
Source record: 71716

Hello--

IIRC, the "mesh" in "mesh diode" refers to an early method of construction used in tunnel diodes and early-version Schottky diodes. One side of the diode die attached to a platform on a lead, while the other lead terminated in a tiny wire-mesh dome that pressed against the junction to form the second contact.

A modern Schottky would work just as well; the idea behind the Hint/Kink is to use the lower forward voltage drop offered by the Schottky diode to improve detection sensitivity.

No April-1st connection implied or stated, although a friend once referred to these devices as shot-kitty diodes<g>.

73,
Brad AA1IP

3618. Re: Schematic to pcb software info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <37016835.695201@netnews.worldnet.att.net>
Source record: 71765

On Mon, 29 Mar 1999 05:58:53 GMT, daveh@inspire.net.nz (Dave Hellberg) wrote:

>Im looking for a basic software package to draw schematics and then
>convert to them to pcb's
>Mainly for home use ie ham projects
>Any info please

Sure -

http://www.holophase.com

They make Circad, which is great! The demo is free, and the only thing that's crippled in it is the ability to output Gerber files (used for commercial production of boards) and (I think) import other software formats. It -will- allow you to print or plot outputs (schematics, PC board layouts, component placement, drill drawings, etc.) to any printer or plotter device with a Windows driver.

It's good for making hobby-grade PC boards with a laser printer and toner transfer paper. Just make sure you adjust the size of the printout. I made a board without checking the pad spacing on the ICs, and the pis are just a -little- too far apart to easily fit a chip. I got it in the board, but I had to splay the pins apart a bit.

Dave

3619. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: c.c.tqbssz@MESHXDIODE.killspam.us.com
Message-ID: <7drq0h$17k$1@samba.rahul.net>
Source record: 71766

Just what is a "mesh diode"?

Stephen

J M Noeding (la8ak@online.no) wrote:
: >>On Mon, 29 Mar 1999 16:28:17 -0600, w5rg@swbell.net wrote:
: >>
: >>>Does anyone know where I can find mesh diodes?
: >>>I'm working on a conversion for the FT-980 and
: >>>need some..
: >>

: >J M Noeding wrote:
: >
: >> Seems you have read some note in FoxTango-newsletter...(?)
: >
: >FoxTango?

: >KB1CKT Tech Plus
: >**********
: It was referring to an article in QSTNov 84*, copied and attached to
: FT-newsletter, KY0A believes that meshdiodes are more quiet than
: ordinary diodes, but I suspect it is a hoax from Hints&Kinks column.
: FT980 was mentioned
: Believe Yaesu re-invented the diode ring type product detector because
: they had some problems applying PC1037H - which seems to be caused by
: resistor values chosen. Changing few resistors will improve PC1037H -
: as used in FT-726 (not for 736), and the RX sounds ufb on ssb/cw!

: I borrowed the FT-newsletters from Edmund, DK3UZ, but I doubt they
: have much interest today. Most of the articles is at a technical level
: which can be compared to 'Hint&Kinks' in QST.

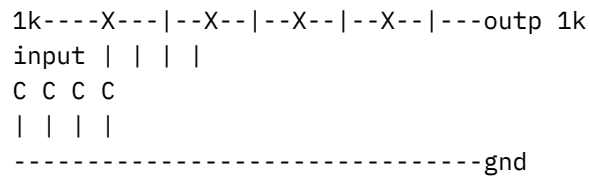
: 73
: Jan-Martin LA8AK

: *) Improving receiver noise floor

3620. 500kHz Ladder filter for SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37017475.173925496@news.online.no>
Source record: 71767

Built the ladder filter shown using ceramic resonnators, believe they
are series mode, parallel resonnance frequency seems to be 513-514kHz



Ladder filter using ceramic elements, Murata CSB500E3
C= 1000pF C= 2000pF
0 501.26 502.04
-3 500.42 504.5 499.76 502.24
-6 499.99 505.6 499.56 502.8
-10 499.30 505.6 499.26 504.31
-20 496.93 507.92 498.14 504.83
-30 491.99 508.65 496.29 505.50
-40 479.45 508.65 492.55 506.42
-50 407.7 510.44 483.6 507.40
-55 140.5
-60 - 511.36 457.83 508.62
-70 - 512.41 92.27 509.75
-80 - 513.4 - 511.25
-90 - - - 511.80
Spurious responses:
724.56 -26dBr 724.42 -40dBr

I am not certain which capacitance is the correct for this filter, but
2000pF seems to be quite close

73 jan-martin

3621. Amplifier Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990330205016.09593.00000327@ng31.aol.com>
Source record: 71768

List #1= 3CX3000A7 tube,
Socket, Filament transformer 7.5 volts @ 51 Amps
Plate Transformer 2.7 Amps @ 5000 volts
HV Caps, Blower, Meters, Tank Coils
Cabinet to build a large amplifier.
I will sale all parts for $1,500.00 plus shipping.

3622. WTB Radio Electronics Mark-8 Computer,Manuls, newsletters etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: LAMP-PUBLISHING@worldnet.att.net
Message-ID: <7ds2if$g5d$1@bgtnsc02.worldnet.att.net>
Source record: 71769

Hi,

I am a serious computer collector looking for a Mark-8 computer kit sold
in the 70's, any help appreciated. thanks

steve

3623. Ham Radio magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Sir Robin <nexus15@flash.net>
Message-ID: <37019789.162@flash.net>
Source record: 71770
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Bill,

I have a Ham Radio index that I put together just by copying the appropriate December multiple year indexes. It covers all 268 issues. The last year was a partial and I had to copy the table of contents for all those issues.

I don't know of a downloadable one. I've worked a little on scanning it and OCRing it but little luck so far. It would be a monumental typing task.

If you would like a copy of the Ham Radio Index I can probably get it copied for $6 plus a $1 for shipping. It is 30 double sided pages......Let me know...Rick...W5RH

>Turini wrote:
>
> Does anyone know of a source of indexes for QST, HR, and 73, CQ, etc?
> The ARRL has indexes from 1970 or so. I thought that someone was
> selling indexes going farther back. Anyone remember who?
>
> Also, I'm looking for bibliographies of articles for BAs, i.e.
> Johnson, Hammarlund, etc.
>
> Thanks
>
> Bill Turini KA4GAV/7 turinib@wdni.com
>
> Always looking for Signal/One Accessories, equipment, publications,
> advertisements, etc.

3624. Re: Manufacturer TMC ?? Looking for info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: dslosty@pipeline.com
Message-ID: <3701d1a7.34705088@news.pipeline.com>
Source record: 71771
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"VE7SEZ" <tkpoustie@NOSPAMbc.sympatico.ca> wrote:

>Hello all, I am looking for info on my latest great hamfest acquisition---a
>TMC Model RFE 1 2@4CX350a HF amplifier. Anybody know how to contact them? I
>would like to obtain original manuals, schematics etc. The name on the tag
>is Technical Materiel Corp. Mamaroneck NY. Any info greatly appreciated!
>
>Tim VE7SEZ

They have, gone out of business.
I've heard that there still is a service organization in the
Mamaroneck area but I don't know how to contact them.

Doug

"Use it up, wear it out. Make it do, or do without."

Remove the "_" in my return address to reply.

3625. Looking for preselector design plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Erwin Cremers <ecremers@knoware.nl>
Message-ID: <3701E577.144B78C3@knoware.nl>
Source record: 71772

I'm looking for design plant to build a good preselector . If possible
with the option to connect more then one receiver to one antenna.

If you know any site dealing with this isseu or have plans available
please let me know.

Kindly greeting you all,

PE1MGR
Erwin Cremers
http://www.knoware.nl/users/ecremers - Home of The TubeBug -

3626. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <370179ce.175294066@news.online.no>
Source record: 71773

On Tue, 30 Mar 1999 15:59:54 -0800, John Miles
<jmiles@pop.removethistomailme.net> wrote:

>J M Noeding wrote:
>>
>> <snip>
>> >***
>> It was referring to an article in QSTNov 84*, copied and attached to
>> FT-newsletter, KY0A believes that meshdiodes are more quiet than
>> ordinary diodes, but I suspect it is a hoax from Hints&Kinks column.
>> FT980 was mentioned
>>
>>
>> 73
>> Jan-Martin LA8AK
>>
>> *) Improving receiver noise floor
>
>What exactly is a mesh diode? I have never heard of those.
>
>Isn't the noise figure of a passive mixer simply the Johnson noise of an
>equivalent attenuator? Could be wrong about that, but it's not clear
>how one diode can be 'more quiet' than another, unless it delivers less
>conversion loss.
>
>-- jm KE5FX

>(opening mouth and removing all doubt)
well, not so much this time.
>
..... perhaps the background noise simply is too weak to pass.....
it was the matter with Kenwood TR-7010 2m ssb/cw mobile transceiver,
so they later changed standpoint on this matter and biassed the
diode-ring, with the unfortunate result of heavy distortion. I removed
the 100k bias resistor together with 2x 30pF balancing capacitors and
it worked just fine.
My "Everyday English Dictionary" says a meshdiode is a device attached
between two wires, could be almost any diode, perhaps we should start
trying out 1N34, instead of those modern type 1N60 or 1N270(?).

My advice is: Print such information in April issues only, then most
of us will have a real understandig what it is about

73
Jan-Martin LA8AK

3627. WTB: HF Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: william brooks <kf4wru@email.msn.com>
Message-ID: <#kqotd2e#GA.126@upnetnews02.moswest.msn.net>
Source record: 71774

Looking to purchas a HF Amp.

W.O. Brooks

3628. Re: QST magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: dpnewkirk@home.com
Message-ID: <37020ab5.887625@news>
Source record: 71775
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Tue, 30 Mar 1999 19:22:01 GMT, turinib@wdni.com (Bill Turini)
wrote:

>Does anyone know of a source of indexes for QST, HR, and 73, CQ, etc?
>The ARRL has indexes from 1970 or so. I thought that someone was
>selling indexes going farther back. Anyone remember who?

The ARRL has a complete QST index going back to 1915. It's accessible
via the members-only portion of the ARRL website
(http://www.arrl.org/). Alternative, it can be installed in your
computer -- in segments, as you buy the corresponding CDs -- with the
QST View (QST on CD-ROM) product.

73,

Dave Newkirk, W9VES
w9ves@arrl.net

3629. FS: Radio parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3701fbd6.427906@news.earthlink.net>
Source record: 71776
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.antiques.radio+phono

For Sale:
(Add shipping costs to all prices unless stated)

= = = = = = = = = = = = = = = =

115V AC Dow-key style relay, with SO-239 connectors, in excellent
condition. No external contacts. Will sell for $25.00

= = = = = = = = = = = = = = = =

24 V DC "Dow-key" style antenna relays with three UHF (SO-239)
connectors.
Magnecraft without external contacts, Excellent condition. $20.00
Advance with DPDT external contacts Excellent condition $25.00

(These may possibly work fine on 13.8V DC supplies too.)

= = = = = = = = = = = = = = = =

Bud Box, diecast, 4.5" X 3.5" X 2", new, no cover plate $4.00

Crystals (FT-243):

AM Broadcast ($4.00 each)
1170

80m CW & AM ($4.00 each)
3730.24
3789.9
3807.4

6m & 2m AM and CW multipliers ($2.00 each except as noted)
5958.3
6000
6125
6210
6425 (QTY2)
6440 (QTY 2)
6529
6550
6650
6825
6900
6925 (QTY 2)
7800
8000
8002.6

8003.3
8240
8345
8375
8380
8402 $4.00
8406.5
8410
8425

Minimum order of $12 crystals
= = = = = = = = = = = = = = = =
CR-1/A case is 0.1" diameter pins 0.5" apart. Case is 1.1" wide and
1.25" tall
FT-241/A case is the same but with smaller diameter pins.

Antique and unusual Crystals:
1746 Kc. Bliley (signal corps) FT-171B $4.00
1.921 MC Philco FT-241/A $5.00
5684 kHz HI-POWER B-5 (Type LTCR) round $3.00
7010.47 CR-1/A $4.00
7011.9 kHz CR-1/A $4.00
7119.5 kHz M-9A (3-pin) holder McCoy $5.00
7270 kHz CR-1/A $4.00
8007.69 kHz CR-1/A (QTY 5) $2.00 each
8500 kHz CR-1/A $2.00
24.0 MC Channel 40 FT-241/A $1.00
24.3 MC Channel 43 FT-241/A $1.00
24.4 MC Channel 44 FT-241/A $1.00
27.3 MC Channel 73 FT-241/A $1.00
27.9 MC Channel 79 FT-241/A (QTY 2) $1.00 each
Unmarked FT-241/A (QTY 6) $0.50 each

Minimum order $12.00 of crystals
= = = = = = = = = = = = = = = =

Newer style metal can precision crystals -
CR-18/U (=HC-6/U), HC-17/U and HC-49/U etc.

1000 kc. CR-18/U $5.00
1947.8 kHz. CR-18/U $5.00
1952.22 kHz. CR-18/U $5.00
3520.83 CR-18/U $4.00
3525 CR-18/U $4.00
3527.08 CR-18/U $4.00
3528.12 CR-18/U $4.00
3529.17 CR-18/U $4.00
3530.21 CR-18/U $4.00
3531.25 CR-18/u $4.00
3532.29 CR-18/U $4.00
3537.5 CR-18/U $4.00
3571 TCXO short leads $1.00

3579.545 CR-18/U (QTY 2) $1.00 each
3526 CR-18/U $4.00
3532.3 CR-18/U $4.00
3566.66 CR-18/U $4.00
3640 HC-17/U wire leads $4.00
3865.83 CR-18/U $3.00
3867.50 CR-18/U $3.00
8350 CR-18/U $2.00
8450 CR-18/U $2.00
29100 CR-18/U $5.00

4.194 MHz HC-49/U(?) mini w/ wire leads $2.00
7.15909 MHz HC-49/U(?) mini w/ wire leads (QTY 7) $1.00 each

Minimum order $12.00 of crystals
= = = = = = = = = = = = = = = =

WATCH THIS SPACE! Coming soon: Crystal sockets & tube sockets!

= = = = = = = = = = = = = = = =

Mallory type 294 4-pin vibrator 6 V DC. I am told these will work fine on either 6V or 12V DC. Great replacements for older rigs $3.00 each

= = = = = = = = = = = = = = = =

Electrolytic Caps: (LOT #1)
(N. = New, U. = Used)

5800 uF / 40V Sprague Powerlytic Blue plastic cover computergrade cap w/ radial screw terminals 3.125" X 1.5" U. $1.00

5500 uF / 40V Sprague Powerlytic Blue plastic cover computergrade cap w/ radial screw terminals 4" X 1.5" N. (QTY 2) $2.00 each

5500 uF / 25V Sprague Powerlytic Blue plastic cover computergrade cap w/ radial screw terminals 3.125" X 1.5" N. $2.00

5500 uF / 40V Blue plastic cover Mallory computergrade cap w/ radial screw terminals 4" X 1.5" U. $1.00

4700 uF / 35V Elna axial 2" X 7/8" N. $2.00

3000 uF / 30V Sprague axial 3.25" X 1" N. (QTY 3) $1.00 each

2500 uF / 15V G.E. radial 2" X 1.25" N. $1.00

2200 uF / 35V Nippon axial 1.5" X 3/4" U. (QTY 3) $0.50 each

2200 uF / 16V Ace axial 1.5" X 3/4" N. $0.75

1900 uF / 40V Sangamo axial 2.75" X 1" N. (QTY 4) $1.00 each

1700 uF / 30V Sangamo axial 2.75" X 1" N. (QTY 7) $1.00 each

1300 uF / 50V Sprague axial 3.125" X 7/8" N. $1.00

1390uF / 30V MEC radial 2.5" X 7/8" N. (QTY 2) $1.00 each

1275 uF / 20V MEC radial 1.5" X 1" N. (QTY 2) $1.00

1010 uF / 20V MEC radial 1.5" X 1" N. $1.00

1000 uF / 50V Rubicon axial 2" X 7/8" N. $0.50

1000 uF / 15V Sprague axial 2.25" X 7/8" N. QTY 2 $1.00 each

885 uF / 20V MEC radial 1.5" X 1" N. (QTY 2) $1.00

500 uF / 40V National Cap axial 1.5" X 5/8" U. (QTY 2) $0.50 each

40 uF / 450V Planet radial 2-7/8" X 1" U. $1.00

22 uF / 450V Xicon axial 1.25" X 5/8" QTY 2 N. $2.00 each

22 uF / 350V Nichicon axial 1.25" X 1/2" QTY 2 N. $2.00 each

20 uF / 450V Aerovox axial 2.25" X 1" U. $1.00

16 uF/ 600V Sangamo 3/4" dia. screw-mount w/screw 4.5" X 1.25" $3.00
(SOLD - James Lueck)

12 uF / 450V Beaver 1.75" X 0.75" QTY 2 U. $1.00 each

PAPER Capacitors: (Lot #1)
0.1 uF / 400V Sangamo Type 33, QTY 4, U. $0.50 each

Or take all capacitors in Lot #1 for $50.00

Electrolytic Capacitors (Lot #2)

8 + 8 uF / 475 V and 10 uF / 50V Philco Can 6" X 1-3/8" with bracket
U. $2.00

Mercury Wetted Relays for keying boatanchor transmitters!
By Adams and Westlake Number MW-2617-12 DPDT contacts
with diagram. Octal base - 12V DC coil 480 ohms. $5.00 each
(Same shape & size as 6L6M)

TUBES (LOT #2) (some new, mostly used) for sale:
= = = =

And for now, here is one more final lot of nice tubes:

6HS8 by International Servicemaster (New in Box) $2.50

12BE6 Silvertone, used, in box $1.00

12SA7 Raytheon (QTY 2) Used $1.00 each

6GH8 Zenith, used in box $2.00

50B5 RCA, used in box $1.50

5965 G.E. Used in box $1.00

OA2 RCA - new in box $2.00

6719 Sylvania NEW in box (Rare pencil tube) $5.00

6BN6 by Capehart used, in box $3.00

6CB6 Philco, used in box $1.00

6KT8 by G.E. used, in box $1.00

6146 Raytheon Used in box $8.00

6146 RCA used in box $8.00

Or take the 14 remaining tubes above for $32.00
(Please mention tube Lot #3)

= = = = =

ARRL Handbooks:
1975, 1978 at $10.00 each
Both in good to excellent shape

National TMK-50 Variable capacitor New In Box $15.00

Plate variable transmitting capacitors:
50 pF 800V Hammarlund 1.5" deep, 1/4" shaft, clean used $5.00
140 pF 1000V 1.5" deep 1/4" shaft New, unused $8.00

Collins 20 Watt Modulation Transformer, BRAND NEW! $40.00
Made by CHicago Transformer Co. Has 1:1 ratio: 6000 ohms to 6000 ohms
with
3000V test voltage. Part number 677N201

Thordarson transformer - THORDARSON D161916
power transformer 120 V AC primary potted, square - has two
secondaries:
Sec 1: 700V c.t. at 250 mA. 5.78 H, 48 ohms (24+24 ohms DC)
Sec 2: 1580V at 20 mA. 23.6 H, (605 ohms DC)
Approximately 4.5" X 4.5" x 4" Good for about a 175-200 Watt plate
supply. Will sell for $20.00

Tube Manuals:
RCA Receiving Tube Manual RC16 Good cond. $10.00

RCA Transmitting Tube Manual (Missing cover) 192 Pages
Good condition. $10.00

Four Nifty Books:
RCA Solid State Hobby Circuits HM-92 (397 Pages) Exc. cond. $8.00

Television For Radiomen, by Ed Noll. 340 pages, illustrated
1962. Front cover torn a little but otherwise very good $3.00

TV SICK? Service your own TV, by Belmont TV Co.
33 pages, plus sale flyer, 1975 MINT $2.00

METHODS OF TEACHING SHOP AND TECHNICAL SUBJECTS by Leighbody & Kidd
College text, 201 pages, excellent condition $3.00

All four books above for $13.00

Hallicrafters Manual:
HT-46 $8.00 each (repro)

UNIVERSAL Three station FM Wireless Intercom. REDUCED!!
Household system, plugs into any AC outlet. About 1 year old, and
in perfect condition. Three channels. Clean signals, mint condition.
Use them anywhere your house! $40 for the set of three identical
units.

3630. Re: Homebrew HF Transciver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <37022215.755CB0D5@arrl.org>
Source record: 71777

For better homebrew photographs, try the techniques in

Light, Science, & Magic--An Introduction to Photographic Lighting
by Fil Hunter and Paul Fuqua

--Zack Lau W1VT

Ian wrote:

> Even the front cover picture of the rig is badly taken with light reflection
> right in the centre of the rig. Great idea but badly done.
> Sorry but thats my view... anyone else have a view on Randys' book ?

3631. NE602 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-03-31 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <37022839.0@news.netwalk.com>
Source record: 71778

I have been looking at how the NE602 works and was wondering if anyone has tried this:

The normal RF inputs to the mixer are internally biased and the 'instructions' say to not make any DC connection to ground or it will upset the bias. Would it be possible to intentionally alter the bias, perhaps by a resistor from the input to ground?

My idea is to allow the oscillator to pass thru the mixer, essentially using the mixer as a buffer stage. This would permit the construction of a QRP CW transceiver using only 3 active components (NE602, audio amp, RF final amp). If surface mount components where used it would be quite tiny.

I also think that it would be possible to build a AM mode transceiver using this method---feed the microphone audio thru the audio amp to the input of the NE602 with the mixer slightly unbalanced---although the necessary switching may be too bulky.

--
Jim
N8EE
jbolinger@Nloisnptaemk.com
Remove the letters 'Nospam' to reply directly

3632. Re: Food for thought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <3703A241.5656@eece.maine.edu>
Source record: 71629
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

http://www.speroni.com/Antenna.html

Don't know if everyone else has seen it already; sorry if this is an
oldie, but I found it last summer and thought it was kinda humorous.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3633. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: c.c.tqbssz@MESHXDIODE.killspam.us.com
Message-ID: <7e08v5$i3$1@samba.rahul.net>
Source record: 71630

Organization: a2i network
Distribution:

Clifford Buttschardt (cbuttsch@slonet.org) wrote:
: It is a simple 2800 diode by HP. Why make is so complicated?
: Cliff K7RR

Didn't we used to call those 'hot carrier diodes'?

Stephen

: On Wed, 31 Mar 1999, Allan Kaplan wrote:

: > Please, Yaesu certainly did NOT invent the diode ring type product
: > detector!!! That circuit is older than either of us. It goes 'way
: > back before Yaesu. I will find my copy of QST, but what on earth os a
: > "mesh diode" ? That is not a familiar electronic term on this side of
: > the Atlantic Ocean. My guess would be that it might equate to "PIN
: > Diode", because I have read articles that claimed improvement in
: > receiver dynamic range based on replacing poorly chosen RF switching
: > diodes with PINs.
: > Fraternally,
: > W1AEL
: >
: >
: >

3634. Re: Food for thought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be7cac$d9507360$273963c3@default>
Source record: 71631
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dear Guru,

How comforting it is to see a common sense analysis.

If its only a small fraction of an S-unit - who the heck
cares anyway ?
--
Reg.

3635. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: wb5agz@dc.cis.okstate.edu
Message-ID: <7e0htb$9vk$1@sunhub-tulsa.onenet.net>
Source record: 71632

This is one of the more thought-provoking topics lately. I am not much of a kit builder because I was born blind and you have to read the schematics and instructions to know where all those parts go.:-)

I do like to build things, however. My favorite medium is perf board, wire wrap, and solder for audio and or digital projects. Hooking up an IC involves writing down a wire list of the pin-out which I do in Braille as well as any essential notes such as voltage requirements, etc. I am not the only blind person who does this at all and I am sure there are those who can do a lot more, but IC's have made home-built stuff a lot easier to build now because all you really need to know is what pins go to what and such important things as operating parameters like maximum load or the input voltage range.

Most (but not all) IC's have either a notch or a little pin-prick dot over pin 1 or between pins 1 and whatever the last pin is which is usually cut or molded in to the case so it can be felt which helps greatly in putting it into the socket right. I hate the ones with a tiny dot over pin 1 and a slightly bigger one over the other end. I have smoked a few of those by putting them in backwards and it isn't pretty.

I have an old multimeter which was manufactured in the early seventies which uses a Wheatstone Bridge whose output is fed through a chopper and a little audio amplifier. There is a scale of raised dots and a knob with a pointer. When you turn the knob and reach the correct reading, the buzz nulls out. I also have a much newer Radio Shack talking DMM and one of their DMM/frequency counters that can be connected to a P.C. I also use an audio signal tracer for lots of things.

Schematics don't really work very well in Braille because the degree of complexity of the line drawing would be kind of like trying to follow one piece of string in the world's largest twine ball.

As for building equipment in cases and chassis boxes, I sometimes will cut a piece of cardboard the same size of the cannel i am about to butcher and test the layout on that. If it will work, I then use a center punch and go on through the cardboard to the metal and make my marks to keep the hand drill or drill press from crawling away.

I am no master craftsman, but it is a lot of fun.

Martin McCormick WB5AGZ Stillwater, OK
OSU Center for Computing and Information Services Data Communications Group

3636. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <3703DC8E.3000@megsinet.net>
Source record: 71633

Barry L. Ornitz wrote:
> Several authors have suggested PIN diodes for switching in HF gear. But
> they mainly do not know what they are talking about. They invariably
> suggest the use of PIN diodes with carrier lifetimes about 10 to 20 times
> too short to work on HF. In fact, at the lower frequencies, conventional
> silicon switching diodes work better having less junction capacitance.

Obviously, because of the short carrier lifetimes, you have to use a lot
of PIN diodes in series at HF.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

3637. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <3703DED1.24AE@megsinet.net>
Source record: 71634
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Shawn Upton wrote:
> I've noticed that the people selling things on ebay and then posting
> stuff in this newsgroup have either used FA in the subject line, or
> plainly said something to the effect, for auction on ebay. So, I have
> no qualms about people using this newsgroup to post stuff on ebay.

The newsgroups are for discussion, not for greedy bozos to drop a poopy
for selling their products and then go away.

This particular "richcom" chucklehead seems to think the newsgroups are
his own personal advertising ground. Considering the amount of equipment
he's been selling here and in a spamful of other newsgroups, he's either
a dealer or someone who inherited Barry Goldwater's ham shack.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

3638. Beacon keyer !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: xhduffx@ica.net
Message-ID: <3703e218.31424093@news.ica.net>
Source record: 71635

I have a small quantity of small 3" x 2" microcontroller boards
that I have programmed as beacon keyers.
I will custom program your CW message of virtually any length.
Sends out your CW message at 8 or 12 WPM (selectable) on
a ground-to-key PTT line.
Requires 5vdc (12vdc with an optional regulator).
US $30 post paid each includes hookup documentation.

For more info remove both 'x' in my address to reply.

3639. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <7e0s00dm1@nnrp1.dejanews.com>
Source record: 71636

In article <36fe43cf.54334885@news.erols.com>,
wmeara@erols.com (Bill Meara) wrote:
> On 27 Mar 1999 19:42:35 GMT, n2ey@aol.com (N2EY) wrote:
>
> >I know of at least one kit that was actually built twice. Many years ago I
> >bought a used Viking Adventurer. It had some rather oddball problems and some
> >undocumented mods. So after some unsuccesful troubleshooting and circuit
> >tracing, I simply took it completely apart. Checked each component, replaced
> >some dubious parts, sorted, straightened and cleaned others, and then
proceeded
> >to rebuild it according to the manual. Worked perfectly after that. Anybody
> >else ever do that?
> >
> >"So nice, they built it twice".
>
> Jim: I picked up a Heathkit VF-1 VFO that looked like it had been
> assembled by a demented, soldering school drop out intent on creating
> more instability in the world. I stripped it down almost completely
> to the component level and rebuilt it from a schematic. I ended up
> using a few more terminal strips than the boys at Benton Harbor
> intended. It was fun and the thing works. Pictures at:
> http://www.erols.com/wmeara

Bill,

Great story and great pix at the website! I wonder if anyone has collected
those Jean Shepard stories.

So there's two kits that were "built twice".

A VF-1 was my first VFO. Used it with a DX-20 - worked OK on 80 and 40. Tough
to zero beat on CW, though.

73 de Jim "You'll put your eye out, kid!" N2EY

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3640. FS!-PRICE ERROR!! Pair GE 211/VT-4C NOS & sockets.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <923006531.395.84@news.remarQ.com>
Source record: 71637
Cross-posted to:
alt.ham-radio.marketplace,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Sorry Folks!! I mistakenly priced these initially at $275.00 Whoops!! Should have been $225.00!!!! Sorry!!!

These tubes were "Liberated" from a Master Case of twelve. NOS, unused now in generic white boxes. Sockets are E.F.Johnson Ceramic 123-XXX series, used but perfect!!!
$225.00 plus Shipping.

TNX for reading!

Steve

3641. Re: Q: Rewinding microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: AAAjdc3538@osfmail.isc.rit.eduAAA
Message-ID: <3703f987.0@isc-newsserver.isc.rit.edu>
Source record: 71638

What's a magnetic shunt? Also, how much current limiting are we talking
about?

73..Jim N2VNO

In article <mzenierF9Irps.2q5@netcom.com>,
Mark Zenier <mzenier@netcom.com> wrote:
>In article <36feb661.0@isc-newsserver.isc.rit.edu>,
> <AAAjdc3538@osfmail.isc.rit.eduAAA> wrote:
>>Have any of you tried rewinding microwave oven transformers for
>>different voltages? It seems like a good way to get a cheap 12 volt
>>supply going.
>
>There was an article in Electronics Now about 4 years ago for building an
>isolation transformer for repair work by taking two microwave transformers
>apart and using the two primary winding assemblies on one core for a 1:1
>transformer.
>
>One trick is that there are magnetic shunts in microwave oven transformers
>to act as built in current limiting, same as a neon sign transformer.
>Some have shunt blocks in the winding window that can be removed.
>
>Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident
>

--

When replying, remove the leading and trailing AAA
--

When replying, remove the leading and trailing AAA

3642. Re: Ten Tec 40m QRP transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: "D.Pearce" <depearce@netscape.net>
Message-ID: <3703F660.2DEC1593@netscape.net>
Source record: 71639

I think the high power reading comes from measuring both the frequency and the harmonic. Get rid of the harmonic and the power reading will go down. Are the coils on the three hand wound torus inductors squashed together as much as possible? Also, look for a burnt out capacitor in the filter area or a shorted out inductor in the filter area.

Those are my best guesses right now.

3643. Re: MESH DIODES ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3703cfe7.25291225@news.online.no>
Source record: 71640

On 1 Apr 1999 17:04:37 GMT, c.c.tqbssz@MESHXDIODE.killspam.us.com
wrote:

>Organization: a2i network
>Distribution:
>
>Clifford Buttschardt (cbuttsch@slonet.org) wrote:
>: It is a simple 2800 diode by HP. Why make is so complicated?
>: Cliff K7RR
>
>Didn't we used to call those 'hot carrier diodes'?
>
two names should suffice, hot carrier - and schottky-barrier diodes

but what is the clue using such diodes, is it just a hoax?

3644. Designing bandpassfilters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3703dd2e.28690575@news.online.no>
Source record: 71641

downloaded an ufb program for lowpassfilters from ARRL, is is
available a similiar program for n-orderpassive bandpassfilters?

73
Jan-Martin LA8AK

3645. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: kf8od@aol.com
Message-ID: <19990401182651.15618.00000731@ng-cf1.aol.com>
Source record: 71642

Ron,
Eimac news letters or Radio Handbook by William Orr
Long live QRO!

3646. Re: Ten Tec 40m QRP transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37040DEC.3B54@eece.maine.edu>
Source record: 71643

D.Pearce wrote:
>
> I think the high power reading comes from measuring both the frequency
> and the harmonic. Get rid of the harmonic and the power reading will go
> down. Are the coils on the three hand wound torus inductors squashed
> together as much as possible? Also, look for a burnt out capacitor in
> the filter area or a shorted out inductor in the filter area.
>
> Those are my best guesses right now.

I'll take a look later on. The coils are "squashed"; I tried messing with the number of windings, and it seems to run best with 13, if I remeber correctly--which wasn't the right number originally. I've also noticed that all the tuning coils (the cans) are very close to their stops--fractions of a turn from each.

Before I blew the radio up, I never was able to hear the sidetone; now I can, and it took turning all the cans to figure that out. I forget which one it was that brought the sidetone to life; it was something like the can for biasing the driver for the final, or somewheres in that area. I probably should have taken some notes on what was going on.

Anyhow, I was kinda looking around to see if anyone else had similar problems, and had figured them out yet. Thanks for the response.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3647. Need to build 5 cheap light 1:1 baluns for quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <rmVM2.18$O94.1298@news12.ispnews.com>
Source record: 71644

Title says it all. I need to build 5 cheap light 1:1 balins to feed a 5 band quad I'm working on. I've considered toroids,choke and linear baluns. What would you recommend?

Marty
N5KBP

--
Marty Duplissey
Lone Star Business Systems
Specializing in development for the credit report retrieval industry
Desktop, Networks, Intranets and Internet Delivery
http://www.lsbs.com

3648. Re: QST magazine Indexes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: munsch@ibm.net
Message-ID: <370422f3@news1.us.ibm.net>
Source record: 71645
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I have the first printed issue of " From Beverages to Oscar", and the '79-81 addendum, both by Rich Rosen. Has he continued that information in Cyberspace, and is that what the reference is to, or is it to the originals?
Thanks.
W5VPQ
--
Crazy George

3649. HV Capacitor Source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <37042675.E0D09543@hamradio.org>
Source record: 71646
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I am restoring an old 7" electrostatic deflection TV set, and I need to replace the vertical deflection coupling capacitors. They are huge, old

waxed paper types - .05 mfd @ 6000 volts - because of the low 60 Hz vertical sweep frequency. I can't seem to find anything suitable, and I would rather not series/parallel a whole lot of smaller ones if there is something better.

Any suggestions?

Thanks, Al - K8EUR

3650. HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <37042736.B4D89CCC@seidata.com>
Source record: 71647
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Thanks for reading this post. I am looking for a procedure for
calibrating HF SWR and watt meters. I have a good idea on
how to cal. the SWR portion, but the watt meter would require
a calibrated RF voltmeter to read the voltage across the load
resistor. There are RF voltage probes you can build in the
1995 ARRL handbook, but how do you cal. those? I need
a simple standard of some sort. Ideas?

Randy KB8ASO Milan, IN.

3651. Re: Amplifier Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Dot & John Forsythe <johnfor@swbell.net>
Message-ID: <370438B8.1D5B@swbell.net>
Source record: 71648

KB5MER wrote:
>
> List #1= 3CX3000A7 tube,
> Socket, Filament transformer 7.5 volts @ 51 Amps
> Plate Transformer 2.7 Amps @ 5000 volts
> HV Caps, Blower, Meters, Tank Coils
> Cabinet to build a large amplifier.
> I will sale all parts for $1,500.00 plus shipping.

I bet you would !!!! What kind of car you giving with this deal ???

3652. Re: Need to build 5 cheap light 1:1 baluns for quad

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <370445CE.44DB628A@iag.net>
Source record: 71649

MARTY I USED COAXIAL BAZZOOKAS WHEN I HAD A TRI BAND QUAD THEY WORKED WELL AND WERE CHEAP TO CONSTRUCT, QUARTER WAVE OF COAX AND THE BRAID OFF SOME OLD DISCARDED RG 8 FOR DECOUPLING SLEEVE WRAPPED WITH PVC TAPE SPRAYED WITH KRYLON AND YOUR DONE.TRY ONE OUT AND SEE HOW WELL THEY WORK. 73 GL HARRY

Marty Duplissey wrote:

> Title says it all. I need to build 5 cheap light 1:1 balins to feed a 5 band
> quad I'm working on. I've considered toroids,choke and linear baluns. What
> would you recommend?
>
> Marty
> N5KBP
>
> --
> Marty Duplissey
> Lone Star Business Systems
> Specializing in development for the credit report retrieval industry
> Desktop, Networks, Intranets and Internet Delivery
> http://www.lsbs.com

3653. HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <37044899.100A9C0D@seidata.com>
Source record: 71650
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Thanks for reading this post. I am looking for a procedure for
calibrating HF SWR and watt meters. I have a good idea on
how to cal. the SWR portion, but the watt meter would require
a calibrated RF voltmeter to read the voltage across the load
resistor. There are RF voltage probes you can build in the
1995 ARRL handbook, but how do you cal. those? I need
a simple standard of some sort. Ideas?

Randy KB8ASO Milan, IN.

3654. HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <3704496C.3483AC19@seidata.com>
Source record: 71651

Thanks for reading this post. I am looking for a procedure for
calibrating HF SWR and watt meters. I have a good idea on
how to cal. the SWR portion, but the watt meter would require
a calibrated RF voltmeter to read the voltage across the load
resistor. There are RF voltage probes you can build in the
1995 ARRL handbook, but how do you cal. those? I need
a simple standard of some sort. Ideas?

Randy KB8ASO Milan, IN.

3655. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Patricia Gibbons <wa6ube@ix.netcom.com>
Message-ID: <370466D6.3ECA@ix.netcom.com>
Source record: 71652
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Personally, I like the fact that those who
place items on ebay also drop a note here.

It gets my attention and if it something
I am interested in, I go look at it.

the convention of having the [FA} ahead
of a listing here on the newsgroup is
an easy way for those who DON'T like
such postings, to be able to ignore them..

Trish

--

Patricia E. Gibbons
Acting Chief Communications Technician
City of San Jose - ITD/communications
.....
My Public Key is available at:
<http://pgp5.ai.mit.edu/pks-commands.html>
Key ID: 0xEDECB44F
This key is RSA, NOT Diffie-Hellman !!

KF4FDJ (Mike in Ft. Myers, FL) wrote:
>
> RICHCOM,
>
> I am not generally a grump, but your method of posting to the newsgroups
> regarding items you are selling on EBAY is getting tiresome. If someone
> wnats to peruse EBAY and see what's for sale, fine, but parallel
> postings to the newsgroups is not appropriate, especially since you have
> no description in your posts, just a link to EBAY! Based on the number
> of items you've been selling and parallel posting here, you must be in
> the business of selling used equipment. In such case, you are violating
> newsgroup rules twice, once for your own gain, and the second by
> promoting EBAY.
>
> 73, Mike
>
> richcom wrote:
> >
> > Go to:
> > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=83432906

```
>
> --
> __\/__
> | . / ^ _ \ .
> | |\| (o)(o) |/|
> ^ --- * -----------------.OOOo--oo--oOOO.------------------- *
> ||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
> |X| | | * P.O. Box 763 ................ AMSAT member #31884 *
> [X]~~~|k| * Fort Myers, FL 33902 ....... ARRL member #1781549 *
> / \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
> | | |4| * kf4fdj@amsat.org ........................... EL96ap *
> | P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
> | 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
> | D | |j| * Bringing Oscar demos to the Lee County Schools. *
> |_____|=| | * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
> /*X*\ | | * Black holes were created when God divided by zero. *
> ________|_|_____________________________Oooo._________________________
> .oooO ( )
> ( ) ) /
> \ ( (_/
> \_)
```

3656. ferrite rod antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3702b887.256900229@news.online.no>
Source record: 71717

How much is a ferrite antenna loaded? Need to receive 243kHz, and
have wound a copil of 150turns, it measures 2856uH, Q=170 with 150pF
capacitance
need a 50 ohm tapping

hpe bcnu
73
jan-martin LA8AK,

3657. Re: Frequency counter circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: skipp@dilbert.ucdavis.edu
Message-ID: <7duees$g49$1@mark.ucdavis.edu>
Source record: 71718

: I am trying to increase the max frequency of my oldish Gould TC12 counter
: (currently about 25 MHz) by replacing the first decade counter with a faster
: chip. Is the 74F160 or 74F162 currently the fastest BCD decade counter
: chip around that is TTL compatible or does anyone know of a faster BCD
: decade counter ? Also what is the fastest variety 74S or 74F or other ?
: John G3UGY
:
Try a pre-scaler, sold by many companies including ramsey electronics on
the US East Coast, New York I beleive.

cheers
skipp

3658. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Dana <c5966@mindspring.com>
Message-ID: <01be7bf3$55773e20$79078ad1@einstein>
Source record: 71719
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

So, let's just have *everyone* kick Usenet etiquette out the window,
right?...Wrong.

Dana

Shawn Upton <supton@eece.maine.edu> wrote in article
<37026741.500F@eece.maine.edu>...
> I find the letters in the subject line "FA" to be a nice thing for
> people advertising ebay articles. If I see FA, I just unmark the post,
> and that's that--no wasted time, as I don't care to use ebay (I've used
> it before, but the thrill of auctioning doesn't do it for me--I'd rather
> deal with the seller directly).
>
> I've noticed that the people selling things on ebay and then posting
> stuff in this newsgroup have either used FA in the subject line, or
> plainly said something to the effect, for auction on ebay. So, I have
> no qualms about people using this newsgroup to post stuff on ebay.
>
> --
> **********
> Shawn Upton
> Electrical Engineering Student
> University of Maine at Orono
> webpage: http://www.eece.maine.edu/~supton/
> mail: supton@eece.maine.edu
> KB1CKT Tech Plus
> **********
>

3659. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Jeff Johns <jeffj@scott.net>
Message-ID: <251842660388619NEWS2LX@news.scott.net>
Source record: 71720
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

On Wed, 31 Mar 1999 11:34:53 -0600, "Tom C. Brown, Jr." <mmc@netdoor.com> wrote:

> I agree.

I second the motion!

73 Jeff W4JEF

--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------
jeffj@scott.net w4jef@amsat.org	Reserve Patrol Captain
Satellite: Mir R0MIR-1, AO-27	Jefferson County Sheriff's Dept
200LX+BayPac+FT50=Portable Packet	QTH Birmingham, AL USA

3660. Southside ARS has moved

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Warren <vk4wh@NOSPAM.tpg.com.au>
Message-ID: <37030a4a@dnews.tpgi.com.au>
Source record: 71721
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi and thanks for reading this message.

We wish to advise that the Southside Amateur Radio Society Web Page has moved.

Our new address is http://www.qsl.net/vk4wss

Our new e-mail address is vk4wss@qslNOSPAM.net (PLEASE REMOVE NOSPAM)

Why not pay us a visit and read about Chris Bourke's (VK4YE) Kilowatt Linear project, subscribe to our on line newsletter, see what Australian contest are coming up, or check out some of our links to Amateur Radio Related software sites

You can also try out our online NAOCP and AOCP theory exam and get some useful tips on CW.

Hope to see you there.

Regards
Adam Jaroszuk (VK4LAJ)
Web Master/ News Editor.
Southside Amateur Radio Society Inc.

3661. Re: NE602 question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3702bb61.257629723@news.online.no>
Source record: 71722

On Wed, 31 Mar 1999 16:18:55 -0500, "Jim" <jbolinger@Nloisnptaemk.com>
wrote:

>
>J M Noeding wrote in message <37027c3d.241463257@news.online.no>...
>>>
>>would suggest NE614 as AM synchronous demodulator and SSB/CW product
>>detector, it may also serve as (balanced) modulator for AM/SSB
>>transmitter, not sure how much balance it has, but it doesn't matter
>>if it is for AM only. The limiting IF amplifier may function as
>>carrier oscillator. I have made similiar circuits with SN76660N and
>>MC1351P, it was possible to achieve 40dB balance as modulator/mixer.
>>The first IF amplifier (pin 1-14-15-16) if fine for RX IF amp.
>>An article in Radcom shows MC1351P as multimode detector; for
>>CW/AM/SSB/FM
>
>
>Perhaps I did not make it sufficiently clear as to my idea.
>
>What I was thinking of was using the NE602 as a crystal controlled (or
>perhaps VXO) direct conversion receiver. In transmit mode the mixer would
>be unbalanced and act as a buffer for feeding the RF power amplifier.
>
>This could possibly be as simple as grounding, through a resistor, one of
>the mixer inputs with the Morse code key.
>
>Jim
>N8EE
>
>
Perhaps I did not make it sufficiently clear as to my idea.
My suggestion was to use NE604/614 instead of NE602

>I also think that it would be possible to build a AM mode transceiver using
>this method---feed the microphone audio thru the audio amp to the input of
>the NE602 with the mixer slightly unbalanced---although the necessary
>switching may be too bulky.

I thought it was an idea to be able to receive AM as well as send it,
using my idea would provide a quality demodulator particularly good
for selective fading

3662. Food for thought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: "A. Guru" <w7el@teleport.com>
Message-ID: <37035888.BE65E31C@teleport.com>
Source record: 71723
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

It's tough, but once in a while I can tear myself away from the newsgroups and just think for a bit. And when I do, the wheels really turn! Here's what I came up with this time, some food for thought.

Years & years ago, I was getting set to put up an inverted vee antenna. I looked in one of the popular handbooks for advice, and it cautioned me to make sure the included angle was at least 90 degrees, otherwise "severe pattern cancellation" would result. Wow. Of course I made sure the angle was at least 90 degrees. Or at least almost 90 degrees. But you know, that's nagged at me all these years, so I did some more thinking about it. Sure enough, if you move the wires closer and closer together, the antenna looks more and more like a transmission line. In fact, you could say that the transmission line mode begins overwhelming the antenna mode when they get really close. And transmission lines don't radiate. Well, I whipped one of these up out of curiosity, with an angle way less than 90 degrees, to see what would happen. Sure enough, when I transmitted nobody came back, even though I made a really, really long CQ (I don't know, maybe 50 CQs, then signed my call a couple times). So if it was putting out, somebody must have heard me. I checked the power going into the antenna, and there was plenty of power going in. But nothing coming out. So where the heck was the power going?

Now, we all know that when the patterns reinforce, you get more power. Like, 6 dB gain means that you get 400 watts out for 100 watts in. (One of the big name writers said this in one of the magazines not long ago, so I know it's true.) So what if the patterns cancel? What am I getting out for my 100 watts in?

If you don't know the answer to this, you obviously never took thermodynamics. The second, or the first -- anyway, one of the laws -- says you can't win. So there's got to be less than 100 watts coming out, but it can't just disappear. Just think about it. If the patterns add, you get more power, and that's energy, right? So if they cancel, you have to be getting negative energy. Positive energy makes heat, so negative energy has to make cold. That 100 watts of positive energy is making cold, negative energy! Now, some pointy-head Ph.D. is going to leap up any second and yell a bunch of stupid objections. But shoot, even a Georgia farm kid knows that YOU'VE GOT TO PLUG THE DANG REFRIGERATOR IN. Anybody with just plain common sense can see that it takes positive energy to make things cold (negative energy). Bet you never stuck a six-pack in the refrigerator and had electricity come out of the 'fridge plug while it cools off! Duh! No, you've got to put the positive energy in to get that negative cold energy into the beer.

So there we have the no-moving parts refrigerator. It's a great Field Day accessory. And I'm the first to discover it. Nobody else even thought of disregarding the learned advice and making the inverted vee with a really skinny angle. If you don't have any wire handy, you can just hang the beer off the back of your beam. Or maybe the side would be better. Whatever.

After making that great discovery, I had to take a break to calm down, so I started fooling with one of those computer programs that tells how an antenna will work. I was just about falling asleep slogging through a boooring example, when something jumped right out at me! Here was what looked like a plain dipole in a back yard, but its gain was 6.82 dBi! Whoa! Well, that shows how dumb these programs are. But I have a friend that has 'em all -- ELNEC, MININEC, MN, NEC-2, EZNEC, MININEC Broadcast Professional -- even NEC-4. They all said the same thing! So in desperation he dug out ol' Sterba's favorite tools, a dull pencil and slide rule. AND GOT THE SAME ANSWER! Now anybody knows the gain of an ordinary dipole is 2.15 dBi. So this thing has a gain of 6.82 - 2.15 = almost 4.7 dB greater than a dipole! And it looks just like one. Of course it can't be an ordinary dipole because it's got gain. But I don't think I'm the first to discover this one. This must be how some of those big guns put out such a gynormous signal while running only 1.5 kW. They've figured out how to make beams out of these special dipoles, and are keeping it a secret from us. Boy, if they ever figure out how to make amplifiers, it's all over for the rest of us. Just the other day, I saw a posting on the homebrew newsgroup where a guy wanted to buy a 3 kV, 2A transformer (or was it 4kV, 1.5A -- I forget). Anyway, he obviously doesn't know how to make an amplifier with more than 25% efficiency. But boy do those guys know the antenna secrets!

Well, I thought up a couple more great ideas, like how to make a 3-element beam with 3 s-units gain over a dipole (both in free space), and how to make a super broadband antenna with good SWR over the whole HF band and beyond without a tuner or adjustment. But my fingers are getting tired and my throat's getting dry, so I'll have to leave those for another time.

So until next time, keep your wires in the air!

A. Guru

3663. Re: Food for thought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Marv Luse <mwluse@dimensional.com>
Message-ID: <37038606.FAC44E97@dimensional.com>
Source record: 71724
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Now what is the date? Hmmm...

73

Marv
KC0EGB

3664. Re: Food for thought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Mark Fergerson <mfergerson1@home.com>
Message-ID: <37038920.40CD0772@home.com>
Source record: 71725
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"A. Guru" wrote:
>
<snip>

> If you don't know the answer to this, you obviously never took
> thermodynamics. The second, or the first -- anyway, one of the laws --
> says you can't win. So there's got to be less than 100 watts coming

1. You can't win.

2. You can't break even.

3. You can't get out of the game.

Just thought I'd be helpful here...

Mark L. Fergerson

PS: Now that you've invented the Refrigerating Antenna, you ought to
cross it with the beercan antenna and save us all some time.

3665. Ten Tec 40m QRP transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <370393A3.6EEA@eece.maine.edu>
Source record: 71726

I have one of these radios; I blew it up a while back and replaced the IC's and the final transistor. Works ok; seems to be really cranking out the power now, but that could be just a really messed up measurement (my R/S SWR/Pwr meter indates 5~6W, but at 12V, the radio is only supposedly drawing 600m or 700mA). Anyhow, I've noticed that the second harmonic is pretty strong, and that the output seems to be not filtered very well. I plan on putting in a low pass filter (I'll just use the stuff in the ARRL book for that), but I'm wondering if anyone else has experienced that sort of problem.

--

****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3666. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: BOB DUCKWORTH <bob@ns.atl.org>
Message-ID: <37035288.55CC@ns.atl.org>
Source record: 71727

Wind a tranny on toroid to get the appropriate voltage swing on the
grids. Use swamp resistor so max output on the TX you plan to use
will not exceed linear region of grid swing. Bias tube(s) as per data
sheet. You can do this for parallel or push-pull depending on what
sort of tank you want to mess with. You can use air wound tranny
if you only want one band.
-bob

3667. Homebrew Keys/Paddles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-01 00:00:00 UTC
From: guardm@aol.comjunkblk
Message-ID: <19990401110641.00195.00000961@ng141.aol.com>
Source record: 71728

Hello, I'm looking for any info about building a set of paddles. if you know of any web sites or have any info to help me build my "Dream Paddles" Please let me know
TNX & 73,
Mev KG9NF
Mev

remove "junkblk" from e-mail address if you drop me a note.

3668. Get paid to surf the net!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: K4DE <k4de@hotmail.com>
Message-ID: <7e3hsg$b1h$1@camel29.mindspring.com>
Source record: 71579

```
Click on the link below to get paid to surf the net! Not a scam!
http://alladvantage.com/go.asp?refid=APB407
```

3669. Need 455kHz BFO circuit PLEASE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Mike & Coreen Smith <ve9aa@nbnet.nb.ca>
Message-ID: <3705891B.4E8013F0@nbnet.nb.ca>
Source record: 71580
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Hi gang, I am in need of a very simple cct for a 455kHz BFO.
Perhaps using a Colpitts or Hartley Oscillator or an IC (?)

This is to couple to a shortwave converter for an AM car radio that I
built.
A kit is NOT an option. Must be built by me. Fewer components the
better.

Thanks!

Mike ve9aa
--

Coreen & Michael Smith
271 Smith Road
Waterville Sunbury Co,
New Brunswick Canada E2V 3V6
<ve9aa@nbnet.nb.ca>

3670. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37056CB7.792B1F03@mwci.net>
Source record: 71581
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

J M Noeding wrote:

> On Fri, 02 Apr 1999 08:32:38 -0600, "William E. Sabin"
> <sabinw@mwci.net> wrote:
>
> >
> >
> >Randy and Cara Randall wrote:
> >
> >> ----------
> >> Thanks for reading this post. I am looking for a procedure for
> >> calibrating HF SWR and watt meters. I have a good idea on
> >> how to cal. the SWR portion, but the watt meter would require
> >> a calibrated RF voltmeter to read the voltage across the load
> >> resistor.
> >
> >The best approach of all is to locate someone who has a Bird Model 43 wattmeter that you can borrow for a day or two.
> >Just be sure the Elements are correct for the frequency range that you are interested in.
> >
> >Bill W0IYH
> >
> >
> and before you start, check that FSD appears with same power level
> with SWR meter connected one way and the opposite

I have a *new* Bird 43 that I bought about a month ago. It has the 250 W and 1000 W elements for 2 to 30 MHz. I have
compared it with recently calibrated reference equipment and it has been found to be accurate as closely as I could read
the meter. The guaranteed accuracy is 2.0 percent of full scale, which is about 0.1 dB. At below full scale the scale
spreads out (easier to read), and my measurements were accurate as closely as I could read the meter over a wide range of
meter readings. The accuracy was the same in both directions.

Bill W0IYH

3671. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <37057D28.29977FEC@calweb.com>
Source record: 71582
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

> >Randy and Cara Randall wrote:
> >
> >> --
> >> Thanks for reading this post. I am looking for a procedure for
> >> calibrating HF SWR and watt meters. I have a good idea on
> >> how to cal. the SWR portion, but the watt meter would require
> >> a calibrated RF voltmeter to read the voltage across the load
> >> resistor.
> >

As others have said, borrow a meter and check yours against it.

However there was an article in one of the magazines some years ago
on using a dummy load in water and measuring the temperature rise.

I would suggest that you take a dummy load and wrap insulation around
it. Then put DC into the load and measure the temperature rise and the
time it takes. Compare that to the temperature rise and the time with
RF into the load.

I leave it as a learning exercise for you to do the math.
(when you figure it out let me know too)

Bill K7NOM

3672. Re: HOW TO: Calibrate SWR/Watt meters - - Cheap RF Voltmeter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Jim <I.hate.SPAM@nospam.com>
Message-ID: <7e43vn$5fi@dfw-ixnews3.ix.netcom.com>
Source record: 71583

>>How to calibrate a homebrew power meter?

><snip>

>>The principle source of low frequency inaccuracy in RF measurements is
>>the voltage drop across the rectifier diode. You can calibrate it out
>>if you know what kind of diode you have, Germanium or Silicon.
>>Dave K1MBO

>Re the error due to forward voltage drop and non linearity under and around
>the point of conduction for Germanium and Silicon diodes, anyone know if
its
>workable to set a steady DC current through the diode so that it is well in
>to conduction. Would this enable one to measure very low RF voltages below
>the forward Voltage level of the diode and improve linearity ??

There was an article in HAM RADIO November 1987 (Page 65) which shows a
surprisingly simple and elegant way to correct the nonlinearity in an RF
detector diode. It used low cost, easily available parts.

The design worked from less than 70 millivolts up to 3 volts RMS, which
is a respectable range. Particularly when you can apply attenuators to
measure higher power.

Jim N6BIU

Yep, my EMAIL address is wrong. I really hate spam......

Let's see the automatic spambots decode THIS address !! It ought to
give them heartburn.

jpennell at
---
ix.netcom.com

3673. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Michael <MKlevickis@worldnet.att.net>
Message-ID: <37059A9B.55B1@worldnet.att.net>
Source record: 71584
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Dick Carroll wrote:
>
> Patricia Gibbons wrote:
> >
> > Personally, I like the fact that those who
> > place items on ebay also drop a note here.
> >
> > It gets my attention and if it something
> > I am interested in, I go look at it.
> >
> > the convention of having the [FA} ahead
> > of a listing here on the newsgroup is
> > an easy way for those who DON'T like
> > such postings, to be able to ignore them..
> >
> > Trish
> > >
>
> My feelings exactly. I think it's a service.
>
> Dick

Yes, but one can always go to their web site if one wants to buy or peddle something. E-Bay is so tacky, commercial, and so often disreputable (sufficiently so that the commercial banks refused to back the original IPO), that I hate to do anything to support it.

Michael K.

3674. FS: Wirewd., noninductive res., more (long post)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3704DCB8.2757@pop.valley.net>
Source record: 71585

Components for sale (updated March 31, 1999):

Hello--
Attention, builders-- I'm offering NOS (i.e., unused) resistors of assorted types: Allen-Bradley carbon comps; wirewound; noninductive; adjustable; and more! Terminal strips (six lugs) and capacitors, too.

****
NOS boxed wirewound power resistors: $3.00 each

All Clarostats are rated for 50 watts (but see note)

Clarostat p/n	Qty. Avail.	Resistance	Type
VP50K	2	30K	Fixed
VP50KA	9	35K	Adjustable
VP50KA	6	40K	Adjustable
VP50KA	1	50K	Adjustable
VP50KA	4	60K	Adjustable
VP50K	6	75K	Fixed
VP50KA	3	80K	Adjustable

Ohmite p/n	Qty. Avail.	Resistance	Type
D100K10R	2	10 ohms	Adjustable 100 watt
D100K10R	3	3 ohms	Adjustable 100 watt

209L25J3K0 8 3000 ohms Fixed 25 watt (type 270)

****
NOTE: power rating for adjustable resistors applies to entire resistance element. If you use 25 per cent of the resistor, power dissipation in that portion derates to 25 per cent of 50 watts, or 12.5 watts.

****

Noninductive resistors FS-- Caddock MS281N type:

10 ohm +/- 5 per cent tolerance, 8 watt noninductive power film resistors

Tinned axial leads (0.75 inches long) are formed for PC-board insertion on 1.2-inch centers. These are NOS, bulk-packed parts.

Note: these measure well within tolerance at +/- 0.2 ohms typical. Full specs are available in PDF format on Caddock's web site (www.caddock.com)

but highlights are:

--Temperature coefficient of resistance: 50 ppm;
--Power rating: 8 watts at 25 C, derating to 4 watts at 150 C and
0 watts at 275 C;
--Noninductive design: serpentine film layout cancels magnetic field-
equivalent inductance of a straight piece of wire of the
resistor's body plus lead length.

Applications include:
--Current sampling;
--Cathode bias;
--Dummy loads for audio and RF applications.

Price: $1.50 each ($12.50 for 10 pieces); only 90 pieces available

****
More noninductive resistors m'fd. by RCD Components, Inc.:

RCD 135X-15-5% 3 watt, 15 ohm +/- 5 percent axial leads. Max. inductance
200 nH. $1.00 each, $10.00 for 12 pieces); 376 pcs. available.

****

Lower-wattage wirewound resistors:

RCL Electronics:

RCL p/n Qty. Avail. Resistance Type
-------- ---------- ---------- ----

RCL1307 28 200 ohms +/- 5 percent Fixed 3 watt axial
RCL1307 23 900 ohms +/- 5 percent Fixed 3 watt axial
RCL1308 105 1500 ohms +/- 5 percent Fixed 3 watt axial
RCL1307 49 4000 ohms +/- 5 percent Fixed 3 watt axial

M'fr. unknown:

207022 115 2000 ohms +/- 5 percent Fixed 3 watt axial

Dale CW2C-14 300+ 20 ohms +/- 5 percent Fixed 3 watt axial

****

Rockwood wirewound resistors: 1.8K +/- 10 per cent tolerance, 3 watt

Tinned axial leads (1.5 inches long) are formed for PC-board insertion
on 1.0-inch centers. Resistor body is of square construction. These are
NOS,bulk-packed parts.

Use for general-purpose voltage division, screen current-limiting or
wherever a resistor with more power-handling capability than a 2-watt
carbon composition resistor is required. Definitely not in Caddock's
class, but these are a basic barrel-of-nails resistors.

Price: $1.00 for 10 pieces ($8.00 for 100 pieces); several
thousand pieces are available!

****

Allen-Bradley Carbon Composition Resistors

Wattage	Qty. Avail.	Resistance	Type	Price/pkg.
2.0	2 x 25 pcs.	18 ohms +/- 5%	RC42	25/$4.00
0.5	2 x 50 pcs.	1200 ohms +/- 5%	RC20	50/$4.00
0.5	5 x 50 pcs.	33000 ohms +/- 5%	RC20	50/$4.00
0.5	30 x 100 pcs.	100000 ohms +/- 5%	RC20	100/$6.00

Note: all carbon-composition resistors tend to shift value during
storage (e.g., the 100K resistors listed above measure from 5 to 10
percent higher than nominal) and may require a stabilization bake to
return within original tolerance.

****

Allen-Bradley Potentiometers, p/n WRA16040F504U

500K +/-10 percent, 1/2-watt, 350V max. element to case, linear taper.

Mount in std. 1/4-inch hole via threaded bushing (nut and washer
included). Shaft measures 1/8 inch dia and is 3/8 inch long (1/4 inch
half-round to accommodate knob set screw (knob not incl.)

Price: 5 pieces for $1.00 (approx. 500 pcs. available)

****
Capacitors: 0.068 uf +/-10 percent 100V, tubular plastic-wrapped
metallized-polyester construction, AWG≠24 axial leads. Snazzy yellow
color (in at least two different shades)<g>.

Packaged 48 pieces per bag. Available for $2.00 per bag

****

And... yet another offering of these ever-popular six-lug terminal
strips, similar to Keystone's p/n 825: six isolated, tinned steel lugs
mounted on a brown phenolic insulating strip, arranged in groups of
three on either side of a central mounting bracket.

The lugs are spaced on 0.375-inch centers; mounting bracket has a
0.140-inch hole (use a 6-32 screw for chassis mounting).

Prices: $8.00 per 100 pieces, $15.00 per 200 pieces, $45.00 per 1,000
pieces plus $10.00 for priority-mail shipment. (U.S. only).

****

Postage: add $4.85 for insured U.S. Priority mail shipment for orders up
to $50.00 (except 1000-piece terminal strip orders). Please inquire for
postage charges for larger quantities or if you're purchasing from

outside of the U.S.A.

I accept payment via personal or cashier's check or money order drawn in U.S. dollars and made payable to "Brad Thompson".

Warranty policy:

If you purchase these components and find them unsatisfactory upon your inspection, notify me within seven days and return in as-received condition for a full refund or replacement (if available).

This material is subject to prior sale and is supplied as-is, as new-old-stock (NOS) merchandise, with all responsibility for safe and successful application residing solely with the purchaser.

**********Available from:**********
Brad Thompson, AA1IP
P.O. Box 307, 202 Whitaker Rd.
Meriden, NH 03770-0307
Voice:(603) 469-3351
Fax: (603) 469-3917
E-mail: brad.thompson@valley.net

3675. Re: Designing bandpassfilters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7e4jf6meq1@news.netcologne.de>
Source record: 71586

J M Noeding schrieb in Nachricht <3703dd2e.28690575@news.online.no>...
>downloaded an ufb program for lowpassfilters from ARRL, is is
>available a similiar program for n-orderpassive bandpassfilters?

Hi,

have a look at Faisyn (http://members.aol.com/faisyn/faisyn.htm). This shareware program allows the design and simulation of passive lowpass, highpass and bandpass filters (top C coupled BP, standard BP) with lumped elements and filters with distributed elements (parallel coupled line BP, SIR distributed BP). Output format is SPICE, MMICAD and TOUCHSTONE.

Peter

3676. Improving FT-726 SSB RX quality

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37040601.39143698@news.online.no>
Source record: 71653

mentioned some AGC improvements in DUBUS (1989?) for this rig, quite
often one believes that AGC is the problem, but sometimes one discover
that the problem is product detector dynamic range
So did LA7BI, and says it is quite simple modification to improve it,
"Q13=�PC1037 has too high operational voltage, should be reduced to
+6V by indreasing value of resistor R83=56 ohm to 120-150ohm, not sure
how critical the value is"
I had similiar problem in 1976 with Kenwood TR-7010, believed the AGC
could be improved, and had some success with some changes, but later
found a way to improve the product detector, and AGC modifications
were not so important any more

73 jan-martin

3677. Re: Designing bandpassfilters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990401222151.15103.00000656@ng-fc1.aol.com>
Source record: 71654

>
>downloaded an ufb program for lowpassfilters from ARRL, is is
>available a similiar program for n-orderpassive bandpassfilters?
>
>73
>Jan-Martin LA8AK

WWW.AADE.com

W4ZCB

3678. Wanted: Manual on a Swan SSB Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: joet@bellsouth.net
Message-ID: <lxZM2.5973$Ek.2508179@news1.mia>
Source record: 71655

Greetings;
Need either specs or possibly a service manual on a
Swan "CYGNET" Model #270B SSB transceiver.
If anybody can help, it would be appreciated.

73's
Joe

3679. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <37046E03.7409@megsinet.net>
Source record: 71656
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Patricia Gibbons wrote:
> Personally, I like the fact that those who
> place items on ebay also drop a note here.

Love that spam, do you?

> It gets my attention and if it something
> I am interested in, I go look at it.

Apparently.

> the convention of having the [FA} ahead
> of a listing here on the newsgroup is
> an easy way for those who DON'T like
> such postings, to be able to ignore them..

The convention of playing nicely with others and obeying rules that were created to make the newsgroups possible and to keep them usable is much more important to most of us than setting up special conventions for the rulebreakers to break the rules with impunity.

ebay's continued insistence that its users drop these poopies in the newsgroups has generated literally BILLIONS of copies of advertisements, carried around the world to displace topical messages that truly belong in these newsgroups and to cut down on the discussion the Usenet groups were created for and are maintained for. If you want to see what's on ebay, GO TO EBAY.

--
Cliff Sharp	All relevant people are pertinent.
WA9PDM	All rude people are impertinent.
	Therefore, no rude people are relevant.
	--Solomon W. Golomb

3680. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Rick Callebs <callebs@bright.net>
Message-ID: <7e1t9u$65k$1@cletus.bright.net>
Source record: 71657
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

> Patricia Gibbons wrote:
> > Personally, I like the fact that those who
> > place items on ebay also drop a note here.

Personally, I don't think 95% of the FA or EBAY postings on the NG cause any problem at all, if they mention equipment that would normally be sold/traded/bartered on the newsgroup anyway.
I do agree that the "updates" of ... three hours left on this one ... get a little ridiculuous, but we're only talking about one or two people who do that. As many people have mentioned, you can filter out the AUCTION or FA subject lines if it bothers you that much.

The little "typewriter pictures" and cutesy quotes and phrases at the end of dozens of NG posts consume much more space and are far more irritating than any one paragraph auction notice. Just my $0.02.

Rick Callebs

3681. Re: 572B Driving Impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be7d2b$ffcf6440$643763c3@default>
Source record: 71658
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

As a rough, perhaps good enough estimate, driving impedance
is (Peak RF volts) / (Peak current) ohms.
--
Reg

3682. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: aronson@my-dejanews.com
Message-ID: <7e2cqc$850$1@nnrp1.dejanews.com>
Source record: 71659
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I think a bigger crime is Irv's quoting of two long messages worth of text
(not to mention QUOTED HTML) for two lines consisting of 4 or 5 words...

Puh-lease...

Adam

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3683. Program-oscilloscope for Sound Blaster wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: sols146 <asi@phys.msu.su>
Message-ID: <01be7cf8$bc5d0920$c57ce8c1@sols146>
Source record: 71660

subj
If anybody's got any info (URL etc.) would he drop me a line?

SY Yaroslaw RX3AHL

3684. Re: 572B Driving Impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <3704B272.9C6157D1@gate.net>
Source record: 71661
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Reg,

As a rule of thumb, here in Southwest Florida, the "driving impedance" depends largely on the time of year, and which road you attempt to negotiate. From December to April (peak current), "peak rubbernecking folks" (Peak RF Volks) exceed capacitor dielectric limits, and cause severe arcing of the drivers. Once the excess RF are shunted to ground (Home to OH, PA, NY, ON on I75), and the capacitors restored (new bridges built, roads resurfaced), the driving impedance returns to specs, until the entire circuit overheats in July, causing local oscillations, and forcing the addition of cooling fans. As the sunspot cycle wanes, and operators use more power to compensate, the cycle begins anew, only this time, larger capacitors are wired into the circuit, to handle the increased load. ...

73, Mike

Reg Edwards wrote:
>
> As a rough, perhaps good enough estimate, driving impedance
> is (Peak RF volts) / (Peak current) ohms.

--
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| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
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3685. Re: Marine battery in UPS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7e2g68$e4u$1@autumn.news.rcn.net>
Source record: 71662

One caveat, the marine batteries are
the marine batteries desiigned to vent
to the atmosphere as a car battery would?
Take in consideration safety hazards if
hydrogen gas buildup is a problem.

Pete

Chris Davis wrote in message <0%qM2.1245$4y3.1690@newscene.newscene.com>...
>I was given an older 550VA UPS. The batteries have pretty much lived out
>their useful life and need to be replaced. Could I just put in a
deep-cycle
>marine battery? The box has enough space for one.
>
>Thanks,
>Chris KB0WWP
>
>--
>* remove the '1' from my address to respond *
>
>

3686. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <3705c2db.2974810@news>
Source record: 71663
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

On Thu, 01 Apr 1999 21:11:02 -0500, Randy and Cara Randall
<crrandal@seidata.com> wrote:

How to calibrate a homebrew power meter?

How accurate do you want to be? For starters, bypass any coupling capacitors at the input to your power meter and apply a DC voltage. Measure the DC voltage with as good a voltmeter as you have and that should be pretty close for relatively low frequencies, relatively meaning compared to frequencies where the parasitic reactances in your power meter begin to be important. Or, borrow a Bird wattmeter and compare readings to it. I did that with a couple of SWR meters I had and was pleasantly suprised to discover that they were pretty close. The principle source of low frequency inaccuracy in RF measurements is the voltage drop across the rectifier diode. You can calibrate it out if you know what kind of diode you have, Germanium or Silicon. The ARRL Handbook has some information on building RF measurement gear.

Good luck, have fun!

73

Dave
K1MBO

3687. THANKS - Help with upper Freq on 6146B

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7e2ks6ele1@nnrp1.dejanews.com>
Source record: 71664

THanx to Al, Brad, Lonnie, et al who provided feedback on using 6146 up on 2mx. Three points emerged from the invaluable input: 1. It could probably be made to work 2. Most likely not work all that great - considering effort to watts out 3. Do it right the first time and use a 4CX?? or similar PA

Again, the group helped immensely and I thank you all.
Have a nice Easter es 73 de

VE6INM (Glenn)

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3688. SMC 2520 -> 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Allan McDermid <allan@mm1bjp.freeserve.co.uk>
Message-ID: <7e2ls1fij3@news8.svr.pol.co.uk>
Source record: 71665

Hi there, does anyone know if it is possible to modify the SMC 2520 truncked radio to 2m?

Please reply to me personally!

Cheers!

Allan McDermid

3689. SMC 2520 -> 2m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Allan McDermid <allan@mm1bjp.freeserve.co.uk>
Message-ID: <7e2ls3fij6@news8.svr.pol.co.uk>
Source record: 71666

Hi there, does anyone know if it is possible to modify the SMC 2520 truncked radio to 2m?

Please reply to me personally!

Cheers!

Allan McDermid

3690. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3704D506.DB0C4B79@mwci.net>
Source record: 71667
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Randy and Cara Randall wrote:

> ----------
> Thanks for reading this post. I am looking for a procedure for
> calibrating HF SWR and watt meters. I have a good idea on
> how to cal. the SWR portion, but the watt meter would require
> a calibrated RF voltmeter to read the voltage across the load
> resistor.

The best approach of all is to locate someone who has a Bird Model 43 wattmeter that you can borrow for a day or two.
Just be sure the Elements are correct for the frequency range that you are interested in.

Bill W0IYH

3691. Re: Program-oscilloscope for Sound Blaster wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <3704DD52.AC7031B0@gate.net>
Source record: 71668

One of the best FREE oscilloscopes I've found can be downloaded from:

http://polly.phys.msu.su/~zeld/oscill.html

Once you figure out how to kick it into frequency domain, it becomes
very useful for analyzing audio waveforms such as heterodynes from
international broadcasters for frequency checks on a rig. It will also
show sub audible tones on an FM repeater signal.

73, Mike

sols146 wrote:
>
> subj
> If anybody's got any info (URL etc.) would he drop me a line?
>
> SY Yaroslaw RX3AHL

--
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^ --- * ------------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
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3692. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7e2qj4$mo6$1@news7.svr.pol.co.uk>
Source record: 71669
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Dave Potter wrote in message <3705c2db.2974810@news>...
>On Thu, 01 Apr 1999 21:11:02 -0500, Randy and Cara Randall
><crrandal@seidata.com> wrote:
>
>How to calibrate a homebrew power meter?

<snip>

>The principle source of low frequency inaccuracy in RF measurements is
>the voltage drop across the rectifier diode. You can calibrate it out
>if you know what kind of diode you have, Germanium or Silicon.
>Dave K1MBO

Re the error due to forward voltage drop and non linearity under and around the point of conduction for Germanium and Silicon diodes, anyone know if its workable to set a steady DC current through the diode so that it is well in to conduction. Would this enable one to measure very low RF voltages below the forward Voltage level of the diode and improve linearity ??

3693. IC / Discrete MASTER CD-ROM Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7e2qj5$mo6$3@news7.svr.pol.co.uk>
Source record: 71670

I'm looking for recent IC data Master and Discrete transistor data Master CD-ROM's. May be you've received your updates and dont need your old CD's. If you old ones are now spare please let me know.

John

3694. NEED kENWOOD TM733A FRONT PANEL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Alejandro Segura Millan Blake <alexseg@data.net.mx>
Message-ID: <01be7d25$eb83d4e0$c7130dc8@alexsegdata.net>
Source record: 71671

I AM LOOKING FOR THE DETACHABLE FRONT PANEL CONTROL HEAD DISPLAY FOR THE KENWOOD TM733A DUAL BANDER. PLEASE ADVICE PRICE AND AVAILABILITY TO ALEX SEGURA XE1PJF.THANKS
alexseg@data.net.mx

3695. Re: HV Capacitor Source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: zateslo@quartz.gly.fsu.edu
Message-ID: <7e2s56$emj@quartz.gly.fsu.edu>
Source record: 71672
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <37042675.E0D09543@hamradio.org>,
Al Dolgosh <al.dolgosh@hamradio.org> wrote:
>I am restoring an old 7" electrostatic deflection TV set, and I need to
>replace the vertical deflection coupling capacitors. They are huge, old
>
>waxed paper types - .05 mfd @ 6000 volts - because of the low 60 Hz
>vertical sweep frequency. I can't seem to find anything suitable, and
>I would rather not series/parallel a whole lot of smaller ones if there
>is something better.
>
>Any suggestions?

Al,
The Newark catalog shows several styles of HV caps made by Plastic
Capacitors. They aren't cheap, but they should do the job, and
you can buy in small quantities with a credit card from Newark.
A 10 KV 0.05 uF cap (OFN100-503) is $77.71 in the catalog.

It looks to me like paralleling a bunch of 6 KV ceramics wouldn't be
much cheaper, unless you already had them in the junk box.

Ted Zateslo, W1XO

3696. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <371007d3.218745338@news.atl.bellsouth.net>
Source record: 71673

On Mon, 29 Mar 1999 02:36:44 GMT, maddog@io.com (Monty Northrup) wrote:
>On Sun, 28 Mar 1999 18:24:09 GMT, ke4zv@bellsouth.net (Gary Coffman)
>wrote:
>
>
>>BNC and N fittings are available in 50 ohm and 75 ohm styles. The
>>difference is the center pin diameter. You will trash a 75 ohm BNC
>>female by inserting a 50 ohm N male because the pin is larger and
>>will spread the female pin in the BNC. If you try it the other way, 75
>>ohm pin in 50 ohm socket, the pin will be loose. So remember, only
>>mate 50 ohm with 50 ohm and 75 ohm with 75 ohm. That works.
>
>Gary,
>
>Hmmm... I was completely unaware that an "N" type plug was intended to
>mate in any way to a BNC plug; for one thing, the "N" type is a
>screw-on connector with a diameter of about 1/2 inch, and the BNC is a
>1/4-turn bayonet connector with a much smaller cylindrical diameter.
>However, I must admit I've never tried to mate the two.

They were never *intended* to mate, but they will provided they are
the same impedance. The center pins of N and BNC connectors of
the same impedance are the same diameter, and the grounding rings
of each style are the same diameter. What's different is the mechanical
locking feature of each style. That's irrelevant electrically, of course.

It is common practice to simply *push on* a N male into a BNC female
on a piece of test equipment. As long as the impedances are the same,
it works. You wouldn't want to do this for a permanent connection of
course. Where you run into trouble is doing this with a 50 ohm N male
on a 75 ohm BNC female. The female pin will be damaged, and you'll
curse when having to replace the connector on your piece of test
equipment.

>Secondly, I think you're partially mistaken about the pin diameters on
>the 50 vs 75 ohm connectors, at least in this respect: The MATING
>(i.e., contacting) portion of the connectors is the same on 50 ohm vs
>75 ohm connectors of the same series. Behind the mating portion
>(where the soldering or crimping is done during assembly to a cable)
>is indeed different. Therefore, you should never have to worry about
>mating any BNC plug to any BNC jack, or any "N" series plug to any "N"
>series jack.

No, the diameters *are* different. Both the N and the BNC are constant
impedance connector designs, so the pins have to be different diameters

for different impedances. In a TV broadcast plant we have a mix of 50 ohm
and 75 ohm connectors, and we have damaged connectors on test equipment
to prove that people *will* try to push on the wrong impedance connectors.

There's a milspec on this. I looked it up one time and posted it in our
shop to try to get people to not mix impedances. Didn't work. We still
get damaged connectors on our test equipment from time to time due
to this practice.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3697. FS: 44 year accumulation of Tubes & Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: "m.pasternack" <m.pasternack@cwix.com>
Message-ID: <01be7d3b$7670d0c0$349c3ea6@pavilion>
Source record: 71674
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

e-mail to "m.pasternack@cwix.com" to receive 10 page list. Murray, W6KRC

3698. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7e35mu$nv0$1@autumn.news.rcn.net>
Source record: 71675

I thought the 922 used 3-500Z tubes.
Only ham amp I remember using the 4-400 tubes
was the rare Heath Chippewa (sp?).

Peter

Richard Drabble wrote in message <7du5seven1@news7.svr.pol.co.uk>...
>Try looking at the cct. for Kenwoods TL-922
>It uses 4-400 valves (ok toobs if you wish) and seems a good design.
>73
>Richard G1SLE
>
>Ron Harshbarger wrote in message ...
>>I have a pair of 4-400 tubes with sockets and chimneys. I would like to
>>build an HF amp. How about some ideas on the best circuit? Maybe some
>>references to published plans.
>>
>>73
>>K3PID Ron
>>
>>
>
>

3699. Re: ferrite rod antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be7d85$ccf54120$aaecabc3@default>
Source record: 71676

Reactance of L at 0.243 MHz = XL = 4361 ohms

Parallel impedance of tuned circuit = Q*XL = 741,300 ohms.

Turns ratio = Squareroot (741,300 / 50) = 122

Turns on link (secondary) winding = 150 / 122 = 1.23
turns Very closely coupled.

So use 2 turns not very closely coupled.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

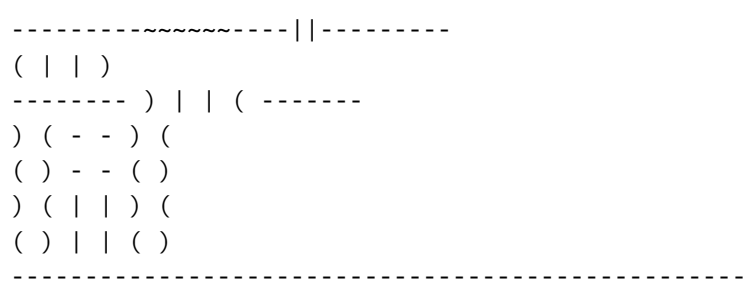
****

J M Noeding <la8ak@online.no> wrote in article
<3702b887.256900229@news.online.no>...
> How much is a ferrite antenna loaded? Need to receive
243kHz, and
> have wound a copil of 150turns, it measures 2856uH, Q=170
with 150pF
> capacitance
> need a 50 ohm tapping
>
> hpe bcnu
> 73
> jan-martin LA8AK,
>

3700. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: edh@xxxqualcomm.com
Message-ID: <7e3es9cab1@thefuture.qualcomm.com>
Source record: 71677

In article <36F66527.237C@eece.maine.edu>, supton@eece.maine.edu says...
>
>Hello all, just a quick question. Being short on time, I am looking
>for a CW filter that would go after the audio stage. I know I could
>design one myself, but I would rather just find someone else's already
>working design, and go on that. It has to be passive, and capable of a
>a watt or two of audio. I plan on adding this to my 2m multimode, which
>does not have a cw filter internally, and also would like to use on my
>Ten-Tec 40m qrp radio, which has a kinda wide cw filter. Thanks.
>--



Here is one I designed many years ago that worked quite well. The turns ratio on the 2 tranformers is 2.5, the secondary inductance is 2.5 mHy, the resonant cap is 15 uF, the series inductance is 79.6 mHy and the series cap is .5 uF. I don't remember the # turns or the core sizes but the inductors should be made from reasonably large toroids or pot cores.

This gave a 3 dB bandwidth of 200 Hz and was 500 Hz wide at 30 dB down.

3701. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-02 00:00:00 UTC
From: la8ak@online.no
Message-ID: <370529f2.113891409@news.online.no>
Source record: 71678
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

On Fri, 02 Apr 1999 08:32:38 -0600, "William E. Sabin"
<sabinw@mwci.net> wrote:

>
>
>Randy and Cara Randall wrote:
>
>> --
>> Thanks for reading this post. I am looking for a procedure for
>> calibrating HF SWR and watt meters. I have a good idea on
>> how to cal. the SWR portion, but the watt meter would require
>> a calibrated RF voltmeter to read the voltage across the load
>> resistor.
>
>The best approach of all is to locate someone who has a Bird Model 43 wattmeter that you
can borrow for a day or two.
>Just be sure the Elements are correct for the frequency range that you are interested in.
>
>Bill W0IYH
>
>
and before you start, check that FSD appears with same power level
with SWR meter connected one way and the opposite
Have built some VSWR and power meters for 35 years, and have bought
some commercial power meters, OSKERBLOCK and Bird Model 43, none of
them are very accurate, including Bird model 43, but it is usually of
very little importance whether the power is 90 or 100W. Read the
instruction book for Bird Model 43 thoroghly to get a better
understanding of which levels the meter shows. Believe Marconi
Instruments 2955 is quite accurate for VHF/UHF, but it costs at least
ten times as much as Bird model 43

LA8AK

3702. Re: Amplifier Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <7e3tr8igu1@nnrp1.dejanews.com>
Source record: 71587

In article <19990330205016.09593.00000327@ng31.aol.com>,
kb5mer@aol.com (KB5MER) wrote:
>
> List #1= 3CX3000A7 tube,
> Socket, Filament transformer 7.5 volts @ 51 Amps
> Plate Transformer 2.7 Amps @ 5000 volts
> HV Caps, Blower, Meters, Tank Coils
> Cabinet to build a large amplifier.
> I will sale all parts for $1,500.00 plus shipping.
>

Maaaan! I wish I had time.
CT

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3703. Re: UHF/Microwave attenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: "Y." <soj@sympatico.ca>
Message-ID: <37057159.6055@sympatico.ca>
Source record: 71588

Peter Bolch wrote:
>
> Hi,
>
> for my homebrew 10 MHz - 1.2 GHz RF signal generator project I need a
> switched 0-20-40 dB attenuator. I thought of using two shielded 20 dB SMD
> resistor attenuators and micro-strip RF relays (OMRON 6GY) for switching
> this stages in and out.
>
> What is the best circuit topology for the resistors? Pi or T-network? Will
> two cascaded Pi or T networks _for each 20 dB attenuator stage_ give better
> results? What is the
> formula to calculate the values of the resistors of the "double Pi" or
> "double T" network?
>
> Peter

Have you looked mini-circuit SMD attenuators; they are not too
expensive. This relay from OMRON that you mention interest me.
I am unable to find information on the OMRON web site. Is the
number 6GY correct? Regards. Y.

3704. The Daily DX

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: Bernie McClenny <bernie@dailydx.com>
Message-ID: <3705F81A.97ABC1DF@dailydx.com>
Source record: 71589

http://www.dailydx.com

--
Bernie McClenny, W3UR (ex WR3E, WB3JRU)
Editor of The Daily DX
Editor of How's DX?
3025 Hobbs Road
Glenwood, MD 21738
Fax 301-854-5105
http://www.dailydx.com
bernie@dailydx.com

3705. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: Dick Carroll <dixie@townsqr.com>
Message-ID: <7e44fqgav1@208.207.71.161>
Source record: 71590
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Patricia Gibbons wrote:
>
> Personally, I like the fact that those who
> place items on ebay also drop a note here.
>
> It gets my attention and if it something
> I am interested in, I go look at it.
>
> the convention of having the [FA} ahead
> of a listing here on the newsgroup is
> an easy way for those who DON'T like
> such postings, to be able to ignore them..
>
> Trish
> >

My feelings exactly. I think it's a service.

Dick

3706. FS MFJ259 $130

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: The one and only! <mitch96@pobox.com>
Message-ID: <3705ADF6.A6C11E13@pobox.com>
Source record: 71591

```
--
mitch Ww4mL
Hollywood, Fla.
```

3707. Re: What constitutes Homebrew?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990403010551.02594.00001038@ngol03.aol.com>
Source record: 71592

In article <7dlhm1$r17$1@winter.news.rcn.net>, "CommQuart"
<commquart@erols.com> writes:

>Subject: Re: What constitutes Homebrew?
>From: "CommQuart" <commquart@erols.com>
>Date: Sun, 28 Mar 1999 10:21:16 -0500
>
>>I know of at least one kit that was actually built twice. Many years ago I
>>bought a used Viking Adventurer. It had some rather oddball problems and
>some
>>undocumented mods. So after some unsuccesful troubleshooting and circuit
>>tracing, I simply took it completely apart. Checked each component,
>replaced
>>some dubious parts, sorted, straightened and cleaned others, and then
>proceeded
>>to rebuild it according to the manual. Worked perfectly after that. Anybody
>>else ever do that?
>>
>73 de Jim, N2EY
>
>Came damn close with a few large Philcos and a few SX-28s. Not unusual when
>restoring some vintage radios to have to completely strip the chassis, and
>sand
>repaint with grey primer and galva-coat. depends on the rust damage....
>
I've seen some restoration jobs that were clearly more work than building an
equivalent unit from scratch. Every part restored, (and many remanufactured),
junk units cannibalized, ancient technologies rediscovered. Great stuff. Love
to see a classic saved from the landfill and restored to its former glory.

You are to be congratulated, sir.

73 de jim, N2EY

3708. Re: Need 455kHz BFO circuit PLEASE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3706005D.7DAC9E3B@bellsouth.net>
Source record: 71593
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Mike & Coreen Smith wrote:
>
> Hi gang, I am in need of a very simple cct for a 455kHz BFO.
> Perhaps using a Colpitts or Hartley Oscillator or an IC (?)

I can't answer the question, but I wonder if anyone's ever tried using a 455kHz ceramic filter (like is used in AM broadcast radios) as the frequency-determining element in a BFO?
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3709. HELP: Alinco ELH230g 2m Linear blown final

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: "Adam (VK4LAJ)" <vk4wssNOSPAM@qsl.net>
Message-ID: <3705c98e@grissom.powerup.com.au>
Source record: 71594
Cross-posted to:
aus.radio.amateur.misc,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi all and thanks for reading this,

I have an Alinco ELH230g 2m SSB/ FM Linear that I picked up locally at a ham fest with the view of sticking it on the back of my FT290R Yaesu.

I was told that the final was blown when I bought it, simple I thought just replace the final. Problem is I cant tell what the final is, as the letters and numbers have been worn off and I have not got a schematic.

Can anyone help with identifying the offending part?

Please e-mail me direct as I don't visit the news groups often.

Thanks in advance
73
Adam (VK4LAJ)
NOSPAMjabba@w3.to PLEASE REMOVE NOSPAM
http://members.xoom.com/ajaros

3710. Re: Need 455kHz BFO circuit PLEASE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: Wm Kresl <kresl@elknet.net>
Message-ID: <8D9D18A56kreslelknetnet@news.elknet.net>
Source record: 71595
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Doug Smith <w9wi@bellsouth.net> wrote in <3706005D.7DAC9E3B@bellsouth.net>:

>Mike & Coreen Smith wrote:
>>
>> Hi gang, I am in need of a very simple cct for a 455kHz BFO.
>> Perhaps using a Colpitts or Hartley Oscillator or an IC (?)
>
>I can't answer the question, but I wonder if anyone's ever tried using a
>455kHz ceramic filter (like is used in AM broadcast radios) as the
>frequency-determining element in a BFO?

Yup. I built a Pierce oscillator with a 2N3904 and a 455KHZ CF that
RADIO SHACK (tm) used to sell. Worked FB with an SWL rcvr.

regards,
Bill-wb9bbc

3711. ## 8950 Sylvania TUBES F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990403041323.06955.00000067@ng139.aol.com>
Source record: 71596

Hello, I have FOUR of these in excellent condition, extreme low-hour use.
All getters are as shiny as new.
They are all identical Sylvania, and match very closely.
Selling all four as a quad only, 150.00 includes shipping in cont. USA.
Thank you,
Joe Pratt, Tubecntral@aol.com

3712. Re: HP RF Connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: melus@esi.us.es
Message-ID: <37065ea1.30847549@wingate>
Source record: 71597

On Fri, 02 Apr 1999 18:23:58 GMT ke4zv@bellsouth.net (Gary Coffman)
wrote:

>They were never *intended* to mate, but they will provided they are
>the same impedance. The center pins of N and BNC connectors of
>the same impedance are the same diameter, and the grounding rings
>of each style are the same diameter. What's different is the mechanical
>locking feature of each style. That's irrelevant electrically, of course.

But hasn't 50 Ohm BNC jacks a teflon insulator arround the center pin
that 50 Ohm N jacks don't?

If N and BNC grounding rings mate, and impedance must be held
constant, the pins should be of diferent diameters. Or I'm wrong?

73's de Luis

mail: melus@esi.us.es
Ampr: eb7gwl.ampr.org (sorry shut down)
AX25: (sorry shut down)
http://www.esi.us.es/~melus/

3713. ANNOUNCING AN ALL NEW CONCEPT!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: melin <melin_jean@angelfire.com>
Message-ID: <7e4vml$l2q$12@lyon110.dtr.fr>
Source record: 71598

Hi,

I propose you a new program, it will not interfere with any thing else your doing, but will make you a ton of
money. This is the most creative program out there and it just started March 4th. I've talked to the developer
and the marketing director of this program and its the real thing! This is brand new! Act quick, you are one
of the very first people to see this program and its HOT!

Best Wishes,
Michel

ANNOUNCING AN ALL NEW CONCEPT!
****
INTRODUCING. . . .

Finally! A legitimate program so simple you can literally make thousands of dollars
in the next few minutes with the power of the Internet!

****

WHAT IF, you could literally make one short and simple phone call to an automated system, receive a pin number, and be able to simply "Point and Click" your way to several thousand dollars in the next few minutes?

WHAT IF, simply by sending this same exact E-mail to as many people as possible you could earn $2.00 per caller referred by you for an ENTIRE 7 LEVELS?

WHAT IF, by making this call, this program, contributed a large percentage of revenues to several different Charitable Organizations?

WHAT IF, after making the call you were able to access a website, which would allow you to:

Track your earnings (You will be able to view your entire 7 levels and always know, to the minute, how many people have made the call in each of your 7 levels)?
View the list of charities that have already received contributions?
Receive a lifetime membership to place quality classified ads on our website at no extra cost?
Access over 1700 reports, business tools, legal forms, documents, and educational material at no extra cost?
Purchase computer and other products at a HUGE discounts?
And also provide a means of communication between you and the Program Team?

WE ARE VERY SERIOUS ABOUT YOU MAKING MONEY!
WE HAVE THE MARKETING PLAN TO DELIVER SERIOUS CHECKS AND YOU CAN EARN THIS MONEY FROM THE COMFORT OF YOUR OWN HOME AND FEEL GOOD ABOUT HELPING US RAISE MONEY FOR CHARITY!

HERE IS WHAT WOULD HAPPEN IF YOU ONLY REFERRED 10 WHO REFERRED 5 WHO REFERRED 5, etc. FOR 7 LEVELS:

Of callers in level 1 = 10
Of callers in level 2 = 50
Of callers in level 3 = 250
Of callers in level 4 = 1,250
Of callers in level 5 = 6,250
Of callers in level 6 = 31,250
Of callers in level 7 = 156,250

Total in all 7 levels = 195,310 X $2.00 = $390,620.00 (paid to you)
And all you did was get 10 people to make one simple phone call! Think about what could happen if you actually advertised!

ADVANTAGES:

NO FORMS TO FILL OUT OR SIGN

NO DOCUMENTS TO MAIL OR FAX

NO CREDIT CARD INFORMATION REQUIRED

NO CHECKING ACCOUNT INFORMATION REQUIRED

YOU CAN LITERALLY START MAKING MONEY IN JUST A FEW
MINUTES FROM THE TIME YOU PLACE THE CALL

THERE IS NO INVENTORY TO STOCK OR SELL

THERE ARE NO MEETINGS TO ATTEND

THERE IS NO NEED TO CALL OR TALK TO ANYONE

THERE ARE "NO" MONTHLY OR ANNUAL DUES OR FEES

AFTER PLACING THIS ONE CALL, YOU NEVER PAY ANOTHER CENT, EVER!

Here's how the program works:

1. Simply call a number I will send you if you are interested . Cost of this call is a ONE-TIME flat $35 which is billed to your phone number or if you would rather charge it to your Credit Card you may do so at a web site I'll send you and register without making the phone call. This will NOT switch your long distance service! There is NO, "per minute" charge!

2. You will be issued a pin number which will allow you to register at the web site, so be sure to write it down correctly.

3. After placing the call you will need to go to web site and register so that you can receive your ID #.

4. When you go to the Web site to register you will be asked to enter the pin number you received from the automated call system so be sure to write it down correctly (if you are using a Credit Card this pin # will NOT be necessary).

5. You will also be asked to enter the following referral code while registering:___32914___ (this is the ID # of the person who referred you to the program). It is very important to enter these numbers correctly so please double check all numbers!! Use the above referral number only ! The
referral number at website is for demonstration only !

6. Before sending this E-Mail to anyone, make sure that you replace the referral code in step 5 with your ID # which is the number you received while registering. Once you have done this, simply send this letter to as many people as possible! It is not necessary to have a computer to participate in this program. You will only need to access a computer to register.

7. Go to the website regularly to track the number of calls placed under your ID # by clicking on "View Status Report" in the "Members Section" and watch it grow before your very eyes!

IT'S THAT SIMPLE!

This is still a new program but calls are flooding in!
So HURRY and make the call and get registered while this is still a ground floor opportunity!

"Good things may come to those who wait
but only the things left by those who hustle"
Abraham Lincoln

If your are interested E-mail "tell me more" in the subject line at
melin_jean@angelfire.com

3714. Modification in DSP-2232

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: chondeville@hotmail.com
Message-ID: <3706BBFB.C78C36E4@hotmail.com>
Source record: 71599
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.equipment

Does anyone know how to modify the AEA DSP-2232 in order to get the best
of it when you operate the birds at 9600??. I've heard there is
something I can do to enhance it.
Please, make your comments to chondeville@hotmail.com

73,
Christian

3715. Re: HV Capacitor Source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: "Glenn, KZ7R" <wilson@accessone.com>
Message-ID: <923155076.931.101@news.remarQ.com>
Source record: 71600
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hello Al,

Sprague model number 6GAD47 is a disc ceramic that is rated at .047uF at 6kV. Should be good for your application. These caps can be ordered from any Sprague distributor. If you have trouble finding a conventional source, try Henry Radio as they use this part and its higher voltage 10kV 'brother' in some of their power amplifiers. Henry wants about $10 each plus s/h.

Good luck and 73,

Glenn KZ7R

Ted Zateslo <zateslo@quartz.gly.fsu.edu> wrote in message news:7e2s56$emj@quartz.gly.fsu.edu...
> In article <37042675.E0D09543@hamradio.org>,
> Al Dolgosh <al.dolgosh@hamradio.org> wrote:
> >I am restoring an old 7" electrostatic deflection TV set, and I need to
> >replace the vertical deflection coupling capacitors. They are huge, old
> >
> >waxed paper types - .05 mfd @ 6000 volts - because of the low 60 Hz
> >vertical sweep frequency. I can't seem to find anything suitable, and
> >I would rather not series/parallel a whole lot of smaller ones if there
> >is something better.
> >
> >Any suggestions?
>
> Al,
> The Newark catalog shows several styles of HV caps made by Plastic
> Capacitors. They aren't cheap, but they should do the job, and
> you can buy in small quantities with a credit card from Newark.
> A 10 KV 0.05 uF cap (OFN100-503) is $77.71 in the catalog.
>
> It looks to me like paralleling a bunch of 6 KV ceramics wouldn't be
> much cheaper, unless you already had them in the junk box.
>
> Ted Zateslo, W1XO
>

3716. Re: Need 455kHz BFO circuit PLEASE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <37063100.70D@pop.valley.net>
Source record: 71601
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Mike & Coreen Smith wrote:
>
> Hi gang, I am in need of a very simple cct for a 455kHz BFO.
> Perhaps using a Colpitts or Hartley Oscillator or an IC (?)
>
> This is to couple to a shortwave converter for an AM car radio that I
> built.
> A kit is NOT an option. Must be built by me. Fewer components the
> better.
>
> Thanks!

Hello--
Depending on the age of the car radio, you may need a 262.5 KHz BFO--
older radios used this lower IF for better selectivity.

73,
Brad AA1IP

3717. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <37064472.2C0B@ix.netcom.com>
Source record: 71602
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Randy and Cara Randall wrote:
>
> ----------
> Thanks for reading this post. I am looking for a procedure for
> calibrating HF SWR and watt meters. I have a good idea on
> how to cal. the SWR portion, but the watt meter would require
> a calibrated RF voltmeter to read the voltage across the load
> resistor. There are RF voltage probes you can build in the
> 1995 ARRL handbook, but how do you cal. those? I need
> a simple standard of some sort. Ideas?
>
> Randy KB8ASO Milan, IN.

Hi Randy -- I just calibrated my Swan WM-2000 -- using a Bird Watt Meter
as the Standard.
--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 330,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3718. need assistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: dalejudi@agate.NET
Message-ID: <3.0.1.32.19990403120810.007dcc90@agate.net>
Source record: 71603

Would there be anyone on this list that might be willing to
assist me in trouble shooting a kit that I just put together
but is not working .

Thanks
Dale

3719. Re: need assistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3706AA9D.239699CD@bellsouth.net>
Source record: 71604

Dale and Judie wrote:
>
> Would there be anyone on this list that might be willing to
> assist me in trouble shooting a kit that I just put together
> but is not working .

Probably the best thing to do is to post your question, and whoever feels qualified to answer it will do so.

Before you do, double-check the solder connections, and make sure you put the right parts in the right places. (take special care with resistors that have red and/or orange bands. Sometimes it can be really hard to tell the difference!) These two errors cause the majority of problems with kits.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66

3720. mods : ICP 2ET

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: "A.H. FRANSMAN" <trd@iafrica.com>
Message-ID: <7e5pen$36a$1@nnrp01.iafrica.com>
Source record: 71605

Hi All

A friend of is looking for a mod to make his ICOM ICP-2ET receive on 440mhz
and also to make the filter cutoff wider.

Tnx vy much in advance

ZR1TRD

--
Andre
trd@iafrica.com

3721. National blower BM-10 info needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990403152149.29497.00002363@ng111.aol.com>
Source record: 71606

I just picked up a few National Co. Inc. model BM-10 blowers. They were produced by Electro Eng. Prod. Co. their p/n G-17047. Does anyone have any information on these blowers.

Thanks for the bandwidth.

73's
Bob, W4RLC (formerly WA7OGU)

3722. Re: HOW TO: Calibrate SWR/Watt meters - - Cheap RF Voltmeter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7e625g$na7$1@news4.svr.pol.co.uk>
Source record: 71607

Does someone have the HAM RADIO November 1987 Page 65 article that Jim refers to below which they could scan and email to me ?

John

Jim wrote in message <7e43vn$5fi@dfw-ixnews3.ix.netcom.com>...
> There was an article in HAM RADIO November 1987 (Page 65) which shows a
>surprisingly simple and elegant way to correct the nonlinearity in an RF
>detector diode. It used low cost, easily available parts.
>
> The design worked from less than 70 millivolts up to 3 volts RMS, which
>is a respectable range. Particularly when you can apply attenuators to
>measure higher power.
> Jim N6BIU

3723. VHF mixer circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7e623f$g7v$1@uranium.btinternet.com>
Source record: 71608

I am considering homebrewing a VHF FM rx, for the 2 metre band, and possibly with provision for 6 metres. I would appreciate any help regarding the mixer. If I use ceramic IF filters and say, a low frequency VXO, tuned to some harmonic as the local oscillator, need I bother tuning the RF input stage with the LO?. Will I need a series or parallel trimmer cap across the xtal to increase LO frequency?. As far as the If amplifier is concerned, should I use 10.7 MHz or 455KHz?(I am more tempted to use 10.7 since I have a spare ratio discriminator transformer for this frequency). Would 10.7 be too high for 6 metre reception? I also intend to use discrete transistors for the IF amp rather than an IC. I am unsure of whether to use a cascode strip or seperate transformer coupled stages. Also, how many stages, or how much gain, should I expect from the IF amplifier- I dont want it to oscillate, but want good sensitivity at the same time. Your comments please!

Many thanks for your help, 73 de David.

3724. Re: No Spam!!! 3799

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: Bill <bc@avlist.com>
Message-ID: <7e68ad$9fo$1@oak.prod.itd.earthlink.net>
Source record: 71609
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.antenna

Of course the link is no good!

wjrmyk@GetResponse.com wrote in message <7e17l0$n130@www1.siast.sk.ca>...
>At Last! A Truly Moderated Safe Email list!
>Get your message out to thousands without spamming! Lucrative two tier
reseller option.
>http://dalesafe.com/index.cgi/AK1433
>
>loyjqwsjzsiiffehecmufiutxzpzngfunhdzljkqzgldj
>

3725. need info on rca et-8044 radiotelephone

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: ncrossen <ncrossen@floodcity.net>
Message-ID: <923187501.279.55@news.remarQ.com>
Source record: 71610

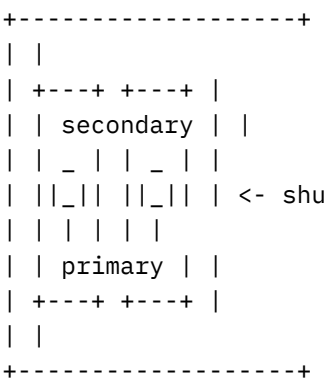
sorry about the off topic post,
here is my dilema
i bought an old rca et-8044 radiotelephone for 5$ at a flea market and
wanted to know if anyone had any information on it. thanks a bunch and happy
easter to all.
sincerely
Neil Crossen
n3vwv for now, hopefully a general soon

3726. Re: Q: Rewinding microwave oven transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-03 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierF9oCGL.Aq4@netcom.com>
Source record: 71611

In article <3703f987.0@isc-newsserver.isc.rit.edu>,
<AAAjdc3538@osfmail.isc.rit.eduAAA> wrote:
>
>What's a magnetic shunt?

It's two hunks of core material that goes between the primary and
secondary windings in the winding windows. (They're wound side by side,
instead of layers like most older power transformers). That gives a
path for the flux to take in parallel with the path through the middle
of the secondary.



I don't know how effective they are at current limiting , and with 2 kV
and 500 to 1000 watts running around in there, I'm really not to eager
test one to find out. ;=)

The magazine article is in Electronics Now, January 1995.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

3727. FS: Lot of 807 type tubes etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3707bf51.8094711@news.earthlink.net>
Source record: 71529
Cross-posted to: rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

For Sale:
(Add shipping costs to all prices unless stated)

= = = = = = = = = = = = = = = = =
TUBES LOT #5 (New and used-tested mix)

807 G.E. NOS, no box $8.00
807 Sylvania Used, no box (QTY 2) $ 5.00 each
807 RCA (newer logo) Used, no box (QTY 2) $4.00 each
807 RCA (older logo) Used, no box $3.00
807 Unmarked (Same style as older RCA), used, no box $3.00
5933/807W Ruggedized 807 New in box (QTY 4) $10.00 each

Or take all of the above tubes for $60 plus shipping

3728. Re: 3/8" brass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: "Paul M. Jaeger" <n7pj@ieee.org>
Message-ID: <EF3520638FD31704.E1C07D41D7D03754.49499FA6BCAA30BF@library-proxy.airnews.net>
Source record: 71530

Try:
http://www.smallparts.com/

GUARD M wrote:

> Hello,
> I'm trying to locate some 3/8 inch brass stock. I need round and
> square
> stock approx 12" long. Any Ideas?
> Mev

3729. Re: Theremin?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <923257749.006.68@news.remarQ.com>
Source record: 71531

> I just saw a very interesting video about Leon Theremin and his musical
> "instrument," called a Theremin, which he invented in the 1930's

> I seek further info about this odd marriage of radio and music, possibly
> even a schematic. I'd like to give a shot at building one.

I built one about 30 years ago from a design in Popular Electronics. It used a pair or capacitive antennas, which controlled the pitch and volume respectively. I don't think I ever got anything approaching a song out of the thing :-).

- 73 Bob W7OV

3730. Looking for NORCAL SIERRA modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Ivo Wilmes <ivoanka@kabelfoon.nl>
Message-ID: <7e8la3$34i$1@news.kabelfoon.nl>
Source record: 71532

Hello,

I am looking for modifications of the NORCAL SIERRA cw transceiver.

I am especially interested in getting the output power up to about 10 Watts.

I am also looking for modifications of the receiver mixing circuit in order
to improve the receivers dynamic range.

Ivo/ PA3ASO

3731. Re: 3/8" brass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7e8lkchuo2@news1.rmi.net>
Source record: 71533

GUARD M <guardm> wrote:
: Hello,
: I'm trying to locate some 3/8 inch brass stock. I need round and
: square stock approx 12" long. Any Ideas?
: Mev

Solid or tube? If tube is ok, then hobby stores and 'well equipped'
hardware stores should have both round and square for you.

Jonesy W3DHJ
--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
271 days to go until the Year 2000 -- So what!
637 days to go until the 3rd Millennium of the C.E.

3732. How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Ron Harshbarger <rnharsh@visi.com>
Message-ID: <plSN2.35$nb3.5333@ptah.visi.com>
Source record: 71534
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

What's the best way to clean contacts inside push button switches? The actual slide surface is not visable but there are holes in the case that would allow a spray nozzle extension to be pushed in...

73
Ron H. K3PID

3733. DENTRON 2000L FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: NI4L <ni4l@bellsouth.net>
Message-ID: <3707F9DE.7DA5D51@bellsouth.net>
Source record: 71535

Dentron 2000L
Peter Dahl transformer B-1 3750v @1amp
Vacuum jennings capacitor, turns counter, 10-80 meters, AL-1500
Grid/timer board ,8877 tube. Have ALL paperwork on amp, and mods all
schematics.
Blower unit,vacuum jennings relays. Nice, clean, cabinet appearance 8 of

10
inside 10 of 10.. Legal Limit ++ $ 1350.00
Would really prefer local pickup or would meet within 100 miles of
Greensboro North Carolina.

3734. INFO:FT-100 reviews

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: howard davis <hdavis3@eagnet.com>
Message-ID: <37080B61.3372007D@eagnet.com>
Source record: 71536

looking for anyone who has purchased the FT-100, would like any info
about the radio's performance and if there are any problems or bugs with

the radio since it is new.
Please email any info to hdavis3@eagnet.com
thanks
73
H. Davis IV

3735. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7e944qskr1@autumn.news.rcn.net>
Source record: 71537
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Caig brand DeOxit.
Pricey, but small can goes long way.

Ron Harshbarger wrote in message ...
>What's the best way to clean contacts inside push button switches? The
>actual slide surface is not visable but there are holes in the case that
>would allow a spray nozzle extension to be pushed in...
>
>73
>Ron H. K3PID
>
>

3736. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <37081C2C.D2EBD0C4@cadvision.com>
Source record: 71538
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

WD-40 -- Cleans and lubes at the same time. Used it for years as a Sony
Factory Service Tech and it beat everything else.
Irv VE6BP

Ron Harshbarger wrote:

> What's the best way to clean contacts inside push button switches? The
> actual slide surface is not visable but there are holes in the case that
> would allow a spray nozzle extension to be pushed in...
>
> 73
> Ron H. K3PID

3737. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <3708185B.4AB9@csolve.net>
Source record: 71539
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Irv Finkleman wrote:
>
> WD-40 -- Cleans and lubes at the same time. Used it for years as a Sony
> Factory Service Tech and it beat everything else.
> Irv VE6BP

[...]

Good Stuff! I find it works wonders on pots also.

Some people have mentioned a conern about gummy residue buildup.

Have you noticed any problems, or had units returned later because of
WD-40?

Best Regards,

Michael R. Monett,
Automated Production Test
mailto:add@csolve.net

3738. Re: WTB: Vacuum Variable Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: RHUNT <RHUNT@prodigy.net>
Message-ID: <3708329C.71B0@prodigy.net>
Source record: 71540
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Tom Repstad wrote:
>
> Hi,
>
> I'm looking for a 500pf @6KV vacuum variable cap (or close to that), if
> you have one please send e-mail.
>
> Thanks,
>
> --Tom
> KB1CGA

Tom,

Check out the following e-bay auction.
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=85705863

Regards,
Richard

3739. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37083886.292D@pop.removethistomailme.net>
Source record: 71541
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Ed wrote:
>
> >>
> >> WD-40 -- Cleans and lubes at the same time. Used it for years as a Sony
> >> Factory Service Tech and it beat everything else.
>
> For the life of me, I don't see how anyone can have good results CLEANING
> switch contacts with a petroleum based lubricant. LUBRICANT is used to
> lubricate.... that is, it leaves a slick deposit to reduce friction of parts
> that tend to rub together and protect parts from air and oxidation. CLEANing
> solutions are designed to clean contacts; that is, remove all dirt and
> residue from surfaces. This is just the opposite of a lubricant. You can't
> have both unless you use extremely expensive conductive grease type materials.
> WD 40 is not a good conductor. I would not want to coat small fine switch
> contacts with this material.

You might be surprised. Things like WD40 and TriFlow aren't conductors themselves, but they unquestiionably do aid in making good electrical contact. I had to convince myself of this -- I sprayed a deep puddle of TriFlow (which is basically WD40 with Teflon) on a piece of copper-clad board, then lightly brushed a single strand of #40 AWG (or something very close to it) through the puddle. An audible continuity tester showed the connection quality to be excellent -- the wire made much better, and more consistent, contact with the board surface underneath the pool of TriFlow than in a similar test where the wire and board were both left dry. I guessed the Teflon residue would interfere with conduction once the hydrocarbon carrier dried up, but that turned out not to be the case either.

That's not to say there isn't better stuff out there, but both experiment and experience suggest that WD40 is unjustly maligned. For pots, yes, you usually have to replace them in the end. But for dirty wafer switches and such, there doesn't seem to be any real advantage to the more expensive stuff, as long as you're sure the WD40 won't attack any nearby components.

The distinction between a cleaner and a lubricant is not an important one in this case. Something that reduces the friction between two surfaces will also tend to get rid of unwanted particulates between them.

-- jm KE5FX

```
-----------------------------------------------------
Note: My E-mail address has been altered to avoid spam
-----------------------------------------------------
```

3740. Re: Improving FT-726 SSB RX quality

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <370783D3.B4B93482@cig.mot.com>
Source record: 71542

Interesting comment on the Product Detector for the FT-726R.
I never seemed to have a problem with audio distortion from the
product detetor. I did modify the AGC to "Hang AGC" which
helped tremondously for breakin work.

Chuck KD9JQ

See http://www.imaxx.net/~kd9jq for Hang FT-726R AGC, Xmit
Delay Mods.

J M Noeding wrote:
>
> mentioned some AGC improvements in DUBUS (1989?) for this rig, quite
> often one believes that AGC is the problem, but sometimes one discover
> that the problem is product detector dynamic range
> So did LA7BI, and says it is quite simple modification to improve it,
> "Q13=ï¿½PC1037 has too high operational voltage, should be reduced to
> +6V by indreasing value of resistor R83=56 ohm to 120-150ohm, not sure
> how critical the value is"
> I had similiar problem in 1976 with Kenwood TR-7010, believed the AGC
> could be improved, and had some success with some changes, but later
> found a way to improve the product detector, and AGC modifications
> were not so important any more
>
> 73 jan-martin

--
Regards,

Charles Reichert

Motorola NSS NSG ACE phone: 847-632-6669 Work
IL-27 Post 2D7 fax: 847-632-4687 Work
1501 W. Shure Drive email: qa2696@email.mot.com
Arlington Hgts, IL. 60004

3741. Theremin?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37071C88.46C8722C@asu.uswest.net>
Source record: 71612
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.baotanchors

I just saw a very interesting video about Leon Theremin and his musical "instrument," called a Theremin, which he invented in the 1930's. From what scant technical information the film presented, I gather this was a device composed of one or more oscillators, an audio amp, two antennas, possibly an RF amp. All vaccum tube electronics, 'played" apparently by using the hands around and about the device, varying hand capacitance effects. Remember the Beach Boys tune "Good Vibrations" and that wavering, organ-like sound? That's this thing.

I seek further info about this odd marriage of radio and music, possibly even a schematic. I'd like to give a shot at building one.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

3742. FS: Boom mic headphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3707353a.525733@news.earthlink.net>
Source record: 71613
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

For sale:

Boom mic & headphone set. Brand new in box. White color.
Great for mobile HF or VHF operating. Think SAFETY!
Also great for extended sessions, contesting etc.
New in box $20.00

Plus shipping

3743. FS: Ham radio Homebrew parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3707356b.575252@news.earthlink.net>
Source record: 71614
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.swap

Add cost of SHIPPING to all prices!

Amperite 115NJ60 Time delay Relay 60 seconds, Octal $5.00

Bud Box, diecast, 4.5" X 3.5" X 2", new, no cover plate $4.00

Mallory type 294 4-pin vibrator 6 V DC. I am told these will work
fine on either 6V or 12V DC. Great replacements for older rigs $3.00
each
(2 Sold - 2 left)

Mercury Wetted Relays for keying boatanchor transmitters!
By Adams and Westlake Number MW-2617-12 DPDT contacts
with diagram. Octal base - 12V DC coil 480 ohms. $5.00 each
(Same shape & size as 6L6M) (2 Sold - 3 left)

ARRL Handbooks:
1975, 1978 at $10.00 each
Both in good to excellent shape

National TMK-50 Variable capacitor New In Box $15.00
(Best 50 pF transmitting or receiving variable you will find!)

Plate variable transmitting capacitors:
50 pF 800V Hammarlund 1.5" deep, 1/4" shaft, clean used $5.00
140 pF 1000V 1.5" deep 1/4" shaft New, unused $8.00

Hallicrafters Manual:
HT-46 $8.00 each (repro)

Four Nifty Books:
RCA Solid State Hobby Circuits HM-92 (397 Pages) Exc. cond. $8.00

Television For Radiomen, by Ed Noll. 340 pages, illustrated
1962. Front cover torn a little but otherwise very good $3.00

TV SICK? Service your own TV, by Belmont TV Co.
33 pages, plus sale flyer, 1975 MINT $2.00

METHODS OF TEACHING SHOP AND TECHNICAL SUBJECTS by Leighbody & Kidd
College text, 201 pages, excellent condition $3.00

Or take All four books above for $13.00

Add shipping cost to all items!

3744. Homebrew Magic in Brazil

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <370779d2.297921164@news.erols.com>
Source record: 71615

I recently had an e-mail exchange with a ham in Brazil that I thought would be of interest to homebrewers, glowbug enthusiasts and ham-historians. Thanks Gilson!

X-Sender: puppin@netpar.com.br (Unverified)
Date: Thu, 01 Apr 1999 22:50:30 -0300
To: wmeara@erols.com
From: "G.Puppin" <puppin@netpar.com.br>
Subject: Homebrew

Congratulations Bill.
You have a very good page about your histoty and experiences in the homebrew field.
When you say "magic" refering to a qso made with a homebrew and low power
you are completely right. This is the correct form to express that feeling.
I felt the same way when, in 1969, I got my first contact (clandestin) on
eleven meter using a 6L6 at the rf amplifier of a homebrew transmiter and a
homebrew receiver.
I can't forget the days I spent at the attic (my lab was there) with a
regenerative receiver and a head phone listening that marvelous stations.
And the galena receiver (crystal radio) that needed no supply to make us so
happy.
You made me remind that old good days !
God bless you brother !
73s de PU5MPL - South America - South Brasil

Gilson Puppin
puppin@netpar.com.br

At 10:24 02/04/99 -0400, you wrote:

>Gilson: Thanks very much for the wonderful message. I'm glad you enjoyed
>the page. I sounds to me like you have experienced a lot of magic also! I
>have built crystal radios with galena crystals - that was a lot of fun. I'm
>gathering parts that could be used for a tube type regenerative receiver but
>I think that it is actually easier to build a superhet!
>Thanks again for the nice message.
>

>73 de N2CQR
>Bill Meara, Falls Church, Virginia
>wmeara@erols.com G-QRP #7965
>http://www.erols.com/wmeara
>
Hi Bill
I was reading Dejanews and found a message with your address at the
end,
then I went to there and knew a little about you.
About the superhet, there is no doubt it is a better radio. The
regenerative is only a way of having fun with a simple one tube
receiver.
I read your spanish article and I found it very interesting too. In my
opinion this kind of article can influence positively the young guys
to
enter this beautiful and magic world of analogic electronics. I
discovered
my love for electronics, reading an article about a Galena radio when
I was
12, in a magazin directed to the people pertaining to a group called
(Legiao da Boa Vontade - Good Will Legion).
After that I did a lot of "experiments", from grafite/gillete detector
to
AM transmiters at the end of the broadcasting band (1600KHz), using
50C5
and 6V6 tubes.
There was a group of 7 guys like me, in Rio de Janeiro, that
transmited
using homebrew transmiters and small antennas (6m of wire) extended
very
near the ground (2- 3m) and we could talk at a distance of
aproximately
8Km. The receiver was what we had at the moment from 6 transistors
portable radio to tube type receiver. I used a small loop with few
turns
tuned at the frequency I was needing to listen, at the attic, where I
had
my "equipament". It was very exciting talk to a friend 8Km apart. I
could
feel the "nulling" of the loop when it was turned. The reduction of
noise
was amazing. Only that way I could talk to that friend (Jair - now he
is a
cardiologist).
Sorry to spend your time with my reminiscences.
I hope you continue with your page bringing us some of your
experiments.
The hamradios we find today need to know the pleasure of use QRP and
homebrew equipament.
That's enough.

Nice to talk to you again.
73s
God bless you.

Gilson Puppin
puppin@netpar.com.br

3745. Re: Beacon keyer !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Fred <as149@detroit1.freenet2.org3>
Message-ID: <7e7g5t$s9h$2@newsource.ihug.co.nz>
Source record: 71616

Hi,
If you can do a beacon keyer that keys alternately in CW and Hellschreiber,
I'd be more than interested. Hellschreiber is on-off keyed and portrays text
as a dot matrix - see my web site for more info.

Murray ZL1BPU
as149@detroit.freenet.org
http://members.xoom.com/ZL1BPU/Contents.html

3746. Re: Theremin?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <37074797.385999627@netnews.worldnet.att.net>
Source record: 71617

Some time back I did a "search" in the Internet for information about theremins. There are sites with schematics, mostly solid-state designs as I recall.

The original Popular Electronics carried at least one article describing the building of a device. In that unit I seem to recall that the oscillators were controlled by cadmium-sulfide photo-resistive cells.

Rumor is that Ziff-Davis (or the owner of the "new" Popular Electronics) will be making the old, original issues available on a Web site.

On Sun, 04 Apr 1999 01:02:18 -0700, Will White <wcw@asu.uswest.net> wrote:

>I just saw a very interesting video about Leon Theremin and his musical
>"instrument," called a Theremin, which he invented in the 1930's. From
>what scant technical information the film presented, I gather this was a
>device composed of one or more oscillators, an audio amp, two antennas,
>possibly an RF amp. All vaccum tube electronics, 'played" apparently by
>using the hands around and about the device, varying hand capacitance
>effects. Remember the Beach Boys tune "Good Vibrations" and that
>wavering, organ-like sound? That's this thing.
>
>I seek further info about this odd marriage of radio and music, possibly
>even a schematic. I'd like to give a shot at building one.

Ron n1zhi
roncook@worldnet.att.net
cook@amsa.com
n1zhi@nsradio.org
ICQ: 26516311

3747. WTB: 6.0V 10A Filament Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <3707569D.D56FF04@starc.org>
Source record: 71618
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hi,

I'm looking for a 6.0V 10A to 15A filament transformer. If you have such
a beast you are willing to part with please send e-mail.

--Tom
KB1CGA

3748. OC 25 and OC 36 transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7e7m84$7dv$1@plutonium.btinternet.com>
Source record: 71619

I have about 8 of these TO-3 power transistors, a mixture of both OC25 and OC36 types, by Mullard, and wondered if anyone had any information on these ancient devices, such as their hfe and voltage ratings. It seems to be difficult to find information on transistors over 20 years old!
I am thinking of using thase to make a class AB push-pull power amplifier.

Many thanks, 73 de David

3749. WTB: Vacuum Variable Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <37075DB6.DE1C9E6F@starc.org>
Source record: 71620
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hi,

I'm looking for a 500pf @6KV vacuum variable cap (or close to that), if
you have one please send e-mail.

Thanks,

--Tom
KB1CGA

3750. Model 59 Grid Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <3707539A.987@ix.netcom.com>
Source record: 71621
Cross-posted to: rec.radio.swap,rec.radio.amateur,boatachors,rec.radio.amateur.homebrew

The very best in excellent condition. All the serial numbers match on the coils and the head. The head covers from 2MHz-425MHz. Cabinet restored like new. With a copy of the manual $150+ shipping.
73 Chris VE3NGW/W4 Florida

3751. Bird Model 43 $200

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <370753B8.221E@ix.netcom.com>
Source record: 71622
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Like new except for a small paint rub on one corner.
73 Chris VE3NGW/W4 Florida

3752. Re: WTB: Vacuum Variable Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: ke9pq@netnet.net
Message-ID: <370766ff.2673779@news.netnet.net>
Source record: 71623
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a "new in the box" EVV silver ceramic 20-600PF @ 12.5 KV for
$175.00 it is in a small package like a 500pf

On Sun, 04 Apr 1999 08:40:23 -0400, Tom Repstad <kb1cga@starc.org>
wrote:

>Hi,
>
>I'm looking for a 500pf @6KV vacuum variable cap (or close to that), if
>you have one please send e-mail.
>
>Thanks,
>
>--Tom
>KB1CGA
>

Thank you & 73 Mark

NEW I can now send digital Jpeg pics. for serious inquiries
ADDRESS: Mark Olson "KE9PQ"
1490 Norfield Rd.
Suamico, Wi. 54173

CALL: (920) 434-8097 After 5:30 PM Central

Email ke9pq@netnet.net

SHIPPING:All prices are plus shipping.

NOTE: All items listed are guaranteed to be
as described or your money back.

3753. Re: need assistance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Harry <WA4OFS@iag.net>
Message-ID: <370770AB.9CFDC533@iag.net>
Source record: 71624

COLD SOLDER JOINTS AND SOLDER BRIDGES THINGS TO MAKE SURE YOU DO NOT HAVE,IF YOU HAVE A LIGHTED MAGNIFIER THAT WILL HELP, SOME TIMES YOU CAN'T SEE THE FOREST FOR THE TREES WHEN TROUBLE SHOOTING. GL HAPPY EASTER HARRY

Dale and Judie wrote:

> Would there be anyone on this list that might be willing to
> assist me in trouble shooting a kit that I just put together
> but is not working .
>
> Thanks
> Dale

3754. Best place for online LMB chassis purchases

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <3707638F.77ECE16E@ameritech.net>
Source record: 71625

Anyone know of a good online source. . .

3755. Re: OC 25 and OC 36 transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.00000140.046533cb@gto.gto.net.om>
Source record: 71626

They're Germanium but if you must.

Hi,

OC25/36 - PNP Germanium
Case - TO3
Vcb(max) - 40/80 Volts
Vce(max) - 40/32 Volts
Veb(max) - 10/40 Volts
Ic(max) - 4/8 A
Tj(max) - 100 ï¿½C
Ptot - 30 W (heatsink @ 25ï¿½C ambient)
Ft(min) - 200 kHz
Cob(max) - ??/200 pF
HFE(min) - 15/30 @ Ic = 1A

Cheers - Joe, G3LLV

Muaskar Al Murtafa'a
Sultanate of Oman

3756. advice on vhf/uhf mobile antenna installation/product

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: WebMonkey <usethelink@below.org>
Message-ID: <3707B0B0.6E69@below.org>
Source record: 71627
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

here's the short form:
i've put my icom 706 in my pickup and have started to install the
anntennae ;-)
mounted on the bed rails near the tailgate are:
L/side, pro am 6m stick on a standard 3/8 thread mount
R/side, pro am 10m stick on a standard 3/8 thread mount

here is the snag;

over each fender well on the bed rails i want to put again
2 standard 3/8 thread mounts, 1 on each side.
what does the group recommend for antennae?
i am looking for a 3/8 thread mounted antenna for:
2m/70cm dualband [or just 2m] on the L/side and
cellphone on the R/side

does anyone have any ideas on compatible products?

thanks for your time
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

3757. 3/8" brass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-04 00:00:00 UTC
From: guardm@aol.comjunkblk
Message-ID: <19990404145514.18123.00001951@ng-cd1.aol.com>
Source record: 71628

Hello,
I'm trying to locate some 3/8 inch brass stock. I need round and square
stock approx 12" long. Any Ideas?
Mev

remove "junkblk" from e-mail address if you drop me a note.

3758. Re: Theremin?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: "Stephan A. Maciej" <stephan@maciej.muc.de>
Message-ID: <Pine.LNX.4.05.9904051809210.127-100000@karlheinz.maciej.muc.de>
Source record: 71479
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.baotanchors

On Sun, 4 Apr 1999, Will White wrote:
> I seek further info about this odd marriage of radio and music, possibly
> even a schematic. I'd like to give a shot at building one.

There are some pages with scanned schematics, even the schematics from
Popular Electronics that Ron Cook mentioned are available for downloading.
Just do a search on "theremin schematics" in Yahoo and you'll get some
sites covering the theme.

I just designed my own Theremin, it's very simple (and still needs some
corrections, too :-), but it fits on a 9x6cm^2 PCB.

--
Stephan A. Maciej, stephanm@muc.de, http://www.muc.de/~stephanm/
Windows is said to be simple and easy to learn. That's right. It was
always simple to get that funny blue screen. And it was very easy to
learn that there are much, much better OSes.

3759. 4-1000a tubes for sell

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990404224127.15314.00002817@ng-cc1.aol.com>
Source record: 71543

i have 2 good pulls FULL OUTPUT

4-1000A TUBES EIMACS IN ORIG BOXES

$135 EACH PLUS SOME SHIPPING

THANKS JOE

3760. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Solarpower1watt@Juno.com
Message-ID: <9TVN2.5027$8Y3.423223@newsfeed.slurp.net>
Source record: 71544
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

>>
>> WD-40 -- Cleans and lubes at the same time. Used it for years as a Sony
>> Factory Service Tech and it beat everything else.

For the life of me, I don't see how anyone can have good results CLEANING switch contacts with a petroleum based lubricant. LUBRICANT is used to lubricate.... that is, it leaves a slick deposit to reduce friction of parts that tend to rub together and protect parts from air and oxidation. CLEANing solutions are designed to clean contacts; that is, remove all dirt and residue from surfaces. This is just the opposite of a lubricant. You can't have both unless you use extremely expensive conductive grease type materials. WD 40 is not a good conductor. I would not want to coat small fine switch contacts with this material.

Off-the-shelf TV tuner cleaner would be about the most easily obtainable cleaner you might find.

Personally, I have found in 30 years radio maintenance that the most reliable fix for an intermittent switch or pot is to replace it. Digikey is a good source for both.

Ed WB6SAT

REPLY INFO:
==========
Return address modified to prevent automatic SPAM response.
TO REPLY: remove the "watt" from my return address.
==========

3761. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <37084481.740C@wenzel.com>
Source record: 71545
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

I agree! Except stick with TriFlow. The contents have a much lower vapor pressure and the fix lasts for years. It is miraculous on pots, too. I suspect the antioxidants help. If you want a surprise, try it on motor brushes! I expected a burnt mess but the sparks disappear and the motor speeds up. I haven't seen any long-term downside yet - and I spray that stuff everywhere. :)

John Miles wrote:
>
> You might be surprised. Things like WD40 and TriFlow aren't conductors
> themselves, but they unquestiionably do aid in making good electrical
> contact. I had to convince myself of this -- I sprayed a deep puddle of
> TriFlow (which is basically WD40 with Teflon) on a piece of copper-clad
> board, then lightly brushed a single strand of #40 AWG (or something
> very close to it) through the puddle. An audible continuity tester
> showed the connection quality to be excellent -- the wire made much
> better, and more consistent, contact with the board surface underneath
> the pool of TriFlow than in a similar test where the wire and board were
> both left dry. I guessed the Teflon residue would interfere with
> conduction once the hydrocarbon carrier dried up, but that turned out
> not to be the case either.
>
> That's not to say there isn't better stuff out there, but both
> experiment and experience suggest that WD40 is unjustly maligned. For
> pots, yes, you usually have to replace them in the end. But for dirty
> wafer switches and such, there doesn't seem to be any real advantage to
> the more expensive stuff, as long as you're sure the WD40 won't attack
> any nearby components.
>
> The distinction between a cleaner and a lubricant is not an important
> one in this case. Something that reduces the friction between two
> surfaces will also tend to get rid of unwanted particulates between
> them.

3762. UHF Power Amp Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: "Steven P. Hull" <rockworm@telusplanet.net>
Message-ID: <YUWN2.1184$m3.2692@news0.telusplanet.net>
Source record: 71546

I'm looking for a schematic for a high power (around 75-100 Watt) UHF RF amp. This can be in either lo or hi band. Please send any correspondence to h2s0c023@telusplanet.net

--
Steve Hull

3763. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7e9gln$mj6@news.Hawaii.Edu>
Source record: 71547
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Give 'em a bath in denatured alcohol or acetone. Do so in an open area.

3764. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: f6awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01be7f44$c4233d20$188127d4@f6awn.cpod.fr>
Source record: 71548

Hello,

You have got a lot of good informations !

Just another small suggestion, by my own experience, make sure you have no harmonic with the generator (transmitter) you are using. A low-pass filter or 1/4 lambda notch is to be put before the swr-meter.

For the accuracy of the swr scale, a good directivity of ur swr-meter is the heart, but it's sometimes (and often) difficult to obtain ... and measure !

73,
Frank.

Randy and Cara Randall <crrandal@seidata.com> a crit dans l'article
<37042736.B4D89CCC@seidata.com>...
>
> Thanks for reading this post. I am looking for a procedure for
> calibrating HF SWR and watt meters. I have a good idea on
> how to cal. the SWR portion, but the watt meter would require
> a calibrated RF voltmeter to read the voltage across the load
> resistor. There are RF voltage probes you can build in the
> 1995 ARRL handbook, but how do you cal. those? I need
> a simple standard of some sort. Ideas?
>
> Randy KB8ASO Milan, IN.

3765. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <3708A939.1EE3@csolve.net>
Source record: 71549
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Jeffrey Herman wrote:
>
> Give 'em a bath in denatured alcohol or acetone. Do so in an open area.

Acetone may attack the plastics in the case. Alcohol will clean some
of the grime but not all.

The idea is to clean the oxides, grime, and non-conductive film from the
contacts, and leave a lubricating layer to prevent galling of the
contacts. The lubricating layer also prevents re-oxidation and the
formation of non-conductive films that caused the problem in the first
place.

The lubricating film is non-conductive, but the microscopic asperites on
the surface of the contact will punch through the film and provide a true
metal-to-metal contact. This can reduce the contact resistance by a
factor of ten and make it much more stable.

For example, "Fix Modem Problems",

http://www.csolve.net/~add/system/modemtip.htm

shows how ordinary vaseline can reduce the contact resistance on your
telephone.

Simply cleaning the contacts may provide temporary improvement, but
without protection, the problem will soon return.

Best Regards,

Michael R. Monett,
Automated Production Test
mailto:add@csolve.net

3766. Re: VHF mixer circuit required

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be7f6c$6ea11ac0$06193bcb@default>
Source record: 71550

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

David Cunningham <D.L.C@btinternet.com> wrote in article
<7e623f$g7v$1@uranium.btinternet.com>...
> I am considering homebrewing a VHF FM rx, for the 2 metre band, and
possibly
> with provision for 6 metres. I would appreciate any help regarding the
> mixer.

David
You could use a NE602/612 which has a built in oscillator for a cheap and
easy mixer or a ring diode (eg SBL1) if you want a more bulletproof design.

> If I use ceramic IF filters and say, a low frequency VXO, tuned to
> some harmonic as the local oscillator, need I bother tuning the RF input
> stage with the LO?.

The input could be fixed tuned for 144Mhz - ideally with something like
helical filter for best performance

>Will I need a series or parallel trimmer cap across the
> xtal to increase LO frequency?.

You will need a PLL/VCO setup for proper performance if you want the set to
be tunable

>As far as the If amplifier is concerned,
> should I use 10.7 MHz or 455KHz?(I am more tempted to use 10.7 since I
have
> a spare ratio discriminator transformer for this frequency). Would 10.7
be
> too high for 6 metre reception?

You should use an IF of about 10% of the operating freq or the image will
be a problem - certainly 455 KHz would be too low. 10.7 would be the IF of
choice (or maybe 21.4 MHz) as parts are easily available.

> I also intend to use discrete transistors
> for the IF amp rather than an IC. I am unsure of whether to use a cascode
> strip or seperate transformer coupled stages. Also, how many stages, or
how
> much gain, should I expect from the IF amplifier-

Most designs would use an IC in the IF amp (eg NE614/15). You will need if you use discrete parts to have several stages (4-6) to get enough gain (typically 100 dB in an IC circuit) There many chips around with well documented app notes (eg Signetics,
Phillips) and these would be much simpler

>I dont want it to oscillate, but want good sensitivity at the same time. Your >comments please!

Due to the high gain, layout and shielding are critical. A PCB ground plane is virtually mandatory with extensive bypassing of the power rails etc
Look in Elektor April 1992 for a 2 metre FM receiver design

Richard

3767. Re: 3/8" brass

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <F9py3G.J26.0.queen@torfree.net>
Source record: 71551

Not the cheapest place, but they have just about everything imaginable
in the way of mechanical parts and I understand always have it in stock:

Small Parts, Inc.,
13980 N.W. 58th Court
P.O. Box 4650
Miami Lakes, FL
33014-0650

http://www.smallparts.com
smlparts@smallparts.com

GUARD M (guardm@aol.comjunkblk) wrote:
: Hello,
: I'm trying to locate some 3/8 inch brass stock. I need round and square
: stock approx 12" long. Any Ideas?
: Mev

: remove "junkblk" from e-mail address if you drop me a note.

3768. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: BOB URZ <sound@inetnebr.com>
Message-ID: <3708E894.C62E6DA7@inetnebr.com>
Source record: 71552
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Wow, some one must own stock in WD 40! In the Pro audio world, the caig cramolin r5/d5 is defiantly the way to go. I would not get caught dead spraying
WD 40 in an expensive mixing board. Leaves too much residue. I have seen boards with "customer repaired" using WD 40 with puddles of goo inside. A good
cleaner should clean and preserve. This leaves out just alcohol or other straight
petroleum products. If you clean a control in this matter, it will soon be noisy again.

Notes on cleaning switches:
If the switch is a knife type with a steel case, try to pry the back cover up to
expose the end of the switch slider. Put the switch in a vertical position and spray
D5/R5 in and work the control for 1 minute or so.
If the switch is a sealed plastic type..Do this only if there is no other choice.
Get a small shafted pencil soldering pencil. Burn a small hole with the pencil in
the back of the control. Make sure you work the control back and forth so none
of the melted plastic jams the control. Spray D5/R5 in the new hole. You then can
seal it with a dab of silicone sealer or equiv.

Ron Harshbarger wrote:

> What's the best way to clean contacts inside push button switches? The
> actual slide surface is not visable but there are holes in the case that
> would allow a spray nozzle extension to be pushed in...
>
> 73
> Ron H. K3PID

3769. VKE Digital Voice Keyer upgrade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Stu Olson <solson@usa.net>
Message-ID: <7eakga$f8v$1@oak.prod.itd.earthlink.net>
Source record: 71553

VKE was updated yesterday and posted on my website for downloading. With Field Day coming upon us, be sure to grab and copy of VoiceKeyExpress. Let VKE call "CQ Field Day" while you save your voice for doing more important things, like asking someone to bring you another cold one, etc.

If you have any questions about VKE, check out my website, and/or drop direct e-mail to me. (You can e-mail me directly from my website too.)

73 and good luck on Field Day

--
Stu Olson N7QJP
http://home.earthlink.net/~n7qjp

3770. WTB LMB "type" unpainted chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <3708CBF7.ABCEDE77@ameritech.net>
Source record: 71554

looking for unpainted chassis with covers;

17"x11"x3"
17"x7"x3"
5"x7"x2"

please email responses to f117ab@ameritech.net

3771. Re: Homebrewing power transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7eaogd$v4k$1@nnrp1.dejanews.com>
Source record: 71555
Body handling: HTML body converted to readable text

In article <370870EA.621823C6@asu.uswest.net>,
wcw@asu.uswest.net wrote:
>
> Given the expense and scant availability of plate and filament transformers
> these days, I wonder how practical and involved it would be to roll my
> own? In looking through catalogs--Mouser et. al--I notice that you can
> buy the E-cores and enameled wire you would need, but I want to know how
> I would go about turning these supplies into a working transformer, and
> what other parts and equipment I would need. Why don't more people make
> their own transformers? Is construction *that* critical and tedious and
> time-consuming that it isn't worth the effort?
>
>
There is a project for a 12V high current switching PS in two recent
> issues of QST that requires winding at least one power transformer, using
> copper strips rather than wire: how practical would this method be applied
> to HV transformers? I notice also the lack of transformer projects in my
> old handbooks and ham magazines, so am I just hoping for a cheap way out?
>
--
>
Will White, KD7BFX
>
>
to reply, please click this link mailto:wcw@asu.uswest.net
>

>
>

Will,
In my opinion, to make a low frequency transformer is more tedious and time consuming than critical. You will need a kind of device to help you turn the base used to support the hundreds or even thousands of wire turns to be wound while ou guide the wire on the several layers, manualy is very complicated.
If you realy want to try it, I suggest you to use an appropriated insulated reel that fit the core where the turns will be wound. This will simplify the task.

A transformer for a switching power supply is less tedious to wind, because it uses much less turns than the low frequency types and can be wounded manually.
The cooper strips are used when the number of turns are small (1 or 2) and

it's needed high cross-section area and small leakage inductance between the windings.

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3772. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <7eamca$3kr$4@hirame.wwa.com>
Source record: 71556

In article <plSN2.35$nb3.5333@ptah.visi.com>,
"Ron Harshbarger" <rnharsh@visi.com> wrote:
>What's the best way to clean contacts inside push button switches? The
>actual slide surface is not visable but there are holes in the case that
>would allow a spray nozzle extension to be pushed in...
>
>73
>Ron H. K3PID
>
>
****

And with all the suggestions and the surprising references to WD40 I did not see the suggestion to use Silicon spray. I have a can of spray used for TV Channel changer contacts (from rotatable channel changer) and it is Silicon. Silicone has also been used in Distributor caps (when cars had them) to keep out water, lubricate and conduct electricity.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

3773. Re: UHF Power Amp Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: quatsein@island.net
Message-ID: <3708f01f.851630151@news.cr.island.net>
Source record: 71557

You may have to be more specific in regards to the frequency you
need the amp to fuction in. UHF goes from 300mhz to 3ghz.

Steve Carlisle VE7AHL

On Mon, 05 Apr 1999 04:23:20 GMT, "Steven P. Hull"
<rockworm@telusplanet.net> wrote:

>I'm looking for a schematic for a high power (around 75-100 Watt) UHF RF
>amp. This can be in either lo or hi band. Please send any correspondence
>to h2s0c023@telusplanet.net
>
>--
>Steve Hull
>
>
>

3774. Re: Modification in DSP-2232

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: "Stacey E. Mills" <w4m@cstone.net>
Message-ID: <7eap29$k2r$1@murdoch.acc.Virginia.EDU>
Source record: 71558
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.equipment

chondeville@hotmail.com wrote in message <3706BBFB.C78C36E4@hotmail.com>...
>Does anyone know how to modify the AEA DSP-2232 in order to get the best
>of it when you operate the birds at 9600??. I've heard there is
>something I can do to enhance it.
>Please, make your comments to chondeville@hotmail.com
>
>73,
>Christian

What problems are you having with the DSP-2232??? The only mod. I'm aware of is one to slightly increase the output signal, but this is only needed if you can't get the proper FM deviation by adjusting the pots. In general the unit works great "as is."

3775. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Irv Finkleman <finkirv@cadvision.com>
Message-ID: <3708ECFC.A9F5F44E@cadvision.com>
Source record: 71559
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Never had any "gummy residue" problems with WD-40.

Irv

Mike Monett wrote:

> Irv Finkleman wrote:
> >
> > WD-40 -- Cleans and lubes at the same time. Used it for years as a Sony
> > Factory Service Tech and it beat everything else.
> > Irv VE6BP
>
> [...]
>
> Good Stuff! I find it works wonders on pots also.
>
> Some people have mentioned a conern about gummy residue buildup.
>
> Have you noticed any problems, or had units returned later because of
> WD-40?
>
> Best Regards,
>
> Michael R. Monett,
> Automated Production Test
> mailto:add@csolve.net

3776. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <3708F074.B031BF9C@netdoor.com>
Source record: 71560
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

The cleaner from radio shack is pretty good #64-4315 or the other one
64-4320. I can't see that one is any better than the other. the 64-4320
costs a dollar more.

Butch KF5DE

CommQuart wrote:

> Caig brand DeOxit.
> Pricey, but small can goes long way.
>
> Ron Harshbarger wrote in message ...
> >What's the best way to clean contacts inside push button switches? The
> >actual slide surface is not visable but there are holes in the case that
> >would allow a spray nozzle extension to be pushed in...
> >
> >73
> >Ron H. K3PID
> >
> >

3777. Re: Homebrewing power transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <3708ED32.EB5BE658@usit.net>
Source record: 71561

Will White wrote:
>
> Given the expense and scant availability of plate and filament
> transformers these days, I wonder how practical and involved it would
> be to roll my own? In looking through catalogs--Mouser et. al--I
> notice that you can buy the E-cores and enameled wire you would need,
> but I want to know how I would go about turning these supplies into a
> working transformer, and what other parts and equipment I would need.
> Why don't more people make their own transformers? Is construction
> *that* critical and tedious and time-consuming that it isn't worth the
> effort?

Did you make a guess at the parts required and do a quick budgetary on what the cost would be Versus a particular typical store bought transformer? I suspect that the parts would cost much more that the transformer to be built, especially if they come from a supplier like mouser. I bet these parts are sold mostly to people with critical and exact requirements for which there is not standard part available, or for breadboard use to determine specs for a custom build of a transformer in quantity.

>
> There is a project for a 12V high current switching PS in two recent
> issues of QST that requires winding at least one power transformer,
> using copper strips rather than wire: how practical would this method
> be applied to HV transformers? I notice also the lack of transformer
> projects in my old handbooks and ham magazines, so am I just hoping
> for a cheap way out?
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net
>

3778. Re: Theremin?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <370904EF.476D@ixpres.com>
Source record: 71562
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.baotanchors

Will White wrote:
>
> I just saw a very interesting video about Leon Theremin and his musical
> "instrument," called a Theremin, which he invented in the 1930's. From
> what scant technical information the film presented, I gather this was a
> device composed of one or more oscillators, an audio amp, two antennas,
> possibly an RF amp. All vaccum tube electronics, 'played" apparently by
> using the hands around and about the device, varying hand capacitance
> effects. Remember the Beach Boys tune "Good Vibrations" and that
> wavering, organ-like sound? That's this thing.
>
> I seek further info about this odd marriage of radio and music, possibly
> even a schematic. I'd like to give a shot at building one.
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

Will OM,

I built a Theremin in early 1955. It was one of a dozen different
circuits that could be built up with an electronics experimenter's kit
from National Radio Institute, as I recall. It was simply an audio
oscillator whose amplitude and frequency could be controlled via hand
capacity from two wire leads, several inches long each. It could be
made to wail and moan, and sounded cool to a 15-year old, but I never
approached anything resembling 'music' with it, HI.

73,
Don, W6JL

3779. GS-35B russian tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: ct1hjo <mop69975@mail.telepac.pt>
Message-ID: <7eb43ndrc1@duke.telepac.pt>
Source record: 71563

Looking for heat sink of GS-35 B or tube with heatsink.

Please reply to surfgang@mail.telepac.pt

thanks....CT1HJO

3780. Re: Homebrewing power transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3708FC4F.2C10@pop.valley.net>
Source record: 71564

Will White wrote:
>
> Given the expense and scant availability of plate and filament
> transformers these days, I wonder how practical and involved it would
> be to roll my own?
> for a cheap way out? <snip>

Hello--
In general, it's more cost-effective to buy or scrounge a transformer that's either close to or exactly what you need. However, use Deja News to search for recent threads discussing reuse of microwave oven power transformers. Basically, you remove the high-voltage winding and reuse the primary; also, you must remove any magnetic shunts present.

OTOH, you can easily wind small to medium-size high-frequency transformers for switch-mode power supplies or DC-DC convertors using ferrite pot cores and their matching bobbins.

The major issues in winding your own transformers are:
--Large number of turns required at 50/60 Hz for high-voltage windings;
--Obtaining proper interwinding insulation;
--Obtaining moderate to large quantities of magnet wire of required sizes and insulation type.

73,
Brad AA1IP

3781. Re: OC 25 and OC 36 transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: "Franck E." <moumoug@cybercom.fr>
Message-ID: <7eb123okm1@jaydee.iway.fr>
Source record: 71565

Joe McElvenney a ï¿½crit dans le message ...
>They're Germanium but if you must.
>

OC36 is in my 1964 data book, thats 35 years.
Germanium PNP Nd max 30W, Vcm 60v, Icm 6A, hfe 50.

You can design a class B push-pull power amplifier, they go in class AB
or even class A in summer by themselves because of collector/base
current leakage. I remember the first 2N3055 as a real relief.

In those days it was not unusual to see a transistorised radio become
silent just because it was left in the sun.

I would not advise more than a 12 volt 2 amp power supply to play safely
with a pair of these.

Have fun.

73

F6BOM

3782. Re: Homebrewing power transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37090BCE.763F@ixpres.com>
Source record: 71566

>
> Will White wrote:
> >
> > Given the expense and scant availability of plate and filament
> > transformers these days, I wonder how practical and involved it would
> > be to roll my own? In looking through catalogs--Mouser et. al--I
> > notice that you can buy the E-cores and enameled wire you would need,
> > but I want to know how I would go about turning these supplies into a
> > working transformer, and what other parts and equipment I would need.
> > Why don't more people make their own transformers? Is construction
> > *that* critical and tedious and time-consuming that it isn't worth the
> > effort?
>
> Did you make a guess at the parts required and do a quick budgetary on
> what the cost would be Versus a particular typical store bought
> transformer? I suspect that the parts would cost much more that the
> transformer to be built, especially if they come from a supplier like
> mouser.

Will OM,

Generally, I have found after 45 years of homebrewing things that parts are almost ALWAYS cheaper than assemblies, especially those that require considerable labor. You did not mention whether you want to build a 60-cycle transformer, or a switching regulated power supply like the one in recent QST, that runs at 10's of KHz or higher. VERY big difference!
The 60 Hz ac transformer is technically much simpler to do, as it requires only the transformer, not a complete switching power supply with all of its control circuitry, fault-protection, etc. I suggest you read that switching supply article in QST through a couple of times. This will tell you how much the designer had to do to make the supply reliable. Building a 60 Hz transformer requires only the winding of many turns of wire, proper insulation layer to layer, and assembling the stack of EI core laminations. If you can find a (cheap) source for common lamination material and wire of the correct sizes, then the rest is mostly all your labor, which is, of course, free.
When winding your own, it is sometimes easier to have lower-voltage secondaries and use voltage doubling in the rectifier, to reduce the number of secondary turns required. Many 60-Hz transformers have roughly one turn per volt, just to get an idea.
If you can find one or more existing transformers of approximate power rating that you can (cannibalize) disassemble, cut off the secondary windings (which are usually the topmost windings, leaving the primary intact). Then you can wind on a secondary for any voltage you like, the

wire size being determined by the available window area left for the secondary.
It can and has been done by many.

Having said all of the above, there is another way. You can copy the basic supply in the QST article, except redesign the power transformer for high voltage at the secondary(s). The primary circuit remains the same of course. The tricky thing with a small transformer like those used in switching supplies, is insulation for the high voltage at the secondary. Easier to get turn-turn and layer-layer arcing, since the volts/turn is much higher with these transformers than 60 Hz ones.
The control loop cirsuitry may have to be modified slightly to allow for the different loop gain around the control loop, with a high-voltage secondary. Even this can be mitigated by using an additional secondary winding with the same number of turns as the original secondary but very small diameter wire, since it will deliver almost no current), and using that as the controlled output. Thus, the new secondary of high voltage, will run "open-loop", or not directly regulated by the control circuitry. This will still work, but without tight regulation of the secondary voltage, which may be OK anyway. After all, 60 Hz transformers are completely unregulated, and work just fine.
There are lots of ways to skin a cat; all have been done before, by many with little or no experience. One makes his choices... Don't be scared out of experimenting by those who only understand buying, and not making. This is what homebrewing is all about.

73 and GL,
Don, W6JL

3783. Re: 4-400 triode/tetrode operation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: skipp@catbert.ucdavis.edu
Message-ID: <7eb424$fq9$3@mark.ucdavis.edu>
Source record: 71567

: Ron Harshbarger (rnharsh@visi.com) wrote:
: I have a pair of 4-400 tubes with sockets and chimneys. I would like to
: build an HF amp. How about some ideas on the best circuit? Maybe some
: references to published plans.
: 73
: K3PID Ron
:

Hi Ron,

I was laughing so hard at "Bobs answer" that I almost forgot to come back... He's trying to sound like he's an amp expert, but it comes off like he's a CB amp/hack guy...

First, 4-400's are great tubes, lots of gain... I would find a late 70 through early 80's ARRL Handbook where a grounded grid construction article is printed. This seems to be the most popular method for hams to use these in newer projects.

They operate similar to 3-500z, but require the additional grid to be dealt with, in g-grid operation, both are often tied to DC/RF ground. This is refered to as triode operation of a tetrode. The cathode is driven through a tuned input for best linearity. They provide less gain in gg operation vs a pair of 3-500z.

Onward...

In true tetrode operation, they drive with much less power. Early 60's ARRL Handbooks are great places to look for the 4-400 in tetrode operation.

Very similar circuits using 4-125 and 4-250 are pretty much the same tube circuit, with lower plate diss. These tubes are "little brothers" of the 4-400. Common high gain tetrode operation, requires considerable care in construction to avoid forced neutralization requirements (feedback problems). Often this type of circuit is grid driven. Some designs allow more broadband operation (without tuned input).

Most common ham tranceivers have enough drive to allow grounded grid, triode operation of a 4-400

hope that helps....

skipp

skipp@pilot.ucdavis.edu

PS, the Kenwood TL-922 used 3-500z tubes, not 4-400's as mentioned by another Author.

Also stop by Rich Measures, AG6K's web page for amplifier information.

http://www.vcnet.com/measures

3784. EL 519

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: "Franck E." <moumoug@cybercom.fr>
Message-ID: <7eb579$t1f$1@jaydee.iway.fr>
Source record: 71568
Cross-posted to: fr.rec.radio.amateur,rec.radio.amateur.homebrew

HI,
I have some EL519 tubes, and I am looking for the spec in class B SSB amplifiers.

Bonjour,

Je recherche les caractï¿½ristiques du tube EL519 en ampli classe B, ceci en vue de remplacer ï¿½ventuellement des 6146, avec un peu plus de puissance en sortie.

Merci et 73

F6BOM

3785. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7eb6k8$8vh$1@autumn.news.rcn.net>
Source record: 71569
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Aa Peavy dealer told me the factory receives
quite a few damaged mixers that have had the WD40
treatment. I am not familiar with the type of slide pots used by
Peavy, but apparently WD40 will damage them.

Peter

BOB URZ wrote in message <3708E894.C62E6DA7@inetnebr.com>...
>Wow, some one must own stock in WD 40! In the Pro audio world, the caig
>cramolin r5/d5 is defiantly the way to go. I would not get caught dead
>spraying
>WD 40 in an expensive mixing board. Leaves too much residue. I have seen
>boards with "customer repaired" using WD 40 with puddles of goo inside. A
>good
>cleaner should clean and preserve.

3786. Remote Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Rosey Rosenbaum <bili@iquest.net>
Message-ID: <_M9O2.342$E4.1633@news1.iquest.net>
Source record: 71570
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

I have a Cherokee AH-27F next to my computer and I need to relocate the 1/2 wave rubber ducky antenna I have for it to the outside. My monitor gives it to much static. I also want to use this rig for a car if the occasion arises, so a window mount would be preferable. What I need is a male BNC to female Coax connector or a male to female BNC connector with 17 foot or so of coax. Any suggestions would be appreciated.

Rosey
bili@iquest.net

3787. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <37092A1B.CB34B43E@erols.com>
Source record: 71571
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

WD40 *is not* an electronic cleaner and should not be used on electronic or electrical equipment. You might get away with it but why would you want to try when there are perfectly good contact cleaners available? In addition, WD40 is flammable and *could* cause a fire if you use it around contacts that may arc. My son-in-law ruined a good alternator by spraying WD40 on the armature trying to lubricate the bearings.

CommQuart wrote:

> Aa Peavy dealer told me the factory receives
> quite a few damaged mixers that have had the WD40
> treatment. I am not familiar with the type of slide pots used by
> Peavy, but apparently WD40 will damage them.
>
> Peter
>
> BOB URZ wrote in message <3708E894.C62E6DA7@inetnebr.com>...
> >Wow, some one must own stock in WD 40! In the Pro audio world, the caig
> >cramolin r5/d5 is defiantly the way to go. I would not get caught dead
> >spraying
> >WD 40 in an expensive mixing board. Leaves too much residue. I have seen
> >boards with "customer repaired" using WD 40 with puddles of goo inside. A
> >good
> >cleaner should clean and preserve.

3788. Re: Remote Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37092D06.7A5F@eece.maine.edu>
Source record: 71572
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Rosey Rosenbaum wrote:
>
> I have a Cherokee AH-27F next to my computer and I need to relocate the 1/2
> wave rubber ducky antenna I have for it to the outside. My monitor gives it
> to much static. I also want to use this rig for a car if the occasion
> arises, so a window mount would be preferable. What I need is a male BNC to
> female Coax connector or a male to female BNC connector with 17 foot or so
> of coax. Any suggestions would be appreciated.
>
> Rosey
> bili@iquest.net

Radio Shack has, or another one of those companies, a rubber duckie
relocation thing--a piece of metal that will fit over the car window,
and has the coax to connect to the radio. That might not work for home,
but that would take care of the car. As for home, a more permanent
solution could be done, wouldn't have to be too fancy, maybe something
like a thro-glass antenna, or something of the sort.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3789. Re: OC 25 and OC 36 transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: c.c.tqbssz@OCX25XandX.killspam.us.com
Message-ID: <7ebdnn$e9i$1@samba.rahul.net>
Source record: 71573

David Cunningham (D.L.C@btinternet.com) wrote:
: I have about 8 of these TO-3 power transistors, a mixture of both OC25 and
: OC36 types, by Mullard, and wondered if anyone had any information on these
: ancient devices, such as their hfe and voltage ratings. It seems to be
: difficult to find information on transistors over 20 years old!
: I am thinking of using thase to make a class AB push-pull power amplifier.

Seek out Wireless World of the mid 60's and you'll find some of the first
transformerless Hi-Fi transistor audio amp designs using these parts
including the "legend in its own time" Tobey/Dinsdale.

Stephen

: Many thanks, 73 de David

3790. loctal sockets needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: remarsh@juno.com
Message-ID: <5C29B610B6AEF5F0.65479F3B2C68B5AD.C907D6229EFF8E19@library-proxy.airnews.net>
Source record: 71574

I need to purchase 4 loctal sockets that mount with a snap ring
(no screws) military stuff from WWll used this type of socket .
used no problem , you can keep all the solder on the pins....just have
all the pins .
thanks
richard
remarsh@juno.com

3791. Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Rosey Rosenbaum <bili@iquest.net>
Message-ID: <Y4eO2.353$E4.1470@news1.iquest.net>
Source record: 71575

I would like a schematic for a 1KW linear. Tube or solid state doesn't matter. If it is tube type I would hope it is for available tubes. I would like to use it on 2m, 10m and 11m right away. Hopefully further expansion later. I would like to build the unit myself out of self found parts. Any help would be appreciated.

Rosey
bili@iquest.net

3792. Tektronix RM-45A scope query

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37097535.368C19A@asu.uswest.net>
Source record: 71576
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have an opportunity to obtain a Tek RM-45A scope for $45. It takes Type CA plug-ins, whatever that means.I have seen these (the scope itself) in Surplus Sales of NEs catalog for $175, so it looks like I may be getting a really good deal. Also, the unit appears to have been very well cared for. It came out of a university science lab just last January.

What should I check before plopping down my money? Can anyone tell me what the tube line-up in this unit is? I understand that the RM-45A is the rack-mounted version of the 545A, so if this is correct info, that should mean the two models are electrically identical or at least very close. It is very definitely a boatanchor, at about 50 lbs. and the size of a window-mounted air-conditioner!

This scope is more than 25 years old, so what is the price/availability of replacement CRTs should I need one in the future? I will check to make sure it has a trace before I buy it. How specifically do I evaluate the trace/CRT for quality/condition? Other simple tests and/or check points that are recommended?

That's a lot of questions, whew! Thanks for reading this and double-thanks for your replies.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

3793. MICROSTRIP LAYOUT DESIGN BOOK ON EBAY

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Charles Elbel <celbel@ctesc.net>
Message-ID: <370999D3.5BD3@ctesc.net>
Source record: 71577

FOR ANYONE INTERESTED IN PCB MICROSTRIP CALCULATIONS FROM 'S' PARAMETERS

CHECK OUT THE EBAY URL BELOW.

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=85580584

K5HQR

3794. Ham Radio Callsign Mugs. Your call on a mug.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-05 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7ec2l0klj1@birch.prod.itd.earthlink.net>
Source record: 71578
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber
All mugs are made with quality control in mind. They are dishwasher and microwave safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber for details.
If you what to buy your personal callsign mug all you will have to do is send a check or money order for the amount of the mug plus $4.00 for shipping. Remember to send your callsign so I can place it on the mug.(The mug you see on my web sit is just a sample mug. Your callsign will be placed on the mug you order.) Please USA orders only. See at http://home.earthlink.net/~jawjabber
To see a picture of the Callsign Mug and to get the order forms please click on the link below.

http://home.earthlink.net/~jawjabber

--
Georges Mug Shop
http://home.earthlink.net/~jawjabber

3795. Re: WTB: Vacuum Variable Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: xuyue <yue-xu@163.net>
Message-ID: <7ebotsgsn1@news.cz.js.cn>
Source record: 71480
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hi!
I have two vacuum variable caps ,one is 400pf@10kv(50Hz pep)weight 1.5kg,the other is 700pf@15kv,weight 3.5kg,they all made by China. PLS mail to yue-xu@163.net phone:86-416-2828178(UTC0500-1300)
thanks!
BD2RH/XUYUE
RHUNT wrote in message <3708329C.71B0@prodigy.net>...
>Tom Repstad wrote:
>>
>> Hi,
>>
>> I'm looking for a 500pf @6KV vacuum variable cap (or close to that), if
>> you have one please send e-mail.
>>

3796. Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: im@home.now
Message-ID: <37097055.16722321@news.atl.mindspring.com>
Source record: 71481

Hi all I am getting to grips with pspice, ''design lab 8'' I am in the process of trying to design a small signal rf amp based on a 2n2219a transistor. Its really serving as a buffer for a vhf oscillator.

Is it possible to be able to display the impedance of a point in the circuit with markers. What I would like to do is look at the real and imaginary impedance feeding the base of the 2n2219a so as to get an idea of the best matching network to use.

I would like to graph the impedance vrs frequency..

Any help would be appreciated..

Thanks JD..

3797. Re: Homebrewing power transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <5ufO2.1900$mk.285@firefly>
Source record: 71482

In a previous article, W6JL@ixpres.com (Don W6JL) says:

>>
>> Will White wrote:
>> >
>> > Given the expense and scant availability of plate and filament
>> > transformers these days, I wonder how practical and involved it would
>> > be to roll my own? In looking through catalogs--Mouser et. al--I
>
>Will OM,
>
> Generally, I have found after 45 years of homebrewing things that
>parts are almost ALWAYS cheaper than assemblies, especially those that
>require considerable labor. You did not mention whether you want to
>build a 60-cycle transformer, or a switching regulated power supply like
>the one in recent QST, that runs at 10's of KHz or higher. VERY big
>difference!
>
> There are lots of ways to skin a cat; all have been done before, by
>many with little or no experience. One makes his choices... Don't be
>scared out of experimenting by those who only understand buying, and not
>making. This is what homebrewing is all about.
>
> 73 and GL,
> Don, W6JL
>

I have had good luck designing and winding 60 Hz transformers. I'd
recommend going to your local library and borrowing a copy of Reference
Data for Radio Engineers. There is an excellent chapter on transformer
design in it. It includes calculation of the cross-sectional area needed
for the power you wish to get from the transformer, correction for
various losses, etc.

73, Zack W9SZ

--

3798. Re: UHF Power Amp Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <ADfO2.1901$mk.341@firefly>
Source record: 71483

In a previous article, rockworm@telusplanet.net ("Steven P. Hull") says:

>I'm looking for a schematic for a high power (around 75-100 Watt) UHF RF
>amp. This can be in either lo or hi band. Please send any correspondence
>to h2s0c023@telusplanet.net
>
>--
>Steve Hull
>

There have been many good designs in QST and the ARRL Handbook for 432 MHz amps over the years.

I bought a 432 amp using 4CX250's complete with power supply at a hamfest for $15 a couple years ago. The owner was going to use it for ATV but never finished it and decided he didn't want it cluttering up his shack.

I just wonder what you are going to use it for? When you say "lo or hi band", that doesn't sound like amateur radio usage. It is illegal to use non-type-accepted equipment for any use other than the Amateur Radio Service.

73, Zack W9SZ

--

3799. Another batch of diode removal questions =)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: jhulet@aol.com
Message-ID: <19990406003319.28813.00003063@ng119.aol.com>
Source record: 71484

Hello folks,

I got several responses about diode removal and I really appriciate everyone of the responses! I failed to state that I was looking for removal of "surface mount" diodes, this would have narrowed the responses to the topic that I was looking for! =) Oh well, I did learn a little about both.

I was surprised to hear that some Hams actually "crush" diodes to remove them. I would imagine this is a permanent "removal", and that it would make it difficult to reinstall a diode back into its place. My question is, is it acceptible to actually crush a surface mount diode as a way to disable its function? The rado in question is a ICOM 706MKII and is out of warranty. I plan on keeping this rig for quite a long time, I've had it since 1997. It is installed on my sailboat and I am looking for a back-up rig that would be able to lend communication assistance no matter what the frequency in the case of an emergency while on the water. I am looking for extended tx capablities on Marine SSB as well as the VHF Marine band.

I am not experienced at removing items from circut boards, but I could manage to crush a diode or two.. (sounds funny) If I were aware of an experienced local Elmer that was willing to take my radio into his hands to perfrom this mod in a more conventional way I would like to stand by and watch it performed. I am still in the process of looking for someone or learning to do so myself.

Thanks again to all !

Jason S. Hulet
W1WOW

3800. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Ed Price <edprice@pacbell.net>
Message-ID: <3709B422.1F63@pacbell.net>
Source record: 71485
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Ed wrote:
>
> >>
> >> WD-40 -- Cleans and lubes at the same time. Used it for years as a Sony
> >> Factory Service Tech and it beat everything else.
>
> For the life of me, I don't see how anyone can have good results CLEANING
> switch contacts with a petroleum based lubricant. LUBRICANT is used to
> lubricate.... that is, it leaves a slick deposit to reduce friction of parts
> that tend to rub together and protect parts from air and oxidation. CLEANing
> solutions are designed to clean contacts; that is, remove all dirt and
> residue from surfaces. This is just the opposite of a lubricant. You can't
> have both unless you use extremely expensive conductive grease type materials.
> WD 40 is not a good conductor. I would not want to coat small fine switch
> contacts with this material.

> Ed WB6SAT

Ed WB6SAT:

You are generally quite right. But....

WD-40 is cheap, and the lighter, more aromatic components of it, when pressure blown onto a contact, will do a pretty credible job of cleaning oils, dust, cigarette tars and mouse piss. And most of the WD-40 will evaporate. But yes, there is an oily residue that remains. And this residue will hold airborne contaminants very well. So, the WD-40 does a good clean-up quickly, but it leaves a residue that actually accelerates future contamination.

Now, if we're talking cleaning a switch contact, we not only want to wash away the gunk, but we want to remove the metal surface oxidation and sulfides. The metal chosen for contacts are a compromise between conductivity, melting point, hardness, and oxide formation. Ideally, you would like a contact that deforms slightly, to make a wiping action when it makes and breaks, thus breaking surface oxide skins. You would also look for a metal with a soft and relatively conductive oxides. So tin is better than aluminum.

If you want to truly clean a contact, you need to either chemically etch the contact, or mechanically abrade it. And once it's clean, then you want to slather on some compound that keeps the contact wetted (submerged in a protective goop) to prevent contact with the oxygen in the air.

Most home jobs aren't critical enough to go the full contact renewal route. I usually wash with WD-40, then wash with rubbing alcohol (and remember, this also leaves an oil film). If I have to burnish the terminal, I'll wash it again with the rubbing alcohol, and follow up with a small squirt of isopropyl alcohol (no oil).

No isopropyl? Wet a cotton swab with high proof vodka.

Ed
WB6WSN

3801. F.S. Circuit boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: VE6NAP <ve6nap@oanet.com>
Message-ID: <01be8002$4defbe80$a91a99cf@ve6nap1>
Source record: 71486
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,can.forsale

4 only
Sperry vertical control boards
part # 1510108 - 908

each contains
1 DB37 male

11 transformers 10kCT : 10K split
3ma DC
175 Volt peak working voltage
200 - 5Kc 100 mW
ratings are for 70,000 ft altitude

Plus a number of other modules of unknown function

I dont know what they are from but Military stock tag id's the item and
places replacement value at 13,613.40 cdn dollars
Stock # 5998218471966

3 units sealed in original military anti static packing

1 unit pkg opened marked serviced by Honeywell May 1992

MARKED SERVICEABLE

$ 40.00 each - the transformers should be worth that much eh..
open to offers though..

terms
shipping costs are extra
weight aprox - 500 Grams or 1.1 lb
Terms
NO COD
Postal M.O. in advance of shipment
If you email full postal address
I will quote total price for shipment via surface parcel post

Regards
Gerald Caouette
9116 - 79 Street
Edmonton, Alberta, T6C 2R4
de
ve6nap@oanet.com

3802. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: VE6NAP <ve6nap@oanet.com>
Message-ID: <01be800c81112560a91a99cf@ve6nap1>
Source record: 71487

CommQuart <commquart@erols.com> wrote in article
<7e35mu$nv0$1@autumn.news.rcn.net>...
> I thought the 922 used 3-500Z tubes.
> Only ham amp I remember using the 4-400 tubes
> was the rare Heath Chippewa (sp?).
>
> Peter

Also the list should also include

Johnson ThunderBolt ,
Adams model 1010 Linear Amp (1956)

and a good number of ARRL handbook amps...
>

3803. Re: EL 519

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: awn <samuel.morse@nomail.cpod.fr>
Message-ID: <01be8015$90659ec0$3a8127d4@f6awn.cpod.fr>
Source record: 71488
Cross-posted to: fr.rec.radio.amateur,rec.radio.amateur.homebrew

Bonjour Franck,

Heureux de voir une question technique, cel&#65533; change des petites annonces et des scanners, Hi!!

Je vais poster des infos d&#65533;taill&#65533;es, le temps de les retrouver, j'en ai des classeurs pleins ...)

Dans un premier temps, de m&#65533;moire :

- l'EL509 et l'EL519 ne sont pas des lampes d'&#65533;mission et ont de cet fait quelques inconv&#65533;nients en HF (produits d'intermodulation), mais elles ETAIENT courantes, solides et peu cher (ce n'est plus vrai, hi).

- remplacer des 6146 encadre d&#65533;j&#65533; la modif :

- place disponible (519 plus haute et plus large)
- tensions disponibles (chauffage, polar grilles et haute tension)
- circuits d'accord disponibles

- la classe utilis&#65533;e pour la SSB est plut&#65533;t AB1/AB2 que B. Il y a donc une polar G1 pour que le courant de repos soit d'environ 20 &#65533; 30 mA par tubes.

De m&#65533;moire :

- il faut environ -9V sur G1 pour avoir ce courant de repos
- le chauffage filament est de 6.3V / 2A
- la HT peut aller jusqu'&#65533; 2000 V !!!, mais il est raisonnable de ne pas d&#65533;passer 1200V et de ventiler les tubes.
- l'intensit&#65533; plaque peut aller jusqu'&#65533; 0.5A si le circuit plaque est bien r&#65533;alis&#65533;.

Tout ceci est TROP pour remplacer une 6146. (600/800V Plaque, Ia < 150 mA ?)

mais qui peut le plus peut &#65533;ventuellement le moins ? Vous pourriez aussi trouver des lampes un peu moins QRO et plus petites en dimension, genre EL 502 / EL 504

PRECISEZ-MOI :

- Si vous avez de la place ou si c'est dans un transceiver, les tensions disponibles sur les 6146, les limites du transfo d'alim (intensit&#65533; chauffage et HT), si vous pouvez refaire les bobines du PA, le montage grilles &#65533; la masse ou &#65533;cran aliment&#65533;?

- si c'est pour modifier un ampli CB, c'est plus simple, mais part les lampes, le reste ne vaut pas grand chose !! Divisez toutes les caract ristiques par 5 (genre ZETAGI, transfo+diodes+chimiques+CV+commutateurs+support de la lampe n'utiliser .. qu'en CB, hi !!)

A plus tard,

Francis
F6AWN

Franck E. <moumoug@cybercom.fr> a crit dans l'article <7eb579$t1f$1@jaydee.iway.fr>...
> HI,
> I have some EL519 tubes, and I am looking for the spec in class B SSB
> amplifiers.
>
> Bonjour,
>
> Je recherche les caract ristiques du tube EL519 en ampli classe B,
> ceci en vue de remplacer ventuellement des 6146, avec un peu plus de puissance
> en sortie.
>
> Merci et 73
>
> F6BOM
>
>

3804. FT-1000 CAT Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: long.22@osu.edu
Message-ID: <3709fb40.1543577@nntp.service.ohio-state.edu>
Source record: 71489

The Version 6.0 ROM for the FT-1000 altered the STATUS UPDATE command to provide the abilty to "read only selected parameters on the serial line".

However the sheet which came with my ROM did not include the details on the new commands. A query to Yaesu has so far not produced an answer.

Does anyone have this info?

ron w8gus.

3805. Re: 88MH toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990406083325.25107.00003117@ng63.aol.com>
Source record: 71490

I found the toroids....8 all together. Can't remember who asked for them.
E-mail me if interested. George
G345CDE

3806. Re: Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Lee Scott <DownWithJunkMail@Spam.Net>
Message-ID: <01be802e$a4c6de60$c79d45d1@leescott>
Source record: 71491

What do you intend to do with this ampilifer on 11m's anyway? This is the
CB band in the USA.

Leland C. Scott
KC8LDO
--
"We learn in time that subjects are not controversial,
but how we communicate about them and the
elements of personal blame we add in anger. "

Rosey Rosenbaum <bili@iquest.net> wrote in article
<Y4eO2.353$E4.1470@news1.iquest.net>...
> I would like a schematic for a 1KW linear. Tube or solid state doesn't
> matter. If it is tube type I would hope it is for available tubes. I
would
> like to use it on 2m, 10m and 11m right away. Hopefully further expansion
> later. I would like to build the unit myself out of self found parts. Any
> help would be appreciated.
>
> Rosey
> bili@iquest.net
>
>
>
>

3807. Re: CW filter for AF usage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <370A0821.20BE10E4@fallschurch.esys.com>
Source record: 71492

Ed Noll, W3NQN of Anapolis, MD., has published articles on passive filters in ham radio, the ARRL Handbook, and EE magazines. He used to sell 88mhy toroids for some of these designs. I built his 200 hertz BW filter for CW, and I love it. Look him up in the callbook, if he doesn't see this and chime in.
73 de W1AEL

3808. Re: Tektronix RM-45A scope query

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <370A1075.5F878F03@fallschurch.esys.com>
Source record: 71493
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

It is a great old 'scope and WELL worth the money UNLESS it needs fixing! The tube lineup is quite extensive (expensive, too!). If you buy this fine instrument, you may want to find a junker 545 (for parts) at a hamfest. Getting a manual might take some searching. I do not know about parts compatibility, but I have a TEK 541 'scope with manual (about the same age --35+) with bad HV and "good all else" that you can HAVE for the freight (not a really great deal, BTW).

As for the testing, you plug it in, turn it on, let it warm up, and adjust Intensity, Focus, and Astigmatism controls for a nice pair of traces. Play with the Vertical and Horizontal position controls, then make a connection between each of the vertical channels (one at a time) to the CAL output connector near the bottom of the panel. You should get a decent square wave trace, after which you can try the Time Base (H) and Vertical scale controls. If all this works OK, reach for your wallet! If it craps out later, you may need to junk it, tho... I'd be hard pressed to resist taking it home, if I hadn't bought a clean 475!
73 de W1AEL.

3809. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7ed52jaht1@news1.rmi.net>
Source record: 71494
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

In rec.radio.amateur.equipment Ed Price <edprice@pacbell.net> wrote:
: ... I'll wash it again with the rubbing alcohol, and follow up
: with a small squirt of isopropyl alcohol (no oil).

: No isopropyl? Wet a cotton swab with high proof vodka.

Is there any other kind?

Jonesy W3DHJ

3810. B'hamFEST 5/1/99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Leon Snider <leons@worldnet.att.net>
Message-ID: <7ed6evkkb1@mtinsc01.worldnet.att.net>
Source record: 71495

Info: http://www.bro.net/barc/fest.html

3811. 2x4-1000 schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Leon Snider <leons@worldnet.att.net>
Message-ID: <7ed6pelko1@mtinsc01.worldnet.att.net>
Source record: 71496

I'm not having much sucess at buying a nice,complete,2x4-1000
amp,so......does anyone have a schematic for one? Leon ke4gg

3812. Re: Tektronix RM-45A scope query

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <370A175E.27C2@pop.valley.net>
Source record: 71497
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Will White wrote:
>
> I have an opportunity to obtain a Tek RM-45A scope for $45. It takes
> Type CA plug-ins, whatever that means.I have seen these (the scope
> itself) in Surplus Sales of NEs catalog for $175, so it looks like I may
> be getting a really good deal. Also, the unit appears to have been very
> well cared for. It came out of a university science lab just last
> January.
>
> What should I check before plopping down my money? Can anyone tell me
> what the tube line-up in this unit is? I understand that the RM-45A is
> the rack-mounted version of the 545A, so if this is correct info, that
> should mean the two models are electrically identical or at least very
> close. It is very definitely a boatanchor, at about 50 lbs. and the size
> of a window-mounted air-conditioner!
>
> This scope is more than 25 years old, so what is the price/availability
> of replacement CRTs should I need one in the future? I will check to
> make sure it has a trace before I buy it. How specifically do I evaluate
> the trace/CRT for quality/condition? Other simple tests and/or check
> points that are recommended? <snip>

Hello--

The Tek 54x scopes represent some of the finest pieces of test equipment ever manufactured. The plug-in design concept allowed Tek and a few other manufacturers considerable flexibility in designing accessory plug-ins doing everything from strain-gauge signal amplification to spectrum analysis.

The type CA plug-in was a wideband dual-channel vertical amplifier-- one of the more common and useful types. If ths scope doesn't include one, plan on spending from $5.00 to $50.00 for one, depending on where you buy it and its condition.

However, these scopes consume considerable power, are (as you pointed out) bulky and heavy, and they're well past the point where factory service and support were available.

You can still locate small-signal replacement tubes, and CRTs are also available. The real showstoppers are: range switches, power transformers electrolytic capacitors and and high-voltage transformers. That said, you can locate replacements from salvaged scopes and a few surplus dealers.

Older heavily-used CRTs exhibit 'double peaking", a condition that denotes a tube getting near its end of useful service. Check by examining the CRT's brightness as you increase the intensity-control setting-- the spot's intensity should reach a peak. If the spot brightens, dims and brightens again, you'll probably need a new CRT at some time in the future.

Makes sure that the scope's cooling fan turns freely-- lost cooling air killed a lot of these scopes.

For more info, get a copy of Stan Griffith's book "Oscilloscopes Selecting and Restoring A Classic"-- Stan worked at Tek and his book outlines differences among models and offers servie and restoration tips.

Stan's address:
Stan Griffiths, W7NI
18955 S.W. Blanton
Aloha, OR 97007

Stan's book lists several sources for components and manuals.

You should also purchase manuals-- one for the scope, and one for the plug-in. The manuals are worth buying solely as examples of good tech writing!

73,
Brad AA1IP

3813. 15m -> 40m QRP transvertor (suggestions?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: stickler@sirius.infospring.com
Message-ID: <7ed7i6$4lg$1@sirius.infospring.com>
Source record: 71498

Hey folks,

I have a very nice portable 15m QRP transceiver (cf. CQ magazine, Sept. 90). The rig's basic specs are: 3W CW, single conversion superhet, RIT, QSK, 1.4 w/0.4 KHz filter, 21.000-21.120 MHz.

I have toyed with the idea of a transvertor for some time to get the rig also onto 40 meters (rather than build a completely separate 40m transceiver, as the reciever in the 15m rig is so great).

I've come across a number of reciever convertor circuits, and some VHF/UHF transvertor projects, but nothing on HF transvertors. And all the transvertors I've seen are frequency multipliers, rather than dividers. Japan Radio used to have a mobile transvertor box for VHF->HF, so I know that it is at least feasible to do.

The present rig has 3W output, but I'd be happy with only a watt (or even less) on 40m. Likewise, anything around 50KHz or better tuning range would be fine (e.g. 7.0-7.050MHz). I seem to recall that the same capacitor provides less tuning range on lower frequencies -- so I expect that I won't get 120KHz of tuning range at 7MHz.

Does anyone have any pointers to circuits, articles, books, kits, etc. that might do the trick?

I'd prefer for the transvertor to be separate from the 15m rig, but I'm also not completely averse to hacking into the circuit board if that simplifies the job.

Any and all help will be greatly appreciated.

Thanks,

Patrick

KC4YYY, OH2LUV

==========
Patrick Stickler * stickler@infospring.com * www.infospring.com
==========

3814. Huge NOS 6C21 Eimac TUBE F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990406133112.07233.00003458@ng151.aol.com>
Source record: 71499

Hello, I have one of these beauties still in it's spring-loaded shipping frame!
It does
take up alot of valuable space on my shelf, so let's off it for 75.00,
including shipping in continental USA.
Thank you,
Joe Pratt, Tubecntral@aol.com

3815. Re: Tektronix RM-45A scope query

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <370A466D.14C64B0F@teleport.com>
Source record: 71500
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Brad Thompson wrote:

>. . . [excellent advice]

> You should also purchase manuals-- one for the scope, and one for the
> plug-in. The manuals are worth buying solely as examples of good tech
> writing!

The source of manuals for older Tek instruments is Deane Kidd, phone 503-625-7363. He also has some replacement parts.

Roy Lewallen, W7EL

3816. FS: New headset with mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <370a49dc.1346821@news.earthlink.net>
Source record: 71501
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

For sale:

Headphones with boom microphone.
Jensen Model JMP-41
Headset Response is 20 Hz - 20 kHz
6' Cord with mini stereo plug.
Microphone is Low-Z Condenser type with 2.2 k-ohm impedance.
Response 30 Hz - 16 kHz

Durable and comfortable design with padded ear-pieces, ideal for
communications applications.

Brand new in box. White color.
Great for mobile HF or VHF operating. Think SAFETY!
Also great for extended rag-chews, contesting etc.
No PTT, but has standard connectors - 1/8" mini-style.
Will also work well with computers. Normally $29.95
New in box $20.00 plus shipping

3817. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <83sO2.3027$c57.998403@news2.mia>
Source record: 71502
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Don't use WD-40 on anything that is high impedance. It conducts. I once sprayed it in the guts of a marine SSB transceiver and it killed the unit. I had to bake it for days in low-temp oven before it worked again.

Irv Finkleman wrote in message <37081C2C.D2EBD0C4@cadvision.com>...
>WD-40 -- Cleans and lubes at the same time. Used it for years as a Sony
>Factory Service Tech and it beat everything else.
> Irv VE6BP
>
>Ron Harshbarger wrote:
>
>> What's the best way to clean contacts inside push button switches? The
>> actual slide surface is not visable but there are holes in the case that
>> would allow a spray nozzle extension to be pushed in...
>>
>> 73
>> Ron H. K3PID
>

3818. Re: Linear

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: kf8od@aol.com
Message-ID: <19990406140946.26648.00003647@ng145.aol.com>
Source record: 71503

5watts on 11m not a 1kw!
Long live QRO!

3819. DSSS Receiver Q's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Emarit Ranu <ranu.1@osu.edu>
Message-ID: <370A56E2.1B4D3737@osu.edu>
Source record: 71504

.

Hello, I'm trying to build a simple direct sequence spread spectrum
receiver and am wondering how to go about the carrier tracking.
Let me give an overview of my approach:

```
IF1 IF2 ___ I _____
input---(mixer)-----(mixer)-----|ADC|------| DSP |
| | |___|------|_____|
f1 DDS Q |
\_____________________|
```

I've implemeted the code tracking in the DSP without trouble but I'm
curious as to how to control the DDS. My thinking is that by taking
atan2(Q/I) I can find the phase offset of the BPSK constellation and
adjust the phase of the DDS to move the constellation back to the
I-axis, assuming no drift of the DDS. But what about when there is
a Doppler shift present or even a changing Doppler shift (i.e. a
drift in the DDS)? I'm not sure how to handle that.

Any suggestions?
Thanks.

--
-Emarit Ranu, KG0CQ

3820. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Joel Jacobs <jacobsj@netzero.net>
Message-ID: <5%sO2.1656$XY4.166878@newsfeed.slurp.net>
Source record: 71505
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

Ron Harshbarger wrote in message ...
>What's the best way to clean contacts inside push button switches? The
>actual slide surface is not visable but there are holes in the case that
>would allow a spray nozzle extension to be pushed in...
>
>73
>Ron H. K3PID
>
>
Most switch contacts are self cleaning if they switch enough current - the arc cleans them. However, sometimes when used in a very low current application they do get oxidized. I've had good luck by removing the switch from the circuit and putting it across a CURRENT LIMITED supply set at about an amp. Exercise the switch a few times - you'd be supprised how well it works.

Joel

3821. altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: beppe@ibm.net
Message-ID: <370a7bad@news.uk.ibm.net>
Source record: 71506

dear OM,
anyone can suggest me an altimeter radar design
to be usedon an ultra ligth plane ?
(sorry for the bad english, hoping anyway to be clear)

73
iz1blh

3822. Re: Theremin?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: david@slack.com
Message-ID: <370a7303.0@news.spies.com>
Source record: 71507
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.baotanchors

In article <37071C88.46C8722C@asu.uswest.net>,
Will White <wcw@asu.uswest.net> wrote:
>I just saw a very interesting video about Leon Theremin and his musical
>"instrument," called a Theremin, which he invented in the 1930's. From
>what scant technical information the film presented, I gather this was a
>device composed of one or more oscillators, an audio amp, two antennas,
>possibly an RF amp. All vaccum tube electronics, 'played" apparently by
>using the hands around and about the device, varying hand capacitance
>effects. Remember the Beach Boys tune "Good Vibrations" and that
>wavering, organ-like sound? That's this thing.
>
>I seek further info about this odd marriage of radio and music, possibly
>even a schematic. I'd like to give a shot at building one.

For lots of information, see:

http://www.nashville.net/~theremin

3823. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: jl110@cleveland.Freenet.Edu
Message-ID: <7ee4vp$c43$1@pale-rider.INS.CWRU.Edu>
Source record: 71508
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap,rec.roller-coaster

In a previous article, bfomsd@starmedia.com () says:

>Do you believe in REINCARNATION?
>
>Do you want to know who you were and where you lived in your past life?
>
>Click here -> http://orbita.starmedia.com/~luizhenrique/reincarnation.html
>ckomlojfcpuoeyhxcmxjvjegpbkwsrcproxsuflencueoisevxrzdwsmkdvwbu
>
>

Let's see, since we posting this stuff on rec.radio.shortwave...

My Drake SW8 was a Philco Tombstone in it's past life.

My Sony 7600G was a transistor AM back in the late 50's

My Sangean 818 was an 8-track player back in '73.

As for my Baygen, it was a detector back in 1915 !

--
"You see ? You have no respect for excessive authority or obsolete trad-
itions. You're dangerous and depraved, and you ought to be taken outside
and shot !" Dr. Dobbs to Yossarian from "Catch-22" by Joseph Heller
----------jl110@cleveland.freenet.edu------YOSSARIAN LIVES !-------------

3824. Re: Homebrewing power transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <370A90A6.8BC82DAF@teleport.com>
Source record: 71509

I've made a total of one transformer, and it wasn't difficult. I started with an old TV transformer and stripped off all the windings except the primary. (It was the inner winding, which I think is common.) What I needed was some high-current, low-voltage windings, so I didn't have a large number of turns to deal with. I did have to disassemble the core, but it wasn't much of a job. If you can get a transformer of the right size that already has a primary winding, it can save you quite a bit of time and trouble. I'd guess that a lot of surplus stores would have transformers of various sizes originally used for the large 5 volt supplies which were common not that long ago.

Roy Lewallen, W7EL

3825. Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <370AA678.C62B7636@seidata.com>
Source record: 71510
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Thanks for reading this message. I am looking for information
from someone who has bought something on the news group
from an individual living in Canada. What are the import duties
or tariffs if any imposed by the US customs? I sure would hate to
buy this radio and find out that there is a 50% or more tariff on the thing!
I have not found a clear answer on the 'net.

Thanks,
Randy KB8ASO Milan, IN.

3826. Help on 10 Meter conversion.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <370AA9E8.EC99E809@seidata.com>
Source record: 71511
Body handling: Binary attachment payload not displayed: CB.doc

[One or more binary attachments are retained only in the source text.]

3827. Help on CB to 10 Meter conversion.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <370AAB57.971C212F@seidata.com>
Source record: 71512

I am thinking of converting a Sears RoadTalker 40 SSB radio
to 10 meters. It is model # 663.38100050. Is this a Uniden
(Cobra) with a Sears name on it? If so, what is the Cobra
model # for it? If not who made it and what is its equiv.
model #?
Thank you,
Randy KB8ASO Milan, IN.

3828. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <370AB498.FBB29F02@teleport.com>
Source record: 71513
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

A lot of government agencies have web sites with all sorts of
information. Have you tried finding a web site for the U.S. Customs
Service?

Roy Lewallen, W7EL

Randy and Cara Randall wrote:
>
> --
> Thanks for reading this message. I am looking for information
> from someone who has bought something on the news group
> from an individual living in Canada. What are the import duties
> or tariffs if any imposed by the US customs? I sure would hate to
> buy this radio and find out that there is a 50% or more tariff on the thing!
> I have not found a clear answer on the 'net.
>
> Thanks,
> Randy KB8ASO Milan, IN.

3829. Re: Help on CB to 10 Meter conversion.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-06 00:00:00 UTC
From: mcp@ricochet.net
Message-ID: <370AF48A.D7A94688@ricochet.net>
Source record: 71514

Once upon a time I converted an SSB CB to 10 meters. After it was all done I think it was not worth while. Although it worked fine it took a lot of time and I had to buy the schematics and some crystals. Then it was worth less after I finished. I wished I had just sold it and bought an HTX-100 for $100 or so.

-Dean
N7LPE

Randy and Cara Randall wrote:
>
> ----------
> I am thinking of converting a Sears RoadTalker 40 SSB radio
> to 10 meters. It is model # 663.38100050. Is this a Uniden
> (Cobra) with a Sears name on it? If so, what is the Cobra
> model # for it? If not who made it and what is its equiv.
> model #?
> Thank you,
> Randy KB8ASO Milan, IN.

3830. FS: DOUBLET ANTENNA KITS $18 EA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0704991436310001@murphy1.cts.com>
Source record: 71429
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.antenna,misc.survivalism

DOUBLET ANTENNA KITS WITH ACC. NEW, PACKAGED $18 EA. 3 FOR $45 5 FOR $60

PICT AND INFO AT:

http://209.239.34.153/murphyjunk/3_COMM_ITEMS

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3831. Re: 8044ABM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <370BDCDA.6AACE906@starc.org>
Source record: 71430

Hi Norm,

They are out of production, last I heard, Jade Products was still
selling a keyer kit that used the 8044ABM (I bought one less than a year
ago)..

--Tom
KB1CGA

Norm Melick wrote:

> Does anyone have a source of the Curtis 8044ABM, 20 pin
> chip?
> Sure could use one, possibly two of them.
>
> 72,
>
> Norm/KQ6SD

3832. FS: TEK 130LC $125

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0704991553570001@murphy1.cts.com>
Source record: 71431
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.equipment

TEK 130LC METERS, CLEAN COND. $125 EA. 3 FOR $275

PICT AT:

http://209.239.34.153/murphyjunk/9A_TEST_EQUIPMENT_LIST

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3833. FS: BIRD 8233 NEW COND. $215 EA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0704991555590001@murphy1.cts.com>
Source record: 71432
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,sci.electronics.equipment

BIRD 8322 NEW, PACKAGED, WITH MANUAL AND CAL CERT. $215 EA.

QTY PRICES:

PICT AT:

http://209.239.34.153/murphyjunk/9A_TEST_EQUIPMENT_LIST

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3834. Re: EL 519

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: claude@netwoman.rz.unibw-muenchen.de
Message-ID: <370ba496.8436531@news.unibw-muenchen.de>
Source record: 71433
Cross-posted to: fr.rec.radio.amateur,rec.radio.amateur.homebrew

On Mon, 5 Apr 1999 21:03:37 +0200, "Franck E." <moumoug@cybercom.fr>
wrote:

>Je recherche les caract�ristiques du tube EL519 en ampli classe B,
>ceci en vue de remplacer �ventuellement des 6146, avec un peu plus de puissance
>en sortie.

Ce genre de caract�ristiques n'est g�n�ralement pas publi� par les constructeurs pour les tubes de d�flection lignes comme celui-ci. Il existe des exceptions, mais je n'en ai pas rencontr�es pour ce tube-ci.

Je me permettrais pourtant quelques remarques. La EL519 est sensiblement plus volumineuse que la 6146. La EL519 n'aura pas toujours assez de place dans un appareil pr�vu pour une 6146. Il faudra aussi changer le support, la EL519 a une base magnoval contre une base octal dans le cas de la 6146. Quant au suppl�ment de puissance possible, je pense qui sera minime si on tient � rester dans le cadre des limites permises. � mon avis, une 6146B � la place d'une 6146 serait un choix plus judicieux, car il s'agit d'une version renforc�e du m�me tube, donc pas de support � changer, m�me encombrement. En tout cas, il faudra aussi v�rifier si l'alimentation sera capable de d�livrer le suppl�ment de puissance envisag�.

Claude Frantz

3835. SOLAR battery charger help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Clinton <cpeebles@_nospam_netidea.com>
Message-ID: <370BE4F2.23DE@_nospam_netidea.com>
Source record: 71434

I have a SOLAR No.1060C battery charger with a fried board. Does anyone have a schematic diagram for this charger? The number on the board is 865-712-005.

Thanks.

--
Kill the MAI

Remove _nospam_ to reply

Clinton Peebles VE7KNL DN19ie
Salmo, B.C. Canada
E-Mail: cpeebles@netidea.com

3836. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: clyde edgar <cedgar@pacificnet.net>
Message-ID: <370C003C.169C4EF1@pacificnet.net>
Source record: 71435
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

I bought a music synthesizer last year for $300 USD, I think I paid $15 shipping for 10# and U.S. Customs charged a $30 tarif and there was a $25 fee from a broker or someone like that. I wouldn't bother doing it again unless its really a rare item.

Randy and Cara Randall wrote:

> ----------
> Thanks for reading this message. I am looking for information
> from someone who has bought something on the news group
> from an individual living in Canada. What are the import duties
> or tariffs if any imposed by the US customs? I sure would hate to
> buy this radio and find out that there is a 50% or more tariff on the thing!
> I have not found a clear answer on the 'net.
>
> Thanks,
> Randy KB8ASO Milan, IN.

3837. Re: Help on CB to 10 Meter conversion.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <Y2UO2.1505$et2.33266@news15.ispnews.com>
Source record: 71436

But you would not have had near as much fun or learned anything either.
Marty
N5KBP

mcp@ricochet.net wrote in message <370AF48A.D7A94688@ricochet.net>...
>Once upon a time I converted an SSB CB to 10 meters. After it was all
>done I think it was not worth while. Although it worked fine it took a
>lot of time and I had to buy the schematics and some crystals. Then it
>was worth less after I finished. I wished I had just sold it and bought
>an HTX-100 for $100 or so.
>
>-Dean
>N7LPE
>
>Randy and Cara Randall wrote:
>>
>> --
-
>> I am thinking of converting a Sears RoadTalker 40 SSB radio
>> to 10 meters. It is model # 663.38100050. Is this a Uniden
>> (Cobra) with a Sears name on it? If so, what is the Cobra
>> model # for it? If not who made it and what is its equiv.
>> model #?
>> Thank you,
>> Randy KB8ASO Milan, IN.

3838. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Mark Fraser <mfraser@helix.net>
Message-ID: <370C14B5.560E01C4@helix.net>
Source record: 71437
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

I think you'll find that items for PERSONAL use do NOT require a broker.
UPS, however, assumes that EVERYTHING is commercial, so they feed things
thru a broker. For 30 bucks or so. Use the post office. Check with FEDEX, as
they may be more friendly, but at higher transport rates. There is a publication
put out
by U.S. Customs, outlining the rules. Be careful in following the rules.
Also be conscious that things like scanners that can receive cellular frequencies
can
be considered to be contraband, under U.S. law. /mark

Don Trynor wrote:

> >Thanks for reading this message. I am looking for information
> >from someone who has bought something on the news group
> >from an individual living in Canada. What are the import duties
> >or tariffs if any imposed by the US customs? I sure would hate to
> >buy this radio and find out that there is a 50% or more tariff on the thing!
> > I have not found a clear answer on the 'net.
>
> Randy:
>
> If you live in the US and are purchasing something in Canada, only US customs
> may impose duties on your purchase. If the product is made in the US or if
> it's value us less than $50US, you will have not problems and to my knowledge,
> no duties will be charged. If it is not either of the above, they will asses a
> tax based on what it is (ie 5% or the such). You should check with them
> concerning this. I'm not sure on this, but there may be brokerage fees charged
> by the shipper to move it across the border.
>
> Don VE9XF

3839. tone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Scott <AC3A@bigfoot.com>
Message-ID: <LOUO2.3658$2g5.31008@server1.news.adelphia.net>
Source record: 71438

Can someone point me in the direction of a circuit to generate CW that can be directly fed into the microphone input of a ssb rig to use for CW?

Thanks

3840. FS: 22 volt 2.4 amp transformers,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: worley@53hill.com
Message-ID: <370C52DB.28D@53hill.com>
Source record: 71439
Cross-posted to: rec.radio.amateur.homebrew,misc.industry.electronics.marketplace

I have at least 20 ea. 22 volt 2.4 amp transformers in plastic case, with jack for computer type ac cord (120V 60Hz input). About 4" cubed, 3.5 lbs. each, unused mint condition, $3.75 each or 4/$14 or 10/$30 plus UPS. 36330 zip.(Alabama) Can be used with a rectifier and appropriate sized cap to power 28 V filaments, or as is for 21 V or 24 V sweep tube filaments. Also good for 24 V power supply. NOTE: Please REPLACE the "53" with "snow" to make "snowhill" or call 334-347-5281 day/eve/wknd.

3841. Re: Homebrewing power transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990406215137.08761.00000621@ng55.aol.com>
Source record: 71515

I have made a couple from old TV transformers. These were low voltage(50-60) units for audio amp power supplies. I cut a piece of wood the same size as the core, wrapped it in Teflon and then hand wound the secodary. The primary was still intact. I have a friend that used to do something similar but he did something much more high tech. He used a BBQ rotisery and a mechanical turns counter

3842. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990406220504.08761.00000625@ng55.aol.com>
Source record: 71516

I swear by Cramolin red. I hear that it is no longer made though and has been replaced by Deoxit. Supposively this is the same stuff, Caig had a problem with the original name. I usually did the tube of some canned air down into a bottle of the stuff leting capilary action draw it up into the tube then blast it into the switch or pot.

3843. Re: EL 519

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: "Franck E." <moumoug@cybercom.fr>
Message-ID: <7eegk3$1q$1@jaydee.iway.fr>
Source record: 71517
Cross-posted to: fr.rec.radio.amateur,rec.radio.amateur.homebrew

awn a ï¿½crit dans le message <01be8015$90659ec0$3a8127d4@f6awn.cpod.fr>...
>Bonjour Franck,
>
>Heureux de voir une question technique, celï¿½ change des petites annonces et
>des scanners, Hi!!
>
>Je vais poster des infos dï¿½taillï¿½es, le temps de les retrouver, j'en ai des
>classeurs pleins ...)
>
>Dans un premier temps, de mï¿½moire :
>
>- l'EL509 et l'EL519 ne sont pas des lampes d'ï¿½mission et ont de cet fait
>quelques inconvï¿½nients en HF (produits d'intermodulation), mais elles
>ETAIENT courantes, solides et peu cher (ce n'est plus vrai, hi).
>
>- remplacer des 6146 encadre dï¿½jï¿½ la modif :
>
> - place disponible (519 plus haute et plus large)
> - tensions disponibles (chauffage, polar grilles et haute tension)
> - circuits d'accord disponibles
>
>- la classe utilisï¿½e pour la SSB est plutï¿½t AB1/AB2 que B. Il y a donc une
>polar G1 pour que le courant de repos soit d'environ 20 ï¿½ 30 mA par tubes.
>
>De mï¿½moire :
>
>- il faut environ -9V sur G1 pour avoir ce courant de repos
>- le chauffage filament est de 6.3V / 2A
>- la HT peut aller jusqu'ï¿½ 2000 V !!!, mais il est raisonnable de ne pas
>dï¿½passer 1200V et de ventiler les tubes.
>- l'intensitï¿½ plaque peut aller jusqu'ï¿½ 0.5A si le circuit plaque est bien
>rï¿½alisï¿½.
>
>Tout ceci est TROP pour remplacer une 6146. (600/800V Plaque, Ia < 150 mA
>?)
>
>mais qui peut le plus peut ï¿½ventuellement le moins ? Vous pourriez aussi
>trouver des lampes un peu moins QRO et plus petites en dimension, genre EL
>502 / EL 504
>
>
>PRECISEZ-MOI :
>

>- Si vous avez de la place ou si c'est dans un transceiver, les tensions
>disponibles sur les 6146, les limites du transfo d'alim (intensitï¿½
>chauffage et HT), si vous pouvez refaire les bobines du PA, le montage
>grilles ï¿½ la masse ou ï¿½cran alimentï¿½?
>
>- si c'est pour modifier un ampli CB, c'est plus simple, mais ï¿½ part les
>lampes, le reste ne vaut pas grand chose !! Divisez toutes les
>caractï¿½ristiques par 5 (genre ZETAGI,
>transfo+diodes+chimiques+CV+commutateurs+support de la lampe ï¿½ n'utiliser
>.. qu'en CB, hi !!)
>
>A plus tard,
>
>Francis
>F6AWN
>
>
Merci Francis pour ta rï¿½ponse,

C'est pour remplacer les 6146 d'un transceiver FT250 en restant dans la
lï¿½galitï¿½ cotï¿½ puissance. J'ai 4 EL519 neuves, les EL502/504 que j'ai sont
usagï¿½es.

Pour la taille ï¿½a tiendra en abaissant lï¿½gï¿½rement les supports, j'en ai
rï¿½cupï¿½rï¿½
plusieurs sur des tï¿½lï¿½ couleurs.

L'alimentation est de construction personnelle, je suis donc maï¿½tre des
tensions.
Il faudra simplement que je ne fasse pas amorcer le CV du PA, donc sans doute
pas plus que 800 ï¿½ 1000 V plaque. En courant je peut fournir 500 mA en crï¿½te,
soit 250 mA par tube.

73,

F6BOM

3844. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: maddog@io.com
Message-ID: <370ac632.85471262@news.io.com>
Source record: 71518

On Tue, 6 Apr 1999 23:24:48 +0200, <beppe@ibm.net> wrote:

>dear OM,
>anyone can suggest me an altimeter radar design
>to be usedon an ultra ligth plane ?
> (sorry for the bad english, hoping anyway to be clear)

This may be one case where homebrew is NOT the answer, especially
if you have to ask for help. If I made a suggestion, and you crashed,
I'd have a hard time living with myself.

In the USA, I think it's even illegal to use non-type accepted
flight-related electronics, and probably for good reason.

Wanna know how to make a toaster?

73,
monty

3845. Re: How to clean contacts??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: franczabkar@ozeemail.com.au
Message-ID: <370a137e.12234110@news.ozemail.com.au>
Source record: 71519
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.repair

On Sun, 4 Apr 1999 18:12:42 -0500, Ron Harshbarger put finger to
keyboard and composed:

>What's the best way to clean contacts inside push button switches? The
>actual slide surface is not visable but there are holes in the case that
>would allow a spray nozzle extension to be pushed in...

I find that Philips Contact Cleaner, 390CCS, p/n 4822 389 50125 (?) is
excellent for this purpose.

-- Franc Zabkar

Please remove one 'e' from my address when replying by email.

3846. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: trynorZZZ@nbnet.nb.ca
Message-ID: <7efcgi$1uc$1@garnet.nbnet.nb.ca>
Source record: 71520
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

>Thanks for reading this message. I am looking for information
>from someone who has bought something on the news group
>from an individual living in Canada. What are the import duties
>or tariffs if any imposed by the US customs? I sure would hate to
>buy this radio and find out that there is a 50% or more tariff on the thing!
> I have not found a clear answer on the 'net.

Randy:

If you live in the US and are purchasing something in Canada, only US customs may impose duties on your purchase. If the product is made in the US or if it's value us less than $50US, you will have not problems and to my knowledge, no duties will be charged. If it is not either of the above, they will asses a tax based on what it is (ie 5% or the such). You should check with them concerning this. I'm not sure on this, but there may be brokerage fees charged by the shipper to move it across the border.

Don VE9XF

3847. Amplifier Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19990407112206.08311.00003182@ng-fx1.aol.com>
Source record: 71521

Subject: Amplifier Parts
From: kb5mer@aol.com (KB5MER)
Date: Tue, Mar 30, 1999 8:50 PM
Message-id: <19990330205054.09593.00000328@ng31.aol.com>

List #1= 3CX3000A7 tube,
Socket, Filament transformer 7.5 volts @ 51 Amps
Plate Transformer 2.7 Amps @ 5000 volts
HV Caps, Blower, Meters, Tank Coils
Cabinet to build a large amplifier.
I will sale all parts for $1,500.00 plus shipping.

3848. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Andy's Player Piano Service <tempola@i1.net>
Message-ID: <QkMO2.161$U5.4256547@news1.i1.net>
Source record: 71522
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap,rec.roller-coaster

I used to not believe in reincarnation.....
however, your posting convinced me of this:

I do believe, Because I dont think you could become so dumb in just ONE
lifetime!
Andy
Trent Phillips wrote in message <7ee4vp$c43$1@pale-rider.INS.CWRU.Edu>...
>
>In a previous article, bfomsd@starmedia.com () says:
>
>>Do you believe in REINCARNATION?
>>
>>Do you want to know who you were and where you lived in your past life?
>>
>>Click here -> http://orbita.starmedia.com/~luizhenrique/reincarnation.html
>>ckomlojfcpuoeyhxcmxjvjegpbkwsrcproxsuflencueoisevxrzdwsmkdvwbu
>>
>>
>
> Let's see, since we posting this stuff on rec.radio.shortwave...
>
>
>
> My Drake SW8 was a Philco Tombstone in it's past life.
>
> My Sony 7600G was a transistor AM back in the late 50's
>
> My Sangean 818 was an 8-track player back in '73.
>
> As for my Baygen, it was a detector back in 1915 !
>
>
>--
>"You see ? You have no respect for excessive authority or obsolete trad-
> itions. You're dangerous and depraved, and you ought to be taken outside
> and shot !" Dr. Dobbs to Yossarian from "Catch-22" by Joseph Heller
>----------jl110@cleveland.freenet.edu------YOSSARIAN LIVES !-------------

3849. 8044ABM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Norm Melick <henmel@worldnet.att.net>
Message-ID: <370B9374.C9137318@worldnet.att.net>
Source record: 71523

Does anyone have a source of the Curtis 8044ABM, 20 pin
chip?
Sure could use one, possibly two of them.

72,

Norm/KQ6SD

3850. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: mshannon@[nospam]
Message-ID: <370b9479.137021276@news.istep.com>
Source record: 71524
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap,rec.roller-coaster

On 6 Apr 1999 23:22:33 GMT, jl110@cleveland.Freenet.Edu (Trent Phillips) wrote:

>
>In a previous article, bfomsd@starmedia.com () says:
>
>>Do you believe in REINCARNATION?
>>
>
Yes.
I believe you will be reincarnated as the only tree on a planet populated exclusively by dogs.

3851. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <370BA84B.6499@ixpres.com>
Source record: 71525

Monty Northrup wrote:
>
> On Tue, 6 Apr 1999 23:24:48 +0200, <beppe@ibm.net> wrote:
>
> >dear OM,
> >anyone can suggest me an altimeter radar design
> >to be usedon an ultra ligth plane ?
> > (sorry for the bad english, hoping anyway to be clear)
>
> This may be one case where homebrew is NOT the answer, especially
> if you have to ask for help. If I made a suggestion, and you crashed,
> I'd have a hard time living with myself.
>
> In the USA, I think it's even illegal to use non-type accepted
> flight-related electronics, and probably for good reason.
>
> Wanna know how to make a toaster?
>
> 73,
> monty

Hello,
For experimental, non certified aircraft, you can use anything you
want for 'avionics'. So a homebrew radar altimeter is not "illegal".
After all, you can homebrew the entire airplane (and engine, too, if you
want). Incidentally, homebuilt airplanes are now the largest source of
lightplanes in the U.S; eclipsing all of the manufacturers of certified
planes.
My question would be, why have a radar altimeter in a non-IFR,
VFR-only ultralight? Your eyeballs and/or a regular pressure altimeter
are easier to use, and tell you everything you want to know.

73,
Don, W6JL

3852. Re: 8044ABM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <370BA994.2190@ixpres.com>
Source record: 71526

Norm Melick wrote:
>
> Does anyone have a source of the Curtis 8044ABM, 20 pin
> chip?
> Sure could use one, possibly two of them.
>
> 72,
>
> Norm/KQ6SD

Norm OM,
Have you considered the 'TICK' keyer chip? Entire keyer fits on a one inch square pcb, and took me about 10 minutes to solder up all the parts (SMT). I use it for CW mobile; it is an excellent keyer, programmable from the key, and runs off a 3V disc battery. I've been using mine every day for the past 8 months or so. It is glued to the under side of my Bencher paddle.

73,
Don, W6JL

3853. LMB Chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <370BC29D.C1B68476@ameritech.net>
Source record: 71527

Looking for unpainted chassis;

17X11X3

17X7X3

7X5X2

If you have any of these collecting dust I will put them to use. 'pay
fair price + shipping.

Art

3854. DC - DC convertors for tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-07 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990407174210.15099.00003156@ng-fc1.aol.com>
Source record: 71528

I have access to a few 500 W DC - DC converters & was wondering if I could
combine them for a mobile tube amplifier @ 1-1.5 KW?
Input 12VDC
Output 1000VDC, 300VDC & -125VDC

Either that or I put some transformers in the 3 Phase part of the alternator...
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

3855. Re: Need ICOM 706 MKII adjustments on the main board.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: clair <clair@gateway.net>
Message-ID: <370D4B89.F22A3A65@gateway.net>
Source record: 71379
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dave, check your swr. The 706 starts cutting back in power output as the swr increases. I am sure you know that,but the 706 is specially sensitive to any swr.Even a small amout of swr will cut back the power output considerably.
P.S I love my IC-706mk2....

> Dave wrote:
>
> Hi Gang
> Would anyone have any information on the Adjustments on the main
> board for a 706 MKII? The owners manual is very sparse on this.
> If you have any information you would like to share you may send it to
> me via
> E-mail at D.R.Abshire@att.net
>
> Anyway my 706MKII is only putting out about 65-70 watts PEP on HF and
> 20-30
> on 6 meters. 2 meters seems to be OK. Oh by the way I did check this
> into a dummyload.......
>
> TNX & 73's
>
> Dave
>
>

3856. MFJ 1274C Need Packet Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: oldgear@aol.com
Message-ID: <19990407211250.05737.00003576@ng134.aol.com>
Source record: 71440

I would like the latest copy of the MFJ 1274 Packet software. Any know a site that I coulod down load it from or have a copy they could send me via Email. Thanks

3857. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <370c15f2.3538065@netnews.worldnet.att.net>
Source record: 71441

On Wed, 07 Apr 1999 11:47:39 -0700, Don W6JL <W6JL@ixpres.com> wrote:

>Monty Northrup wrote:
>>
>> On Tue, 6 Apr 1999 23:24:48 +0200, <beppe@ibm.net> wrote:
>>
>> >dear OM,
>> >anyone can suggest me an altimeter radar design
>> >to be usedon an ultra ligth plane ?
>> > (sorry for the bad english, hoping anyway to be clear)
>>
>> This may be one case where homebrew is NOT the answer, especially
>> if you have to ask for help. If I made a suggestion, and you crashed,
>> I'd have a hard time living with myself.
>>
>> In the USA, I think it's even illegal to use non-type accepted
>> flight-related electronics, and probably for good reason.
>>
>> Wanna know how to make a toaster?
>>
>> 73,
>> monty
>
>Hello,
> For experimental, non certified aircraft, you can use anything you
>want for 'avionics'. So a homebrew radar altimeter is not "illegal".
>After all, you can homebrew the entire airplane (and engine, too, if you
>want). Incidentally, homebuilt airplanes are now the largest source of
>lightplanes in the U.S; eclipsing all of the manufacturers of certified
>planes.
> My question would be, why have a radar altimeter in a non-IFR,
>VFR-only ultralight? Your eyeballs and/or a regular pressure altimeter
>are easier to use, and tell you everything you want to know.

But not nearly as fun!

Dave

3858. Another batch of diode removal questions =)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: vk3em@hotmail.COM
Message-ID: <19990408030219.63741.qmail@hotmail.com>
Source record: 71442

G'day,

Removing SMT Diodes isn't all that difficult. In my
opinion, the safest way to do this is to use two soldering
irons with fine point tips to heat both ends of the diode
at once. You might find it easier to add little blobs of
solder resin before you try and remove the diode. The
presence of the resin seems to help the transfer of heat
from the iron tip to the joint. You dont need to move the
irons too much before the diode will come off the pads.
Dont flick the irons, or you will lose the diode. Carefully
wick up the excess solder on the pad with some fine SODER wick,
and clean the surrounding area of excess flux with
,1,1-trichloroethane or other suitable flux remover.

If it you do it correctly, you be left with a good diode
that can be used again and a pair of pads that are still
intact.

Crushing a SMT diode to remove it is to be ignorant of what you
may want to do with it in the future and/or how difficult it
might be to get a replacement should you need one.

Regards,
Luke

Luke Enriquez (VK3EM) Trio Communications 2000
Electronics Design Engineer. 41 Aster Ave.
B.Eng (Comms) Hon. Carrum Downs, Victoria. 3201
+61-3-03-9775-0505 (BH) Australia
+61-0414-679-432 (Mob) http://www.trio.com.au

____
Get Your Private, Free Email at http://www.hotmail.com

3859. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: maddog@io.com
Message-ID: <370c3040.178170897@news.io.com>
Source record: 71443

On Wed, 07 Apr 1999 11:47:39 -0700, Don W6JL <W6JL@ixpres.com> wrote:

> For experimental, non certified aircraft, you can use anything you
>want for 'avionics'. So a homebrew radar altimeter is not "illegal".
>After all, you can homebrew the entire airplane (and engine, too, if you
>want). Incidentally, homebuilt airplanes are now the largest source of
>lightplanes in the U.S; eclipsing all of the manufacturers of certified
>planes.

Really? I stand corrected.

but...

For six years, I worked in avionics maintenance in the USAF during the late 70's. Part of the equipment I worked on was a radar altimeter used to provide focus distance for an airborne reconnaisance camera. I can tell you from experience, that there are many conditions in which a radar altimeter can give false readings during normal operation- many. I would NEVER rely on one to give me my ground-referenced altitude, or to protect from crashes, except as a last resort backup to a barometric-based primary warning system.

As a pure learning exercise, or for entertainment purposes, such a homebrew project has real attractiveness, however.

73, and good luck!
monty N5FC

3860. Re: DC - DC convertors for tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: maddog@io.com
Message-ID: <370c3439.179188707@news.io.com>
Source record: 71444

On 7 Apr 1999 21:42:10 GMT, goldreged@aol.comJUNKBLOK (Goldreged)
wrote:
>I have access to a few 500 W DC - DC converters & was wondering if I could
>combine them for a mobile tube amplifier @ 1-1.5 KW?
>Input 12VDC
>Output 1000VDC, 300VDC & -125VDC

Hi Ed! Would your alternator provide 75-125 A for your amplifier,
plus whatever normal load it needs to provide your battery and
headlights (20-40 Amps)... Will that fit under the hood of your car?

(and try to filter the hash outta that baby!)

>Either that or I put some transformers in the 3 Phase part of the alternator...

There's an interesting idea... would you wind them yourself?

73,
monty N5FC

3861. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <2ga6DLAz1FD3EwI$@falstaf.demon.co.uk>
Source record: 71445

In article <370c15f2.3538065@netnews.worldnet.att.net>, Dave Hinerman
<hinermad@woodnet.att.net> writes
Back to the question the man asked.

From what I recall, radio altimeters don't use the pulse return time to measure the height. They either phase or frequency modulate the pulse and measure the phase or frequency difference between transmit and receive. This allows them to measure small differences inside the pulse rather than just looking for the pulse leading edge. The only details I can find are in an old (1946) radio and radar handbook which shows the TX/RX antennas on opposite wing tips, probably to get maximum separation between the TX/RX systems if they are sending and receiving simultaneously.

That's about all I know about them I'm afraid. Although, I must admit, from the perspective of being an ultra light and glider pilot, I would rather have "real" instruments as I've been scared too many times with ones that are flaky or when they have failed on me. Call me a wimp but a nice pressure altimeter, even a surplus one (My last ultra light had a WWII surplus one that I found in an antique shop for 6 ukp which just needed zeroing) is the best bet. Although I would still love to try and get a radio one working on top of that.

Cheers

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

3862. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <7wA5nNAa5FD3EwIY@falstaf.demon.co.uk>
Source record: 71446

In article <370c3040.178170897@news.io.com>, Monty Northrup
<maddog@io.com> writes
>
>For six years, I worked in avionics maintenance in the USAF during the
>late 70's. Part of the equipment I worked on was a radar altimeter
>used to provide focus distance for an airborne reconnaisance camera.
>I can tell you from experience, that there are many conditions in
>which a radar altimeter can give false readings during normal
>operation- many. I would NEVER rely on one to give me my
>ground-referenced altitude, or to protect from crashes, except as a
>last resort backup to a barometric-based primary warning system.
>
Completely agree. In fact the RAF only fitted them to V Bombers and the
like in the fifties because they found that the under wing pressure wave
distorted the pressure altimeter close to the ground.

Also I recall having a couple of hours in a TriStar simulator about 4
years ago where the radio altimeter only came alive below about 1500 ft
or something similar. It's main purpose was to give very accurate
readings close to the ground, especially on approach. It wasn't used
under any other scenarios.

>As a pure learning exercise, or for entertainment purposes, such a
>homebrew project has real attractiveness, however.
>
Again, totally agree
>73, and good luck!
>monty N5FC
>
>
Cheers

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

3863. Dissassembly advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <370C60D3.B68118CB@asu.uswest.net>
Source record: 71447

I picked up some homebrewed used test gear at the Arizona State Surplus Property dept. I have here some sort of resistance bridge/substitution box. It has among other parts two very nice Helipot precision 10-turn pots (testing within half a percent of marked value, 1K & 10K), and the drives for same. Pretty good for $3, huh?

I am having trouble removing them from the steel box they are mounted in. I can't get a wrench in to grab the nuts, or figure how to release the mounting clips. Help!

P.S. this thing also had an old Eveready No. 763 22.5V battery. Very cute brightly colored cardboard box with plastic thumbnuts. Any clue what these were used for?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

3864. Re: tone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <370C69A7.65B35B7B@ibm.net>
Source record: 71448

Any audio tone generator circuit can be used as long as it is a very
clean sine wave. When a pure sine wave is fed into a ssb audio
circuit, it will generate the equivilent of a cw signal.. You might
have to tune off a little with the RIT control so that you are
receiving and transmitting 'on the same frequency'.

Scott wrote:
>
> Can someone point me in the direction of a circuit to generate CW that can
> be directly fed into the microphone input of a ssb rig to use for CW?
>
> Thanks

3865. Re: DC - DC convertors for tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990408054321.15104.00003149@ng-fc1.aol.com>
Source record: 71449

<<Hi Ed! Would your alternator provide 75-125 A for your amplifier,
plus whatever normal load it needs to provide your battery and
headlights (20-40 Amps)... Will that fit under the hood of your car?

(and try to filter the hash outta that baby!)

>Either that or I put some transformers in the 3 Phase part of the
alternator...

There's an interesting idea... would you wind them yourself?>>

I do some side work at an Auto Electrical shop. Large alternators are easy to
come by... New model alternators are very clean.
The transdormers are 230 V - 12 V in reverse (3 of them in "Delta"
configuration) then a bridge rectifier for each, then put the output from the
bridges in series for around 900VDC. (1968 ARRL Mobile manual)
Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

3866. MC1550 data?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Jussi Saksa <jussi.saksa@lmf.ericsson.se>
Message-ID: <370C80AB.C810E224@lmf.ericsson.se>
Source record: 71450

Hello,

could someone give me information on
(Motorola?) MC1550 IF amplifier circuit.
It is quite an old circuit. It is in a round
metal can (MC 1550G?).

I have a dozen of these but I don't know
the pinout & specifications. I did search at
Motorola's web site and Deja News but could not
find anything appropriate.

Thanks for any help.

Jussi Saksa

3867. ? MRF 477

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Guido.Schulz@t-online.de
Message-ID: <7ei1o7$k4s$1@news08.btx.dtag.de>
Source record: 71451

Ii¿½m looking for HF-Trans. MRF 477. Who knows where to get it? Many thanks!

3868. found the transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: f117ab@ameritech.net
Message-ID: <370CA8E6.C892F73C@ameritech.net>
Source record: 71452

Thanks for all who replied and helped me locate a filament transformer.
Art

3869. Re: another sad Radio Shack story...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: hinermad@worldnet.att.net
Message-ID: <36dc0518.95147934@demonews.mindspring.com>
Source record: 71453

On Mon, 15 Feb 1999 20:08:04 -0000, "Robinson, AB5VH" <rc@crusoe.org>
wrote:

>Yeah, you are correct, Doug... but I bought my set in 93 or 94, when I first
>started getting interested in getting licensed. You would think that the bug
>would be fixed by now, in current production, especially since Sangean also
>sells it under their own label too.

Gee, maybe I could buy a blown one as scrap and fix it?

3870. Re: Another batch of diode removal questions =)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: hinermad@worldnet.att.net
Message-ID: <370ca91f.154691711@206.132.26.100>
Source record: 71454

On 8 Apr 99 03:02:17 GMT, vk3em@hotmail.COM (Luke Enriquez) wrote:

>G'day,
>
> Removing SMT Diodes isn't all that difficult. In my
>opinion, the safest way to do this is to use two soldering
>irons with fine point tips to heat both ends of the diode
>at once. You might find it easier to add little blobs of
>solder resin before you try and remove the diode. The
>presence of the resin seems to help the transfer of heat
>from the iron tip to the joint. You dont need to move the
>irons too much before the diode will come off the pads.
>Dont flick the irons, or you will lose the diode. Carefully
>wick up the excess solder on the pad with some fine SODER wick,
>and clean the surrounding area of excess flux with
>,1,1-trichloroethane or other suitable flux remover.
>
>If it you do it correctly, you be left with a good diode
>that can be used again and a pair of pads that are still
>intact.
>
>Crushing a SMT diode to remove it is to be ignorant of what you
>may want to do with it in the future and/or how difficult it
>might be to get a replacement should you need one.

When lifting diodes to enable various features in handheld radios, I found it useful to stand the diode on end and leave the lower end soldered to the board. (When this happens unintenionally as the board is manufactured it is called "tombstoning.") That way the original diode is available if I have to un-modify the radio to trade or sell it. I even don't have to try to see the markings to tell which way it goes in - I already know.

Also, you can buy or make notched soldering iron tips that fit over surface-mount components and heat both leads (on a 2-lead part) simultaneously. To make one, take a wide chisel tip and file a rectangular notch in the middle wide enough to clear the part and deep enough that it doesn't touch the part itself.

Dave

3871. Re: ? MRF 477

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <370CA113.D099812E@mwci.net>
Source record: 71455

Guido S. wrote:

> Iï¿½m looking for HF-Trans. MRF 477. Who knows where to get it? Many thanks!

http://www.rfparts.com

Bill W0IYH

3872. Re: Tektronix RM-45A scope query

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <370eaca1.85475822@news.atl.bellsouth.net>
Source record: 71456
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

On Tue, 06 Apr 1999 10:37:49 -0700, Roy Lewallen <w7el@teleport.com> wrote:
>Brad Thompson wrote:
>
>>. . . [excellent advice]
>
>> You should also purchase manuals-- one for the scope, and one for the
>> plug-in. The manuals are worth buying solely as examples of good tech
>> writing!

You bet they are. I wish the makers of today's equipment could produce
manuals that are even half as good.

>The source of manuals for older Tek instruments is Deane Kidd, phone
>503-625-7363. He also has some replacement parts.
>
>Roy Lewallen, W7EL

Deane is really *the* expert on the 453A (great scope, I prefer it to a 465A).
I've restored two of them with his aid. I believe he bought the entire Tek parts
inventory for them when Tek quit supporting them. He has a lot of inventory
for other old Tek scopes too, but some parts for the tube type scopes are
unobtainium.

In many cases you can substitute something else, but in some cases you
can't. The only option is to get a junker for parts. When my 545B gave up
the ghost, I gave it to another ham to use as spare parts for his. Having
two or three carcasses on hand is very useful for keeping a very old scope
going. Switches and transformers are the sticking points. You can't get
replacement parts, or even reasonable substitutes, you have to salvage.

I wouldn't pay much for a 545. It is a huge old shop heater, and the sync
circuits aren't the best. For a few bucks more, you can find a 453A or
465 (the sync circuits in the 453A are the best). Those are better than a
mid-price brand new scope. You'd have to pay more than five times as
much to get a new scope that beats their capabilities. (I know, I have a
2465A too, and it cost me over five times as much as a 453A, but it is
only maybe twice as good as a 453A, and the improvements are probably
in areas that won't matter to you for servicing most amateur gear.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

3873. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: workshop@pcm.co.za
Message-ID: <7eie71$2knr$1@nnrp01.iafrica.com>
Source record: 71457

In article <37097055.16722321@news.atl.mindspring.com>, im@home.now (JD) wrote:
>Hi all I am getting to grips with pspice, ''design lab 8'' I am in the
>process of trying to design a small signal rf amp based on a 2n2219a
>transistor. Its really serving as a buffer for a vhf oscillator.
>
>Is it possible to be able to display the impedance of a point in the
>circuit with markers. What I would like to do is look
>at the real and imaginary impedance feeding the base of the
>2n2219a so as to get an idea of the best matching network to use.
>
>I would like to graph the impedance vrs frequency..
>
>Any help would be appreciated..
>
>Thanks JD..
Hi there.
If you get any help on this Impedance question ,could you
pass it on to me.I would really appreciate it , as I would find
it pretty useful.
I tried calculating the impedance by applying a sine wave voltage
(10mV) to the point I wanted to measure,and then measuring the current.
If you take into account the phase differences between voltage and current
you can calculate the impedance.It worked for simple R-C circuits.
I tried it into the base of a transistor with C-E short(measure transistor
input impedance) ,and it "seemed" to work(the resulting impedance
was not totally unbelievable ;)) ,but have no idea if it was even vaguely
accurate!.
I am going to try find a transistor model that I have Input and Output
S or Y parameters for,and see if they match what I measure.
Cheers
Rob

3874. EIMAC Cavity amp for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: w3atv@aol.com
Message-ID: <19990408105018.27672.00000032@ng-fq1.aol.com>
Source record: 71458

For sale- Eimac cavity amp for UHFmodel CV-400. Set up for 450mhz but can be adjusted for 400-500mhz. Uses 3cx400 tube. Solid built and conservatively rated at 300watts continuous service for FM use but could do 600watts SSB & CW. The entire cavity is there but you would need to build an enclosure, control circuits and power supplies. I have a tube with it but the condition is unknown and should probably only be used for testing the amp because it is old. I have pics available by email.
Tnx,
W3ATV

3875. FS or TRADE: RS HTX-202 HT New in Box!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: rpemers@aol.com.alt.edu
Message-ID: <19990408105655.14815.00000050@ng-fy1.aol.com>
Source record: 71459

I have a brand new HTX-202 2 meter HT that I would like to sell or trade for a 25-30amp regulated power supply. I purchased two of these units when Radio Shack was closing them out. I thought my step son would take an interest but since he has not, I only need the one I've been using. The second unit has been in the original box and I only had it out to make sure it worked and that all accessories were there. It is missing the original manual, but I will download manual from RS website and include.

I will only consider a trade for a new or recently purchased 20-25 amp supply or a 30-35 amp supply in good or better condition. I will also sell the rig outright for $125 plus shipping.

If interested email me! Tnx

Ron
(WO8J)

3876. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <370CC8B0.2781@eece.maine.edu>
Source record: 71460

rob wrote:

> Hi there.
> If you get any help on this Impedance question ,could you
> pass it on to me.I would really appreciate it , as I would find
> it pretty useful.
> I tried calculating the impedance by applying a sine wave voltage
> (10mV) to the point I wanted to measure,and then measuring the current.
> If you take into account the phase differences between voltage and current
> you can calculate the impedance.It worked for simple R-C circuits.
> I tried it into the base of a transistor with C-E short(measure transistor
> input impedance) ,and it "seemed" to work(the resulting impedance
> was not totally unbelievable ;)) ,but have no idea if it was even vaguely
> accurate!.
> I am going to try find a transistor model that I have Input and Output
> S or Y parameters for,and see if they match what I measure.
> Cheers
> Rob

Yeah, I'd like to hear how to do it also, but the general idea--I use
Microcap and some other spice engine for analysis.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

3877. Re: DC - DC convertors for tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7eijpkqpq1@news1.rmi.net>
Source record: 71461

Monty Northrup <maddog@io.com> wrote:
: On 7 Apr 1999 21:42 GMT, goldreged@aol.comJUNKBLOK (Goldreged) wrote:

:>Either that or I put some transformers in the 3 Phase part of the
:>alternator...

: There's an interesting idea... would you wind them yourself?

Hey, I did something like that. I used 3 'surplus' 400cps 12v
transformers. I went into the alternator and came out with the
three phase ac -- ahead of the alternator's rectifiers.
Using heavy gauge wire, I connected the the 3-phase to a socket
on the outside of the Jeep. I mounted the 3 transformers plus
rectifiers in an ol' 20mm ammo box with a cable and plug to
run to the socket on the Jeep. I mounted a regular 110v house
socket in the side of the ammo box for the (almost) 110v DC.

Of course the alternator output freq varies with engine
RPM -- but, it seems to perk along 'ok' at an elevated idle.

Use it to run "universal motor" tools out in the boondocks: drill,
electric chain saw, etc.

73
Jonesy W3DHJ

--
SK

--
Marvin Jones jonz<AT>rmi.net
Gunnison, Colorado

3878. Re: MC1550 data?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904081148370.20513-100000@Stratus.CAM.ORG>
Source record: 71462

On Thu, 8 Apr 1999, Jussi Saksa wrote:

> Hello,
>
> could someone give me information on
> (Motorola?) MC1550 IF amplifier circuit.
> It is quite an old circuit. It is in a round
> metal can (MC 1550G?).
>
> I have a dozen of these but I don't know
> the pinout & specifications. I did search at
> Motorola's web site and Deja News but could not
> find anything appropriate.
>
> Thanks for any help.
>
> Jussi Saksa
>
>

It's just a 3 transistor differential amplifier. It's similar, but not identical, to the CA3028 that was seen a lot in receivers years ago. The biasing, and probably the pinout, is different, but that might give you an idea of it's useage.

1 input (this is the bare base of the bottom transistor)
2 ground (emitter of bottom transistor)
3 ground (ground return for some biasing network)
4 input return (biasing for the base of the bottom transistor)
5 AGC (base of one of the differential transistors, via resistor; base is biased internally)
6 output (open collector of a transistor in differential pair)
7 substrate (should be grounded)
8 bypass (base of other differential transistor, base is biased internally)
9 Vcc (open collector of other transistor in diff pair; but resistor for biasing network feeds off here)
10 bypass (direct connection to the base of the transistor mentioned in pin 5)

That's probably less than you need to use the thing, but hopefully it's a start. I don't have a way of scanning the data sheet. I've taken this out of my Motorola databook from about 1978; it wasn't in the one I have from about a decade ago.

In effect, you have a differential amplifier where you can bias the bottom transistor in any way you want, but the differential pair is pre-biased, at the same point, and one of the bases (pin 5) isolated from the bias network via a resistor.

Michael VE2BVW

3879. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <370CC119.E2046885@calweb.com>
Source record: 71463

Look up information on Doppler radar (not what you want but close)
and FM radar. The combination of Doppler and FM can do the job.

Bill K7NOM

Robin Birch wrote:

> In article <370c15f2.3538065@netnews.worldnet.att.net>, Dave Hinerman
> <hinermad@woodnet.att.net> writes
> Back to the question the man asked.
>
> From what I recall, radio altimeters don't use the pulse return time to
> measure the height. They either phase or frequency modulate the pulse
> and measure the phase or frequency difference between transmit and
> receive. This allows them to measure small differences inside the pulse
> rather than just looking for the pulse leading edge. The only details I
> can find are in an old (1946) radio and radar handbook which shows the
> TX/RX antennas on opposite wing tips, probably to get maximum separation
> between the TX/RX systems if they are sending and receiving
> simultaneously.
>
> That's about all I know about them I'm afraid. Although, I must admit,
> from the perspective of being an ultra light and glider pilot, I would
> rather have "real" instruments as I've been scared too many times with
> ones that are flaky or when they have failed on me. Call me a wimp but
> a nice pressure altimeter, even a surplus one (My last ultra light had a
> WWII surplus one that I found in an antique shop for 6 ukp which just
> needed zeroing) is the best bet. Although I would still love to try and
> get a radio one working on top of that.
>
> Cheers
>
> Robin
> ---
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

3880. NEW Icom IC-2800H with TFT color LCD display

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Bo Chan <VE7WBC@qsl.net>
Message-ID: <370ce3cb@carrera.intergate.ca>
Source record: 71464
Cross-posted to: alt.ham-radio.mods,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dear all,

Please subscribe and discuss at Icom IC-2800 community!!

http://www.onelist.com/searchlist.cgi?searchval=icom-ic2800&language=0&maturity=0

New top-of-the-line dual bander adds video excitement to audio excellence. Advanced features and a unique, 3" (diagonal) TFT color LCD display await you. View GPS and APRSTM maps, catch SSTV or broadcast TV,... even watch digital camera and VHS images. Experiment! The high visibility screen accepts NTSC video input (PAL in the European model) via a simple connection port that accepts most standard camera plugs. A 6-pin data port makes the '2800H 9600bps data ready. ICOM's popular independent band controls are here, making it easy to work V/U, U/V, or cross band repeat. Also get: CTCSS encode/decode, simple band scope, fast scanning, 232 memory channels, air band reception, and much more. The control head is totally separate from the main unit, with a connection cable and independent mounting brackets included as standard equipment. Explore SEEING as well as hearing more of today's amateur activity.

Best Regards,
Bo

3881. FS!-Shack Cleaning U.S. 6KD6 tubes!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <7eisvu$b0q$1@remarQ.com>
Source record: 71465
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Attention All Vintage Yaesu Guys!!!!
Just went through my stash of 6KD6 sweep tubes and found the following
Extras:
Three (3) NOS Sylvania
$22.00 each
Three (3) NOS RCA
$22.00 each
Two (2) NOS GE
$22.00 each
Two (2) USED GE Testing 92 out of 100 (almost new) $35.00
pair
Four (4) USED GE Testing 65 out of 100
$10.00 each
<ALL FOURTEEN (14) TUBES $225.00>
<All prices plus $4.05 shipping via USPS Priority Mail
Insured>

TNX

Steve

3882. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <370CF79D.3285E3E0@teleport.com>
Source record: 71466

Frequency-domain programs like the ARRL RF Designer are more suited to doing anything-vs-frequency analysis, but it can be done with SPICE. First, I recommend using the AC analysis. This automatically makes the source voltages and currents very small to insure a linear analysis. You can use a big sine wave source if you want, but the meaning of an impedance that changes over each cycle of the waveform is a bit fuzzy.

What I generally do is put a zero-volt voltage source in series at the point I want to measure, and use that to get the current. For example, if I'm interested in the impedance at node 10, I put a zero-volt source in series there (say, v0a). Then for a Probe output I add the trace v(10)/i(v0a). That will be the magnitude of the impedance. You can get phase, as I recall, but don't remember the nomenclature for sure. I think it would be vp(10)-ip(v0a). For real and imaginary (R and X) parts of the impedance, I think vr(10)/(i(v0a)*i(v0a)) will give you the R, and vi(10)/(i(v0a)*i(v0a)) the X. Try it on a simple series RL or RC circuit to make sure it's correct.

I recall in the dim past doing the multiplying or dividing directly by using a dependent source whose value was determined by the product of two others. But I don't recall if I did this with PSpice or some other variety, and don't have time to research it now. You might look into this possibility.

I don't know if it's still available, but I have a brief but excellent book on SPICE modeling. It's _Spice: A Guide to Circuit Simulation & Analysis Using PSpice_ by Paul W. Tuinenga. It was packaged with the PSPice demo back in the DOS days, but available separately from the publisher (Prentice Hall, ISBN 0-12-834607-0). The author is with MicroSim, the company that makes PSpice. I highly recommend it or its successor.

Roy Lewallen, W7EL

rob wrote:
>
> In article <37097055.16722321@news.atl.mindspring.com>, im@home.now (JD) wrote:
> >Hi all I am getting to grips with pspice, ''design lab 8'' I am in the
> >process of trying to design a small signal rf amp based on a 2n2219a
> >transistor. Its really serving as a buffer for a vhf oscillator.
> >
> >Is it possible to be able to display the impedance of a point in the
> >circuit with markers. What I would like to do is look
> >at the real and imaginary impedance feeding the base of the
> >2n2219a so as to get an idea of the best matching network to use.
> >

> >I would like to graph the impedance vrs frequency..
> >
> >Any help would be appreciated..
> >
> >Thanks JD..
> Hi there.
> If you get any help on this Impedance question ,could you
> pass it on to me.I would really appreciate it , as I would find
> it pretty useful.
> I tried calculating the impedance by applying a sine wave voltage
> (10mV) to the point I wanted to measure,and then measuring the current.
> If you take into account the phase differences between voltage and current
> you can calculate the impedance.It worked for simple R-C circuits.
> I tried it into the base of a transistor with C-E short(measure transistor
> input impedance) ,and it "seemed" to work(the resulting impedance
> was not totally unbelievable ;)) ,but have no idea if it was even vaguely
> accurate!.
> I am going to try find a transistor model that I have Input and Output
> S or Y parameters for,and see if they match what I measure.
> Cheers
> Rob

3883. FS: MICRO-MINI MICROPHONE ELEMENTS $3.50 EA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0804991207340001@murphy1.cts.com>
Source record: 71467
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.equipment,rec.aviation.restoration

SUB MINATURE MIC. POWERED BY 1.5 TO 9VDC.

PICT AND INFO AT:

http://209.239.34.153/murphyjunk/1_SPECIALS_UPDATED_FREQUENTLY

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3884. FS: 22 V 2.4 A Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: worley@53hill.com
Message-ID: <370D2053.C86@53hill.com>
Source record: 71468
Cross-posted to: misc.industry.electronics.marketplace,rec.radio.amateur.homebrew

FS: at least 20 ea. 22 volt 2.4 amp transformers in plastic case, with jack for computer type ac cord (120V 60Hz input). About 4" cubed, 3.5 lbs. each, unused mint condition, $3.75 each or 4/$14 or 10/$30 plus UPS. 36330 zip.(Alabama) Can be used with a rectifier and appropriate sized cap to power 28 V filaments, or as is for 21 V or 24 V sweep tube filaments. Also good for 24 V power supply. NOTE: Please REPLACE the "53" with "snow" to make "snowhill" or call 334-347-5281 day/eve/wknd.

3885. FS: MOTOROLA 202T $90 EA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0804991300120001@murphy1.cts.com>
Source record: 71469
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

202T, NEW COND. $90 EA.

MIKE

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

3886. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be823d$920d1760$4c3e63c3@default>
Source record: 71470

A 1944-5 radio altimeter used a few milliwatts (from a pair of push-pull acorn triodes) Tx power, about 1 GHz if I remember correctly, frequency modulated with a sinewaveform at 400 Hz. The Tx was a frequency modulated push-pull oscillator. Modulation was by using a small metal loudspeaker diaphragm as one plate of the tank tuning capacitor. With the cover off the case, the speaker could be heard humming away to itself.

Receiving and transmitting antennas were simple dipoles, one under each wing and screened by the fuselage.

The receiver simply mixed the the transmitted signal with the received signal to give a DC output proportional to height above ground. When the phase difference was zero so was the height, or very nearly so.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Monty Northrup <maddog@io.com> wrote in article
<370ac632.85471262@news.io.com>...
> On Tue, 6 Apr 1999 23:24:48 +0200, <beppe@ibm.net> wrote:
>
> >dear OM,
> >anyone can suggest me an altimeter radar design
> >to be usedon an ultra ligth plane ?
> > (sorry for the bad english, hoping anyway to be clear)
>
> This may be one case where homebrew is NOT the answer,
especially
> if you have to ask for help. If I made a suggestion, and
you crashed,
> I'd have a hard time living with myself.
>
> In the USA, I think it's even illegal to use non-type
accepted
> flight-related electronics, and probably for good reason.
>
> Wanna know how to make a toaster?
>
> 73,

> monty
>
>
>

3887. CXA1356N

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Stephen Corbin <corbin@zk3.dec.com>
Message-ID: <370D0ADC.1B1052BB@zk3.dec.com>
Source record: 71471

I am looking for a data sheet on the Sony CXA1356N PLL.
It has been discontinued from Sony and their local field
office as well as the corporate office no longer have
data sheets on this part.

Can anyone send me a photocopy or fax/email of this
data sheet? Any help would be greatly appreciated.

- steve corbin

Reply to:
corbin@cwixmail.com

3888. yet another file archive

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: hinermad@worldnet.att.net
Message-ID: <370d125e.4336853@206.132.26.100>
Source record: 71472

I'm contemplating setting up a Web page with an archive of Circad files (schematics and PCB layouts). You you think this would be useful? I've found several project files in the ARRL archive that are (or contain) Circad files.

If you're not familiar with it, Circad is a schematic capture and PC board layout package that runs on a personal computer. The commercial version is somewhat expensive (in the hundreds-of-dollars range, exact figure escapes me), but the publisher, Holophase, makes a hobbled demo version available for download for free. The only limitation I've encountered in the demo is that it won't output Gerber files (which are pretty much required for a commercial board fabricator to make your boards), and it won't translate certain other PCB software file formats. It -does- allow you to save schematics and PCB layouts to disk, and it will let you plot them on any Windows-compatible graphics device such as a laser or inkjet printer. In fact, I've made a couple of PC boards already using a laser printer and toner transfer paper. Not quite up to commercial board standards, but good enough for most hobby work.

Anyway, would you like to see a selection of Circad project files? And, do you have any you'd like to share? Credit for sources would be included in the archive.

Dave

P.S. I'm not associated with Holophase, and don't stand to gain anything by promoting their products. D.

3889. 6 meter HB 2KW amp $$$???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: gudguyham@aol.com
Message-ID: <19990408180909.03479.00000052@ng156.aol.com>
Source record: 71473

Hi All, a local ham built a nice 8877 2kw homebrew amp. It has a Peter Dahl transformer, antenna change over relay system, large blower to cool the tube, and full metering. I was wondering if any of you out there could tell me what such an amp is worth? I have seen this amp put 2KW into a dummy load on 50.150mhz. Was wondering what I should pay for such an amp if I was to deciede to buy it. Any help anybody? Pleae sent direct e-mail to me if you have any ideas on this. Thanks.....LP

3890. Re: Another batch of diode removal questions =)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Nigle <evolx3@hotmail.com>
Message-ID: <7ejbcr$26o$1@autumn.news.rcn.net>
Source record: 71474

Don't crush the diodes. Use the proper tools and procedures to do the job correctly. Yes there are many ways to do one thing, some are risky, some are not. It really is no big deal to work on surface mount equipment, it just takes a little change of thinking and a good attitude towards the hobby in general. There are Elmers....and there are Elmer Fudds......

If you crush surface mount diodes:

1) Are you certain that the part is a diode? keeping old parts intact can help figure out what the critter really is. Surface mount parts often do not have much in the way of markings. Sometimes the only way to really tell what something is by the schematic or experience (if you have worked on many many smt things) Don't assume.

2) Do you know if putting pressure on the diode will damage the circuit board? Are you certain its just a single layer or multilevel board? Sometimes pressure on one side of a board and/or one area will cause a bowing of the board, especially if still in a chassis. This could cause a new problem in another area if you are not careful and if the board you are working on cant take the abuse....

3) Even if you crush the diodes with small diagonal pliers and thus not putting pressure on the board in any way.....are you following good ESD (Electro Static Discharge) protocol. ESD is real. Crushing diodes might be ok for a rush job, but are you in a rush? Wouldn't you rather wait and do a good job and be proud of that instead of ruining a rig in a quick second. There are also dangers with parts made with Beryllium Oxides..But I wont get into that in this situation...

4) Even with the diode crushed, the end caps of the diode will still be in place and have to be desoldered...why make things difficult?

5) Even if crushing a diode to quickly disable its function......it will look like garbage, and a possible future buyer or radio tech of the rig will cringe at the sight, and wonder what other things has this radio been thru?

For removal of these diodes, (now that I have offended the diode crunchers) here are suggestions:

Use solder wick and a tiny drop of flux on the wic. Use a good Weller or Hako grounded tip solder iron . Be certain you have a good clean tip and a ESD safe workbench. Also use a good magnifying viewer, the kind with a round lens and a round florescent light around the lens that bolts to a workbench will do.

Place the solder wick over one end of the diode, apply heat with flat side of iron tip. Solder should flow from crkt board/diode to the solder wick. Copper solder wick will take on solder and have a "tinned appearance. This removes some of the solder from the board, the solder is actually a conductor and a kind of "glue" for the part... Do this long enough to get most of the solder up. The part will not be free yet. Do same to other side of diode. Now, use a good pair of tweezers to grasp the center of the diode. Take the entire side of the tip of the iron and quickly try to hit both sides of the diodes "endcaps", Diode should pop off board, and your solder pads should still be good for installation of another diode, if you didn't heat the diode/crkt board too long.

For practice, pick up a few destroyed VCR's at a flea market or hamfest...a few bucks on a junker will get you some smd's to remove for practice and some fun spare parts...the tuner section of the VCR may have a cool rf downconverter/tuner in it that can be used for many things....

For a reference on soldering, find a older US Mil-Spec manual on soldering...smt technology has been around for a while in mil gear, it works, is more reliable, compact, vibration proof, easy to manufacture and when you really get into it simple to troubleshoot. Naturally there are some problems, especially with cheap companies skimping on wave soldering...but what is perfect?

For some good help if you are totally bewildered, don't forget about your local vo-tech school or technical school. They would probably be able to remove and install such a part.

JHulet <jhulet@aol.com> wrote in message news:19990406003319.28813.00003063@ng119.aol.com...
> Hello folks,
>
> I got several responses about diode removal and I really appriciate everyone of
> the responses! I failed to state that I was looking for removal of "surface
> mount" diodes, this would have narrowed the responses to the topic that I was
> looking for! =) Oh well, I did learn a little about both.
>
> I was surprised to hear that some Hams actually "crush" diodes to remove them.
> I would imagine this is a permanent "removal", and that it would make it
> difficult to reinstall a diode back into its place. My question is, is it
> acceptible to actually crush a surface mount diode as a way to disable its
> function? The rado in question is a ICOM 706MKII and is out of warranty. I
> plan on keeping this rig for quite a long time, I've had it since 1997. It is
> installed on my sailboat and I am looking for a back-up rig that would be able
> to lend communication assistance no matter what the frequency in the case

of an
> emergency while on the water. I am looking for extended tx capablities on
> Marine SSB as well as the VHF Marine band.
>
> I am not experienced at removing items from circut boards, but I could
manage
> to crush a diode or two.. (sounds funny) If I were aware of an
experienced
> local Elmer that was willing to take my radio into his hands to perfrom
this
> mod in a more conventional way I would like to stand by and watch it
performed.
> I am still in the process of looking for someone or learning to do so
myself.
>
>
> Thanks again to all !
>
> Jason S. Hulet
> W1WOW
>
>

3891. 220 Amp plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: tomk89@aol.com
Message-ID: <19990408185347.28880.00000315@ng-cg1.aol.com>
Source record: 71475

Can anyone point me in the direction of plans or schematics for a solid state 220Mhz SSB/CW amplifier? Looking for about 150 - 200 watts out for 15 in.

Thanks!

Tom Knee - KB2SSS
TOMK89@aol.com

3892. Need ICOM 706 MKII adjustments on the main board.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Dave <Hey@screw.your.spam.com>
Message-ID: <7ejeqb$7uf$1@bgtnsc03.worldnet.att.net>
Source record: 71476
Cross-posted to: alt.ham-radio.hf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Gang
Would anyone have any information on the Adjustments on the main
board for a 706 MKII? The owners manual is very sparse on this.
If you have any information you would like to share you may send it to me via
E-mail at D.R.Abshire@att.net

Anyway my 706MKII is only putting out about 65-70 watts PEP on HF and 20-30
on 6 meters. 2 meters seems to be OK. Oh by the way I did check this into a
dummyload.......

TNX & 73's

Dave

3893. Re: tone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Russ Nixon <rcnixon@mindspring.com>
Message-ID: <370D5A56.70C7@mindspring.com>
Source record: 71477

-- Ralph Mowery wrote:
>
> Any audio tone generator circuit can be used as long as it is a very
> clean sine wave. When a pure sine wave is fed into a ssb audio
> circuit, it will generate the equivilent of a cw signal.. You might
> have to tune off a little with the RIT control so that you are
> receiving and transmitting 'on the same frequency'.
>
> Scott wrote:
> >
> > Can someone point me in the direction of a circuit to generate CW that can
> > be directly fed into the microphone input of a ssb rig to use for CW?
> >
> > Thanks

Our local guru has suggested the use of a DTMF chip and only selecting
one row or column. This has the benefit of providing a sine wave and
eight different tones. You could get clever with switches or Berg
jumpers to select the tone you want. He is looking into designing an
MCW generator to add CW practice to our local repeater.

Russ Nixon - KF4WXD Subtract 9s to e-mail me
The clock of life is wound but once and no man has the power
to say just when the hands will stop, nor at what day and hour.

3894. Re: yet another file archive

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-08 00:00:00 UTC
From: Cyberhax <cyberhax@thegrid.net>
Message-ID: <V2fP2.5$Ye.711@alfalfa.thegrid.net>
Source record: 71478

Dave,

I've used CIRCAD before and would like to see a site as you describe. When I downloaded the "free" version of CIRCAD from their web page, it was an earlier version but was a "full" version that included gerber file output utilities?

Shawn WB6JWB

David Hinerman wrote in message <370d125e.4336853@206.132.26.100>...
>I'm contemplating setting up a Web page with an archive of Circad
>files (schematics and PCB layouts). You you think this would be
>useful? I've found several project files in the ARRL archive that are
>(or contain) Circad files.
>
>If you're not familiar with it, Circad is a schematic capture and PC
>board layout package that runs on a personal computer. The commercial
>version is somewhat expensive (in the hundreds-of-dollars range, exact
>figure escapes me), but the publisher, Holophase, makes a hobbled demo
>version available for download for free. The only limitation I've
>encountered in the demo is that it won't output Gerber files (which
>are pretty much required for a commercial board fabricator to make
>your boards), and it won't translate certain other PCB software file
>formats. It -does- allow you to save schematics and PCB layouts to
>disk, and it will let you plot them on any Windows-compatible graphics
>device such as a laser or inkjet printer. In fact, I've made a couple
>of PC boards already using a laser printer and toner transfer paper.
>Not quite up to commercial board standards, but good enough for most
>hobby work.
>
>Anyway, would you like to see a selection of Circad project files?
>And, do you have any you'd like to share? Credit for sources would be
>included in the archive.
>
>Dave
>
>P.S. I'm not associated with Holophase, and don't stand to gain
>anything by promoting their products. D.
>

3895. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: "Paul S. Hinman" <pshinman@shaw.wave.ca>
Message-ID: <370D7619.935B5C05@shaw.wave.ca>
Source record: 71380
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Many of us up here will decline to make a purchase from the US if they insist on
using UPS for just that reason.
I got ding $145 brokerage on a $600 item once. I have found the US postal service
to be one of the best ways
to get stuff accross the 49th parallel.

Paul VE6LDS from the other side of the story

Mark Fraser wrote:

> I think you'll find that items for PERSONAL use do NOT require a broker.
> UPS, however, assumes that EVERYTHING is commercial, so they feed things
> thru a broker. For 30 bucks or so. Use the post office. Check with FEDEX, as
> they may be more friendly, but at higher transport rates. There is a publication
> put out
> by U.S. Customs, outlining the rules. Be careful in following the rules.
> Also be conscious that things like scanners that can receive cellular frequencies
> can
> be considered to be contraband, under U.S. law. /mark
>
> Don Trynor wrote:
>
> > >Thanks for reading this message. I am looking for information
> > >from someone who has bought something on the news group
> > >from an individual living in Canada. What are the import duties
> > >or tariffs if any imposed by the US customs? I sure would hate to
> > >buy this radio and find out that there is a 50% or more tariff on the thing!
> > > I have not found a clear answer on the 'net.
> >
> > Randy:
> >
> > If you live in the US and are purchasing something in Canada, only US customs
> > may impose duties on your purchase. If the product is made in the US or if
> > it's value us less than $50US, you will have not problems and to my knowledge,
> > no duties will be charged. If it is not either of the above, they will asses a
> > tax based on what it is (ie 5% or the such). You should check with them
> > concerning this. I'm not sure on this, but there may be brokerage fees charged
> > by the shipper to move it across the border.
> >
> > Don VE9XF

3896. EBAY- Autek QF-1A Filter "give-away"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990409000257.03220.00000205@ng145.aol.com>
Source record: 71381

Hi Guys;
Well not exactly a "give-away" but darn close to it.
Its at only $21 with 1 day left!
Heres the URL Folks!
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=86210401

Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

3897. Ebay- Autek QF-1a Filter "give-away"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990409000546.03220.00000207@ng145.aol.com>
Source record: 71382

Hi Guys;
Well not exactly a "give-away" but darn close to it.
Its at only $21 with 1 day left!
Heres the URL Folks!
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=86210401

Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

3898. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: maddog@io.com
Message-ID: <370d9ace.270998849@news.io.com>
Source record: 71383
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

On Wed, 07 Apr 1999 18:02:53 -0700, clyde edgar
<cedgar@pacificnet.net> wrote:

>I bought a music synthesizer last year for $300 USD, I think I paid $15 shipping
>for 10# and U.S. Customs charged a $30 tarif and there was a $25 fee from a
>broker or someone like that. I wouldn't bother doing it again unless its really
>a rare item.

Sheesh! What happened to "free trade"?

monty N5FC

3899. How to build a repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: a_powers@my-dejanews.com
Message-ID: <7ekafsvft1@nnrp1.dejanews.com>
Source record: 71384

I want to, or at least try to build, devise, construct (whatever) a repeater out of two radios, specifically two Relm RH256NB becuase of their versatility. I don't want worldwide coverage, just enough to get around town. If anyone knows how I can do this (WITHOUT SPENDING LOTS OF MONEY) please help.

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3900. thanks [Re: MC1550 data?]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Jussi Saksa <jussi.saksa@lmf.ericsson.se>
Message-ID: <370DA672.B9840951@lmf.ericsson.se>
Source record: 71385

Hello,

thanks to all of you who replied
to me, I now got the picture. The
MC1550G's were used in VHF hand radios
manufactured by Sonab, later Ericsson
Radio, as an IF amplifier for 10,7 MHz.

The batch I have were scrapped by the factory's
quality control, but I think they work nevertheless.

There were two MC1550G's connected
in series (DC supplies that is) so that each amp got half of
the supply voltage. This was done in order to
keep the IF amplifier's total power consumption low.

But it also meant that the ICs had to be sorted
before installation so that there was a 'matched pair',
i.e. the voltage drop over each amp was equal.
And these ICs I have were outside the allowed voltage range.

Needless to say, these VHF radios were quite expensive and
were replaced in early 80's by synthesized units.

regards,
Jussi Saksa

3901. Re: yet another file archive

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: hinermad@worldnet.att.net
Message-ID: <370df412.62124895@206.132.26.100>
Source record: 71386

On Thu, 8 Apr 1999 21:14:24 -0700, "Cyberhax" <cyberhax@thegrid.net>
wrote:

>Dave,
>
>I've used CIRCAD before and would like to see a site as you describe. When I
>downloaded the "free" version of CIRCAD from their web page, it was an
>earlier version but was a "full" version that included gerber file output
>utilities?

I don't know when this current version was issued (although Help:About
show version 4.06d, released 1/15/99). But it definitely doesn't
output Gerber files.

Dave

3902. Rqst for Comments -- Build your Own... -- Book

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: msb <msbSPAMMAPS@newpony.com>
Message-ID: <7ekspg$n5l@sjx-ixn5.ix.netcom.com>
Source record: 71387

Considering building the rig described in

Build Your Own Intelligent Amateur Radio Transceiver
by Randy Lee Henderson
ISBN: 0070282641

Anyone care to share their experience w/ this project?

msb

3903. Homebrewer's Heaven Web Site!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: af4k@earthlink.net
Message-ID: <370dff02.10755416@news.earthlink.net>
Source record: 71388

http://home.earthlink.net/~af4k/hamlynx/hamhomeb.htm

3904. need help with ramsey ele. tvt-1 transmitter (need instructions/manual)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: dakota <dakota@ccwf.cc.utexas.edu>
Message-ID: <7el00t$ef1$1@geraldo.cc.utexas.edu>
Source record: 71389
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

ramsey no longer has any information on theis board !!!!

please contact me if you can make me a copy of your manual, instrructions
or schematic.

I cant get this thing to tune up all transistors check OK but I dont
know if they are in the right positions.

i got this in a trade - I got taken I believe - if you have any instructions
then please send me a copy -

I will reimburse your copy and mailing costs

thanks

richard friedrich
wd5--hrp

3905. Re: How to build a repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Tony <sa95@creative-net.net>
Message-ID: <370E0647.A9A03C5F@creative-net.net>
Source record: 71390

I'm not sure the 256nb is a good choice for repeater service,are you using them because of they are frequency aqile??? If so,keep in mind the logistics of changing duplexer/circulator frequency. Also the power output would need to be lowered to some degree because of duty cycle limitations.

Tony

3906. Question re effect of increasing tuning capacitor range

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: stickler@sirius.infospring.com
Message-ID: <7el1r5$3dg$1@sirius.infospring.com>
Source record: 71391

Hey folks,

I have a 15m QRP transceiver (cf. CQ magazine, Sept 90) which uses
a 50pF variable tuning capacitor and has approx 120KHz tuning range
over the 15m band.

I just inherited a very nice 140pF variable capacitor (Hammarlund)
and am curious if swapping it for the existing 50pF cap would give
me a wider tuning range, possibly covering the whole 15m band.

If this would work (or if not) could someone please explain why?

Thanks,

Patrick

KC4YYY, OH2LUV

==
Patrick Stickler * stickler@infospring.com * www.infospring.com
==

3907. Simple AM transmitter: Updated page!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: ********** ******** ********** ******** <tholaria@the.forthnet.gr>
Message-ID: <01be8296$e8effda0$65dddbc2@SCTHAM.forthnet.gr>
Source record: 71392
Cross-posted to: alt.radio.pirate,alt.radio.free,rec.radio.amateur.homebrew,relcom.radio.diagrams,alt.ham-radio.am

Build a little AM transmitter!

http://www.freeyellow.com/members7/gearloose/amxt.htm

3908. Re: tone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: c.c.tqbssz@toneXgener.killspam.us.com
Message-ID: <7el66u$k8f$1@samba.rahul.net>
Source record: 71393

Russ Nixon (rcnixon@mindspring.com) wrote:
: -- Ralph Mowery wrote:
: >
: > Any audio tone generator circuit can be used as long as it is a very
: > clean sine wave. When a pure sine wave is fed into a ssb audio
: > circuit, it will generate the equivilent of a cw signal.. You might
: > have to tune off a little with the RIT control so that you are
: > receiving and transmitting 'on the same frequency'.
: >
: > Scott wrote:
: > >
: > > Can someone point me in the direction of a circuit to generate CW that can
: > > be directly fed into the microphone input of a ssb rig to use for CW?
: > >
: > > Thanks

: Our local guru has suggested the use of a DTMF chip and only selecting
: one row or column. This has the benefit of providing a sine wave and
: eight different tones. You could get clever with switches or Berg

Is this really a good idea? Do DTMF chips really generate clean / low
distortion sine waves?

Stephen

: jumpers to select the tone you want. He is looking into designing an
: MCW generator to add CW practice to our local repeater.

: Russ Nixon - KF4WXD Subtract 9s to e-mail me
: The clock of life is wound but once and no man has the power
: to say just when the hands will stop, nor at what day and hour.

3909. Re: How to build a repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <7el77m$pe8$1@hirame.wwa.com>
Source record: 71394

In article <7ekafsvft1@nnrp1.dejanews.com>, a_powers@my-dejanews.com wrote:
>I want to, or at least try to build, devise, construct (whatever) a repeater
>out of two radios, specifically two Relm RH256NB becuase of their
versatility.
>I don't want worldwide coverage, just enough to get around town. If anyone
>knows how I can do this (WITHOUT SPENDING LOTS OF MONEY) please help.
****

Keep in mind about possible interference with other repeaters/frequencies in use. As you increase your accessability to your own repeater you become a possible source of interference to others. I recommend you check with your area repeater coordinator once you have worked out the machine issues.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

3910. Repeater for Wilson

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: jonkoop@my-dejanews.com
Message-ID: <7eli0mvfo1@nnrp1.dejanews.com>
Source record: 71395

I have 3 Wilson 2510 tranceivers. Looking for a schematic to make a repeater
for our search and rescue team. Also need to know how to configure the ant.
for repeater use. Any ideas would be greatly appreciated.

Thanks

Jon Koop

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3911. Re: Homebrewer's Heaven Web Site!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <370E4DED.339E@ixpres.com>
Source record: 71396

Brian Carling wrote:
>
> http://home.earthlink.net/~af4k/hamlynx/hamhomeb.htm

Brian OM,

One look at those prices, sez I don't need to bookmark this one!

Don, W6JL

3912. Homebrew antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Stephen Hoch <shoch@COMCAT.COM>
Message-ID: <370E557C.E190AD24@COMCAT.COM>
Source record: 71397

Have lots of aluminium and need plans for all types of antennas. Need contacts for building or buying gamma matches. Any Help would be appredіated. Tried the antennabooks but getting nowhere with gamma matches.

Steve WU3I
sghoch@comcat.com

3913. WTD: UHF mini-plexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Michael Smith <mjs@nolnet.net>
Message-ID: <ejtP2.74$8c.3416@news6.ispnews.com>
Source record: 71398
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

I am looking for a UHF mini-plexer, anyone have one they would like to part with? Please E-mail me with details...

Mike

mjs@nolnet.net

3914. System Failure ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7elt93$8up$1@nnrp1.dejanews.com>
Source record: 71399

Is there any problem with Dejanews?????
The messages I am getting are too old.
What happened?

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3915. Re: System Failure ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <370E7E83.3F54BC7E@my-dejanews.com>
Source record: 71400

Puppin wrote:
>
> Is there any problem with Dejanews?????
> The messages I am getting are too old.
> What happened?
>
> Gilson Puppin - PU5MPL
>

I noticed the same thing, this week. I sent an email to them
but I haven't gotten any response.

Martin

--
Martin E. Meserve KB7EQS martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3916. Re: Rqst for Comments -- Build your Own... -- Book

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <370E84C9.CBABC80E@starc.org>
Source record: 71401

Haven't seen the book... but I'd be interested in getting a copy and
finding out what comment's you received on it :)

--Tom
KB1CGA

msb wrote:

> Considering building the rig described in
>
> Build Your Own Intelligent Amateur Radio Transceiver
> by Randy Lee Henderson
> ISBN: 0070282641
>
> Anyone care to share their experience w/ this project?
>
> msb

3917. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Chris <ck5@ix.netcom.com>
Message-ID: <370E8485.939@ix.netcom.com>
Source record: 71402
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Monty Northrup wrote:
>
> On Wed, 07 Apr 1999 18:02:53 -0700, clyde edgar
> <cedgar@pacificnet.net> wrote:
>
> >I bought a music synthesizer last year for $300 USD, I think I paid $15 shipping
> >for 10# and U.S. Customs charged a $30 tarif and there was a $25 fee from a
> >broker or someone like that. I wouldn't bother doing it again unless its really
> >a rare item.
>
> Sheesh! What happened to "free trade"?
>
> monty N5FC
This does not apply to amateur radio equipment. There's NO duty on ham equipment. Otherwise for all other stuff there's Duty about 5-10% and taxes about 7-8%. Then if you use a broker it cost even more. If they think you claimed too low they can appraise it for you at a using some rediculous method. If they catch you tring to hide it in a car they can impound the car and charge you double duty and taxes to get your item back or it goes to auction. Remember to mark whatever you are sending clearly "AMATEUR RADIO EQUIPMENT" 73 Chris

3918. found 455kHz BFO ckt for AM SW RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Mike & Coreen Smith <ve9aa@nbnet.nb.ca>
Message-ID: <370ED6C5.9D6B40A5@nbnet.nb.ca>
Source record: 71403
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Hi, Several weeks ago I was looking for a BFO cct/ckt for an AM SW rx.
Mark <mcaldera@ix.netcom.com> sent me a nice little cct which I
initially
didn't think worked, but it turned out I had a bad breadboard ---
(20yrs old+) and a low Q IF can.
New board, new can, cct works like a charm !

This cct (or 'ckt' if you prefer) will allow SSB/CW/DATA reception
on an AM receiver that uses a 455kHz I.F. (most have that frq i.f.).

If anyone wants the .bmp file for this VERY simple cct, just let me
know.
I have it saved in b/w format, which makes it quite small (44kB in size)

Thanks again to all for their suggestions !

Mike ve9aa (and part time SWL)

--
Michael Smith
271 Smith Road
Waterville Sunbury Co,
New Brunswick Canada E2V 3V6
<ve9aa@nbnet.nb.ca>

3919. WTB: MOTOROLA RADIOS : VISAR, SPECTRA, MT2000, HT1000, GM300

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Sparky_Prog@hotmail.com
Message-ID: <370EA99B.1427@hotmail.com>
Source record: 71404
Cross-posted to: alt.ham-radio.mods,alt.ham-radio.marketplace,alt.ham-radio.fm,rec.radio.swap,rec.radio.scanner,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,alt.radio.scanner,alt.radio

Looking for :
Motorola (UHF):
VISAR (UHF/ VHF) (Can have DTMF or not)
MT 2000 (Can have DTMF or not)
HT 1000
GM 300
SPECTRA (DASH MOUNT)

All radios must be in working condition and contain everything need for proper operation (Bat, Mic, Power Cables, Ant etc...). Also Must be to work within the 470 - 512 Mhz.

Contact me with an asking price if you have any of the above that you are willing to let go of.

Let me know
Kevin, N3JMD

3920. Re: Question on import duties from Canada.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <370EB3F9.7ABC8545@erols.com>
Source record: 71405
Cross-posted to: rec.radio.swap,alt.ham-radio.marketplace,rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

It is my understanding that there is an exemption of some type for amateur radio equipment purchased for personal use (not resale). It's been a while and I don't remember the details but I purchased a PTC-II from SCS in Germany for $900 plus and was not accessed any import duties on it.

3921. WTB:UHF [70cm] mobile motorola duplexer, please ;-)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: WebMonkey <click@thebottom.com>
Message-ID: <370ED33C.17BF@thebottom.com>
Source record: 71406
Cross-posted to: rec.ham-radio,rec.radio.amateur.equipment,rec.radio.amateur.swap,rec.radio.amateur.homebrew

the below listed repeater needs a 70cm motorola mobile duplexer.
it only runs 25 watts output on 70cm so it's a good match.
quite awhile ago, someone was selling them for $50 but no contact.
anyone out there care to help out the machine.
thanks for your time.
email below
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman

3922. WTD: UHF mini-plexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Michael Smith <mjs@nolnet.net>
Message-ID: <s8IP2.17399$R3.145629@news7.ispnews.com>
Source record: 71407
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

I am looking for a UHF mini-plexer, anyone have one they would like to part with? Please E-mail me with details...

Mike

mjs@nolnet.net

3923. Mods Kenwood TM732 & TH48

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7els91cco2@lola.ctv.es>
Source record: 71408
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

3924. Mods Yaesu FT847

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7els96cco3@lola.ctv.es>
Source record: 71409
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

3925. Motorola GP300 & GM300

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7els90cco1@lola.ctv.es>
Source record: 71410
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

3926. Mods Motorola McMicro

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7els99cco6@lola.ctv.es>
Source record: 71411
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

3927. Motorola RIB design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-09 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7els98cco5@lola.ctv.es>
Source record: 71412
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

3928. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: "J. Andy Thompson" <andy@kffm.com>
Message-ID: <370FBB1E.A4F23DCF@kffm.com>
Source record: 71329

I have built linears calling for 3-500's but used 4-400's with the extra grid grounded. Works great! Most any amp with 3-500's can use the 4-400's if you ground the screen grid with the others. Being a broadcaster, I have access to 4-400's, so I use them.

4-1000's also work in place of 3-1000's if you ground the extra grid. That's my next project, since I have several of them.

Andy
W7CXA

3929. Re: 4-400 ideas?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <370FC3A8.784BD531@att.net>
Source record: 71330

Using 2 4-400s for a long time in Hbrew KW. An exterior
pix is on my web site listed below. Have 2 .jpg images
(160K & 190K) which are schematics of the PS and the rf
deck. Can attach to email if you like....Built years ago
before my documentation was as "clean and computerized"
(translate cad) as now.
Woody

"J. Andy Thompson" wrote:
>
> I have built linears calling for 3-500's but used 4-400's with the extra
> grid grounded. Works great! Most any amp with 3-500's can use the
> 4-400's if you ground the screen grid with the others. Being a
> broadcaster, I have access to 4-400's, so I use them.
>
> 4-1000's also work in place of 3-1000's if you ground the extra grid.
> That's my next project, since I have several of them.
>
> Andy
> W7CXA

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

3930. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: im@home.now
Message-ID: <370fc622.15608712@news.atl.mindspring.com>
Source record: 71331

Thanks for the info roy. The book is available from
amazon.com for $40.00, looks like a buy...

bfn..JD

3931. Re: RTTY decoder circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Harry Lythall <no.one@no.where>
Message-ID: <7eogti$t13$1@zingo.tninet.se>
Source record: 71332

Hi John,

A few years ago I was trying to tell a friend that I did not want a teleprinter but I lied. I made a ridiculous offer and it was accepted. I ended up with a Creed 7E/RP and nothing to use it. I decided to design my own TU so I developed a TU using the NE565 PLL decoder. You can find it on my homepage at http://hem2.passagen.se/sm0vpo but I would be interested in your circuit. My E-mail address is sm0vpo@geocities.com My TU is also equipped to drive an RS232 interface and I used to have a BASIC program that converted RTTY (Baudot) to ASCII code. It is quite easy to do but I no-longer have the program.

The basic problem with the NE567 solution is that the tones must be on the right frequencies (1275 & 1445Hz) but a PLL circuit using the NE565 tracks the tones and gives a square-wave if the tones are within the AF band. QRM is a problem (like on the HF bands), but for VHF it is ideal.

If you listen to RTTY on AM you will hear nothing. FSK appears as a continuous carrier that occasionally (well, quite often actually) wobbles in frequency but the amplitude should not change. Adding a BFO will resolve it in exactly the same way as a CW or an SSB station.

When I started on RTTY I know nothing. I never even heard of the 88mH torroidal chokes and the like. That is why I used a PLL system. The encoder was a simple multivibrator!

David Cunningham wrote in message <7eoa3ranj1@plutonium.btinternet.com>...
>I recently found a circuit for a simple RTTY tone decoder, based on the
>NE567 PLL, in a 1987 magazine. I am considering making the decoder, and
>wondered if I would be likely to find much RTTY activity on the short
>wavebands, and if RTTY is used much in amateur radio these days. I would
>also like to know how I could connect it to my computer (standard 5-volt
>logic output), and where I can find suitable software on the internet.
>Could anyone describe what RTTY signals sound like on an AM radio? If
anyone
>on the newsgroup wants the cct, I can scan and email it.
>
>Thanks, 73 de John.
>
>
>

3932. WTB: HP Probe for 4815A RF Vector Impedence Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7eol63$8tq$1@news2.bit-net.com>
Source record: 71333
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

A friend is in need of the matching probe for his
HP 4815A RF Vector Impedence Meter.

I told him I'd ask around on the Internet.

Thanks! & 73,

~~~

\ ~ / .... DavidC K1YP@qsl.net or 603-894-1174
~~~

3933. Re: EBAY- Autek QF-1A Filter "give-away"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <923786970.811.54@news.remarQ.com>
Source record: 71334

RLucch2098 <rlucch2098@aol.com> wrote in message
news:19990409000257.03220.00000205@ng145.aol.com...
> Hi Guys;
> Well not exactly a "give-away" but darn close to it.
> Its at only $21 with 1 day left!
> Heres the URL Folks!
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=>
> Thanks es 73....Rich WA2RQY (1961)
> WA2RQY's "confusion Radio" Web-Page
> Http://members.aol.com/rlucch2098/index.html
> RLUCCH2098@aol.com
> "Keep those heaters on"

This is not a sale group. Please don't spam.

- Bob W7OV

3934. Elecraft K2 - Easy to Build

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: "Eric Swartz - Elecraft, WA6HHQ" <erics@elecraft.com>
Message-ID: <370FF1F5.B9A7FA10@elecraft.com>
Source record: 71335

I've noticed several messages here asking how difficult the K2 is to build and how much experience is required.

We've designed the K2 so that anyone with good soldering skills can build it. If you have build any other kit, such as the Wilderness NC40, Sierra, Ten-Tec kits etc, you will have no problems building the K2. It is just as easy (sometimes easier) to build - it just has more parts to stuff in the PCB. Since we only use through hole parts it doesn't require tweezers and a microscope to build.

We eliminated the use of wiring harnesses with our 'wireless' design and we also built in key test equipment (volt-meter, freq-meter etc.) so that you don't need a room of equipment to align it. Actually only a digital VOM is suggested.

For more info, check out http://www.elecraft.com . We have a section dedicated to user comments and a complete downloadable manual.

We'll also be at Dayton in booth #192 if you want to see it first hand.

Please feel free to email us if you have any questions.

73, Eric WA6HHQ

3935. Re: Deja News Messages Frozen - Help !!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904102202190.2070-100000@Ocean.CAM.ORG>
Source record: 71336

On Sun, 11 Apr 1999, Puppin wrote:

> I'm trying to read the messages posted to this news group using my browser
> (Netscape 4.08 pointing to dejanews.com), as I used to do.
> The newest message I get is dated 6, april.
> I can post a new message but I can't access it by the regular way, I mean,
> ordering my browser to get the new messages.
> I can read the message I posted, using the feature "author posting history".
> Can anybody help me to solve this??
> I wrote to Deja News but didn't get an answer until now.
> Thank you.
>
> Gilson Puppin - PU5MPL

I just checked, and I see the same thing. I know I posted here today, and it's there if I do a search for my email address, but it's not there if I look for it by browsing the newsgroup.

This is reminds me of a year and a half or so ago, when a newsgroup that I'd checking at dejanews suddenly was no longer there. Dejanews still collected the messages, and they'd show up if you did a search, but they de-listed the newsgroup because there was too little traffic.

I did note earlier in the week that dejanews has changed yet again their site. Now, when you browse a newsgroup, you get a list of threads, and you have to click them on to see the messages, whereas before you would just see a list of messages more or less organized by date.

I suspect that there is some connection between the new format (I noticed it just a few days ago and assume it is a recent change) and the messages not appearing. I would guess that they haven't got the bugs out, unless I'm wrong in assuming that the change took place just a few days ago.

Dejanews keeps changing itself. A while back they eliminated the ability to see threads if you did a search for a keyword. I didn't find it too useful a change. This new change may be useful to those who use dejanews for everything, but I find it not useful to me when I search for missing messages and don't want to wade through various levels to check. It would be nice if when they changed things, they'd keep the old too.

Michael VE2BVW

3936. Re: tone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Russ Nixon <rc9nixon@mindspring.com>
Message-ID: <370FF84A.1056@mindspring.com>
Source record: 71337

c.c.tqbssz@toneXgener.killspam.us.com wrote:
>
> Russ Nixon (rcnixon@mindspring.com) wrote:
> : -- Ralph Mowery wrote:
> : >
> : > Any audio tone generator circuit can be used as long as it is a very
> : > clean sine wave. When a pure sine wave is fed into a ssb audio
> : > circuit, it will generate the equivilent of a cw signal.. You might
> : > have to tune off a little with the RIT control so that you are
> : > receiving and transmitting 'on the same frequency'.
> : >
> : > Scott wrote:
> : > >
> : > > Can someone point me in the direction of a circuit to generate CW that can
> : > > be directly fed into the microphone input of a ssb rig to use for CW?
> : > >
> : > > Thanks
>
> : Our local guru has suggested the use of a DTMF chip and only selecting
> : one row or column. This has the benefit of providing a sine wave and
> : eight different tones. You could get clever with switches or Berg
>
> Is this really a good idea? Do DTMF chips really generate clean / low
> distortion sine waves?
>
> Stephen
>
> : jumpers to select the tone you want. He is looking into designing an
> : MCW generator to add CW practice to our local repeater.
>
> : Russ Nixon - KF4WXD Subtract 9s to e-mail me
> : The clock of life is wound but once and no man has the power
> : to say just when the hands will stop, nor at what day and hour.

I would have to look up the specs in my telephone engineering handbook,
but I have been told that an individual row or column indeed produces an
acceptable sine wave. It has to be better than the stuff a 555 or 556
produces. I guess that it would depend on the part used too, wouldn't
it?

--
Russ Nixon - KF4WXD Subtract 9s to e-mail me
The clock of life is wound but once and no man has the power
to say just when the hands will stop, nor at what day and hour.

3937. Re: Rqst for Comments -- Build your Own... -- Book

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Russ Nixon <rc9nixon@mindspring.com>
Message-ID: <370FFD28.7D32@mindspring.com>
Source record: 71338

msb wrote:
>
> Considering building the rig described in
>
> Build Your Own Intelligent Amateur Radio Transceiver
> by Randy Lee Henderson
> ISBN: 0070282641
>
> Anyone care to share their experience w/ this project?
>
> msb

I have the book. The board set is available from FAR circuits for
around $120 (US) as of September '98. There is a bit of mechanical
fabrication in the tuning hardware that is mostly left to the ingenuity
of the builder but to my novice homebrewer eyes, it looks ok.

--
Russ Nixon - KF4WXD Subtract 9s to e-mail me
The clock of life is wound but once and no man has the power
to say just when the hands will stop, nor at what day and hour.

3938. Impulse-domain radio... comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37100C1C.4BD5@pop.removethistomailme.net>
Source record: 71339
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Some interesting work is apparently being done in the area of single-cycle pulse-based communication in extremely wide bandwidths, on the order of 1-2 GHz. See http://www.time-domain.com, particularly the "Impulse Radio Overview" paper referenced at http://www.time-domain.com/technology.html. I hadn't heard about this stuff before it showed up as a news item on Slashdot. Has anyone else looked into it?

While the transmission technique (pulse-position modulation) is simple to understand, there doesn't seem to be any information on the site with regard to how to lock a receiver onto a low-power, low-duty-cycle pulse train in such a wide bandwidth. Anyone have any thoughts on how a "time-domain discriminator" might work?

This sounds like something out of the April issue of QST, but evidently it's 100% on the level, made practical by the advent of modern high-stability timebases at economical prices. It actually may not be much of an exaggeration to suggest that this family of techniques represents the End of Radio As We Know It.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

3939. Re: Question re effect of increasing tuning capacitor range

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <923801550.369.20@news.remarQ.com>
Source record: 71340

> I have a 15m QRP transceiver (cf. CQ magazine, Sept 90) which uses
> a 50pF variable tuning capacitor and has approx 120KHz tuning range
> over the 15m band.
>
> I just inherited a very nice 140pF variable capacitor (Hammarlund)
> and am curious if swapping it for the existing 50pF cap would give
> me a wider tuning range, possibly covering the whole 15m band.
>
> If this would work (or if not) could someone please explain why?

This would probably work, with a few caveat's.

1. The tuning may be much more sensitive, so you may need to use a 3:1 or 6:1 reduction to make the tuning feel comfortable.

2. The min capacitance may be higher for the 140pF unit, so you may need to retune things to get the offsets right in the band.

3. You may have some reduced power at the band edges, depending how sharp the filters are. This will probably not be a big deal.

4. With higher capacitance the 140pF unit may have less stability, and the rig may be more prone to drift. (But on the other hand it depends on what you are replacing. The hammarlund stuff is pretty well built).

I'd give it a try.

- 73 Bob W7OV

3940. Re: Fluke 99b scopemeter for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <923802090.828.73@news.remarQ.com>
Source record: 71341

<kenshead@nospam.citylinq.com> wrote in message
news:370edf41.4876599@news.citylinq.net...
> 1399.00 obo.
> remove the 'nospam' to respond.

This is a discussion group, not a sale group. Please use rec.radio.swap for
sale items.

- Bob W7OV

3941. Re: found 455kHz BFO ckt for AM SW RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: J W Schermerhorn <skemi@capital.net>
Message-ID: <37100AC6.4FD4@capital.net>
Source record: 71342
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

4/10/99

David Barts wrote:

<snip>JW
>
> I've even used it to tease the Star Roamer into receiving
> SSB signals. Definitely a touchy arrangement, between having to
> set the sensitivity control so that it oscillates enough to create
> a good BFO yet doesn't either take the Q too high or produce so
> much BFO output that it causes the AGC to kick in and kill senstivity
> to the input signal. All the while keeping a hand on the bandspread
> to compensate for driftiness.
>
> Not the sort of thing one would want to do on a regular basis, but
> it *can* be done.

True enough,but wasn't it neat back then! The Star Roamer was my friends
first shortwave and we thought it was hot stuff.

3942. Re: Model 59 Grid Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: 8877@my-dejanews.com
Message-ID: <7em7esgtb1@nnrp1.dejanews.com>
Source record: 71413
Cross-posted to: rec.radio.swap,rec.radio.amateur,boatachors,rec.radio.amateur.homebrew

In article <3707539A.987@ix.netcom.com>,
Chris <ck5@ix.netcom.com> wrote:
> The very best in excellent condition. All the serial numbers match on
> the coils and the head. The head covers from 2MHz-425MHz. Cabinet
> restored like new. With a copy of the manual $150+ shipping.
> 73 Chris VE3NGW/W4 Florida

To post a, for sale three times is not strange (you are desperate)
C T

>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3943. Re: ? MRF 477

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: rjac302069@aol.com
Message-ID: <19990409203057.28095.00000704@ng99.aol.com>
Source record: 71414

Thet won't have 'em--No longer in production--Some people are using C.B. final and settling for reduced output level. One of the parts houses bought the remaining stock and jacked the price through the ceiling, something like$38.00 each. The last price I saw published was about $16.00. So much for gouging---Rick

3944. Re: Tektronix RM-45A scope query

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Xjshillw6ivw@earthlink.net
Message-ID: <370ec757.15980374@news.earthlink.net>
Source record: 71415
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have a number of Tektronix 530-540 series scopes (wish I had less), and notice they are starting to malfunction. At a minimum, I would take off the side and bottom covers, set it right side up, and turn it on, carefully watching the side opposite from the plug-in. There's a time delay device, and wait until it operates, which applies B+ . Be ready to turn it off quickly if there problems (sounds, smells, etc). You can then do a little preliminary trouble shooting and see where the problem area is, i.e. where is the smoke coming from. If it is underneath, you are ready to tip it over and check it fairly quickly. Have the work bench clean, so you can put it on it's side without damage. I reread your post, and notice you are going to check it at the store. Taking off the side covers is still a good idea, particularly if you plan to make a lowball offer if there are problems.

If no sounds or smells, and no trace, look at the little neon bulbs giving rough trace position. There is a good chance the trace is off the face. If the trace is a point, avoid a bright point (turn intensity down) to avoid burning the CRT, which makes the phospor black.

If you have a choice of a number of manuals, notice a serial number is listed on the front page. Pick a manual with a serial number equal to or a little higher than your scope serial number.

I think a bad CRT is the least of your problems, and would not worry much about it initially. When trouble shooting, checking power supply voltages at the test points is a good start.
73's Jim jshillw6ivw@earthlink.net (delete X from header address)

On Mon, 05 Apr 1999 19:45:29 -0700, Will White <wcw@asu.uswest.net> wrote:

>I have an opportunity to obtain a Tek RM-45A scope for $45. It takes
>Type CA plug-ins, whatever that means.I have seen these (the scope
>itself) in Surplus Sales of NEs catalog for $175, so it looks like I may
>be getting a really good deal. Also, the unit appears to have been very
>well cared for. It came out of a university science lab just last
>January.
>
>What should I check before plopping down my money? Can anyone tell me
>what the tube line-up in this unit is? I understand that the RM-45A is
>the rack-mounted version of the 545A, so if this is correct info, that
>should mean the two models are electrically identical or at least very
>close. It is very definitely a boatanchor, at about 50 lbs. and the size

>of a window-mounted air-conditioner!
>
>This scope is more than 25 years old, so what is the price/availability
>of replacement CRTs should I need one in the future? I will check to
>make sure it has a trace before I buy it. How specifically do I evaluate
>the trace/CRT for quality/condition? Other simple tests and/or check
>points that are recommended?
>
>That's a lot of questions, whew! Thanks for reading this and
>double-thanks for your replies.
>--
>Will White, KD7BFX
>
>to reply, please click this link mailto:wcw@asu.uswest.net
>
>

Delete the X before using my e-mail address.
The X was added to stop spam.

3945. Re: 8044ABM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: msix@nmia.com
Message-ID: <7emllu$un9$1@hume.nmia.com>
Source record: 71416

Norm/KQ6SD
MFJ bought all rights to Curtis Chips several yrs ago.
Ask MFJ...

73 - John W7ZFB
1400 Catron SE Albq, NM 87123
****
* Homebrewer since 1947 CW BoatAnchors Norcal #930 *
* BA CW freqs - 3578, 7050, 7118, 14050, 21050, 28050 *
****

3946. Fluke 99b scopemeter for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: kenshead@nospam.citylinq.com
Message-ID: <370edf41.4876599@news.citylinq.net>
Source record: 71417

1399.00 obo.
remove the 'nospam' to respond.

3947. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: jleikhim@nettally.com
Message-ID: <370edcc8.34644877@news2.nettally.com>
Source record: 71418

"Reg Edwards" <G4fgq.Regp@btinternet.com> wrote:

>A 1944-5 radio altimeter used a few milliwatts (from a
>pair of push-pull acorn triodes) Tx power, about 1 GHz if I
>remember correctly, frequency modulated with a sinewaveform
>at 400 Hz. The Tx was a frequency modulated push-pull
>oscillator.

>Modulation was by using a small metal
>loudspeaker diaphragm as one plate of the tank tuning
>capacitor. With the cover off the case, the speaker could
>be heard humming away to itself.

They called that device a "Wobbulator".

Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

3948. Re: found 455kHz BFO ckt for AM SW RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: dogbert@mindless.com
Message-ID: <370f0fe1.7048968@news.earthlink.net>
Source record: 71419
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Fri, 09 Apr 1999 21:42:46 -0700, Mike & Coreen Smith
<ve9aa@nbnet.nb.ca> wrote:

>Hi, Several weeks ago I was looking for a BFO cct/ckt for an AM SW rx.
>Mark <mcaldera@ix.netcom.com> sent me a nice little cct which I
>initially
>didn't think worked, but it turned out I had a bad breadboard ---
>(20yrs old+) and a low Q IF can.
>New board, new can, cct works like a charm !
>

Out of curiosity, is there any way to adjust the BFO
injection level? Seems like different receivers might
need this capability.

Years ago, I was able to hear SSB by tuning (very very carefully!)
one SW radio to about 455Khz above or below the other.
Both radios were analog-tuned -- this was before digital
except for one Panasonic model I would have sold a kidney for
back then.

In short, it worked, and if you didn't sneeze and the
temperature didn't change a tenth of a degree, it might
stay on frequency for a whole minute or two. :)

>This cct (or 'ckt' if you prefer) will allow SSB/CW/DATA reception
>on an AM receiver that uses a 455kHz I.F. (most have that frq i.f.).
>
>If anyone wants the .bmp file for this VERY simple cct, just let me
>know.
>I have it saved in b/w format, which makes it quite small (44kB in size)
>
>Thanks again to all for their suggestions !
>
>Mike ve9aa (and part time SWL)
>
>--
>Michael Smith
>271 Smith Road
>Waterville Sunbury Co,
>New Brunswick Canada E2V 3V6
><ve9aa@nbnet.nb.ca>

Thanks for offering to pass along the info. to those interested.

By the way, there was another modification that was popular back in the days when tubes ruled and the number of active components could still be counted on your fingers: regenerative feedback in the IF stages. At least in theory, a little positive feedback would sharpen the selectivity of the radio AND give you a fair bit more gain. Adjusting just the right amount of gain so it didn't start to oscillate, or take the Q of the circuit so high that it was too narrow for good speech, was purely trial-and-error.

Hey, wait -- maybe if you turn up the regeneration gain high enough, the IF would oscillate, and you wouldn't need that BFO circuit. ;)

3949. WTB: 10.7 MHz SSB filter from TS700

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: "Dale R. Parfitt" <parinc@bellsouth.net>
Message-ID: <370F3CAC.DCCC944D@bellsouth.net>
Source record: 71420

Need to replace the 10.7 MHz SSB filter from my TS700SP. Believe the
same filter was probably used in a number of their rigs from that era.

Dale W4OP

3950. Searching for a good QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7ene3r$bic@eldborg.rhi.hi.is>
Source record: 71421

Hi

I'm searching for a good CW tranceiver QRP kit for a group of novice licenced
hams that just received their licence.
The kit should have the following features:
* Simple
* Easy to build and come with good building instructions
* Should be usable on the 15m band
* Nice, not not required, if the tranceiver can be switched
to another band by replacing a plug-in module.
* Cheap! :)

Any hints, pointers, URLs?

Thanks
Hrafnkell
--
//----------------------//---
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

3951. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: hlabrandt@my-dejanews.com
Message-ID: <7ennc0khj1@nnrp1.dejanews.com>
Source record: 71422
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <7ee4vp$c43$1@pale-rider.INS.CWRU.Edu>,
jl110@cleveland.Freenet.Edu (Trent Phillips) wrote:
>
> In a previous article, bfomsd@starmedia.com () says:
>
> >Do you believe in REINCARNATION?
> >
> >Do you want to know who you were and where you lived in your past life?
> >
> >Click here -> http://orbita.starmedia.com/~luizhenrique/reincarnation.html
> >ckomlojfcpuoeyhxcmxjvjegpbkwsrcproxsuflencueoisevxrzdwsmkdvwbu
> >
> >
>
> Let's see, since we posting this stuff on rec.radio.shortwave...
>
> My Drake SW8 was a Philco Tombstone in it's past life.
>
> My Sony 7600G was a transistor AM back in the late 50's
>
> My Sangean 818 was an 8-track player back in '73.
>
> As for my Baygen, it was a detector back in 1915 !
>
> --
> "You see ? You have no respect for excessive authority or obsolete trad-
> itions. You're dangerous and depraved, and you ought to be taken outside
> and shot !" Dr. Dobbs to Yossarian from "Catch-22" by Joseph Heller
> ----------jl110@cleveland.freenet.edu------YOSSARIAN LIVES !-------------
>

my Grundig Ocean Boy also must have been a detector in it's former life,
because I could not find the BFO. My Sony 7600G (Saudi model) obviously was
used by T.E.Lawrence (Lawrence of Arabia), but that time using Wehrmacht
tubes RV12P2000 or (battery model only RV2,4P700). Any more questions? Helmut

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3952. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: la8ak@online.no
Message-ID: <370f6985.330682289@news.online.no>
Source record: 71423
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Sat, 10 Apr 1999 14:31:27 GMT, hlabrandt@my-dejanews.com wrote:

>In article <7ee4vp$c43$1@pale-rider.INS.CWRU.Edu>,
> jl110@cleveland.Freenet.Edu (Trent Phillips) wrote:
>>
>> In a previous article, bfomsd@starmedia.com () says:
>>
>> >Do you believe in REINCARNATION?
>> >
>> >Do you want to know who you were and where you lived in your past life?
>> >
>> >Click here -> http://orbita.starmedia.com/~luizhenrique/reincarnation.html
>> >ckomlojfcpuoeyhxcmxjvjegpbkwsrcproxsuflencueoisevxrzdwsmkdvwbu
>> >
>> >
>>
>> Let's see, since we posting this stuff on rec.radio.shortwave...
>>
>> My Drake SW8 was a Philco Tombstone in it's past life.
>>
>> My Sony 7600G was a transistor AM back in the late 50's
>>
>> My Sangean 818 was an 8-track player back in '73.
>>
>> As for my Baygen, it was a detector back in 1915 !
>>
>> --
>> "You see ? You have no respect for excessive authority or obsolete trad-
>> itions. You're dangerous and depraved, and you ought to be taken outside
>> and shot !" Dr. Dobbs to Yossarian from "Catch-22" by Joseph Heller
>> ----------jl110@cleveland.freenet.edu------YOSSARIAN LIVES !-------------
>>
>
>my Grundig Ocean Boy also must have been a detector in it's former life,
>because I could not find the BFO. My Sony 7600G (Saudi model) obviously was
>used by T.E.Lawrence (Lawrence of Arabia), but that time using Wehrmacht
>tubes RV12P2000 or (battery model only RV2,4P700). Any more questions? Helmut

Lawrence of Arabia was in the 'Great War' - 20 years before RV2,4P700
(and RV12P2000 appeared around 1938-39) which was used in the "bad
war", domestic battery valves were DF11, DAC25 etc
Tsch&#65533;ss.....

3953. FS: 90 VCT 25 A transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: worley@52hill.com
Message-ID: <370FBB33.4579@52hill.com>
Source record: 71424

FS: one 90 volt, center-tapped 25 amp power transformer, input 120 v
Good for a +/- 40 volt 25 A supply for high powered audio amp or for a
50 amp supply up to 40 v. May be usable as an isolation transformer if
you can find a 20 or 30 volt high current transformer to place in series
with the output. Unit is unused, in original box, 7-1/2" x 7-1/2" x 6"
tall and weighs 60 lbs. $70 plus shipping (unless you pick up) from
36330 zip (Alabama). NOTE: Please REPLACE the "52" in my email with
"snow" to make "snowhill" to repy or call 334-347-5281 day/eve/wknd.

3954. RTTY decoder circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7eoa3ranj1@plutonium.btinternet.com>
Source record: 71425

I recently found a circuit for a simple RTTY tone decoder, based on the NE567 PLL, in a 1987 magazine. I am considering making the decoder, and wondered if I would be likely to find much RTTY activity on the short wavebands, and if RTTY is used much in amateur radio these days. I would also like to know how I could connect it to my computer (standard 5-volt logic output), and where I can find suitable software on the internet. Could anyone describe what RTTY signals sound like on an AM radio? If anyone on the newsgroup wants the cct, I can scan and email it.

Thanks, 73 de John.

3955. WTB: S-100 bus modem

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Alan <alan.diaz@snet.net>
Message-ID: <7eo8re$bbe@news1.snet.net>
Source record: 71426
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap

I'm looking for an S-100 bus modem. Yes, honest, S-100 bus, 300 baud modem.
I want to add it to an S-100 bus system I have and add one to my display
wall at work where I have a number of S-100 items. Any S-100 bus modem you
may have in that box of wires in the shack. I'll buy it from ya. I'd also
be interested in an acoustic modem (coupler) if you have one of those.
Please reply to me directly at chipsndips@snet.net.
Thanks.

Alan

3956. Re: found 455kHz BFO ckt for AM SW RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: David Barts <n5jrn@ricochet.net>
Message-ID: <370FB3D2.BB57AFAC@ricochet.net>
Source record: 71427
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Woofle wrote:

> [...]
> By the way, there was another modification that was popular back
> in the days when tubes ruled and the number of active components
> could still be counted on your fingers: regenerative feedback
> in the IF stages.

And it wasn't only a modification. My old Star Roamer has such a
feature built-in.

> At least in theory, a little positive feedback
> would sharpen the selectivity of the radio AND give you a fair
> bit more gain. Adjusting just the right amount of gain so it
> didn't start to oscillate, or take the Q of the circuit so high
> that it was too narrow for good speech, was purely trial-and-error.
>
> Hey, wait -- maybe if you turn up the regeneration gain
> high enough, the IF would oscillate, and you wouldn't need
> that BFO circuit. ;)

Yup. I've even used it to tease the Star Roamer into receiving
SSB signals. Definitely a touchy arrangement, between having to
set the sensitivity control so that it oscillates enough to create
a good BFO yet doesn't either take the Q too high or produce so
much BFO output that it causes the AGC to kick in and kill senstivity
to the input signal. All the while keeping a hand on the bandspread
to compensate for driftiness.

Not the sort of thing one would want to do on a regular basis, but
it *can* be done.

--
David W. Barts (n5jrn@ricochet.net) / http://www.scn.org/~davidb
LEGAL NOTICE: I am a WASHINGTON STATE RESIDENT. Unsolicited bulk
E-mail may be billed $500 each in accordance with Chapter 19 RCW.

3957. Re: found 455kHz BFO ckt for AM SW RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-10 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904101607190.23267-100000@Stratus.CAM.ORG>
Source record: 71428
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sat, 10 Apr 1999, Woofle wrote:

> On Fri, 09 Apr 1999 21:42:46 -0700, Mike & Coreen Smith
> <ve9aa@nbnet.nb.ca> wrote:
>
> >Hi, Several weeks ago I was looking for a BFO cct/ckt for an AM SW rx.
> >Mark <mcaldera@ix.netcom.com> sent me a nice little cct which I
> >initially
> >didn't think worked, but it turned out I had a bad breadboard ---
> >(20yrs old+) and a low Q IF can.
> >New board, new can, cct works like a charm !
> >
>
> Out of curiosity, is there any way to adjust the BFO
> injection level? Seems like different receivers might
> need this capability.
>
> Years ago, I was able to hear SSB by tuning (very very carefully!)
> one SW radio to about 455Khz above or below the other.
> Both radios were analog-tuned -- this was before digital
> except for one Panasonic model I would have sold a kidney for
> back then.
>
> In short, it worked, and if you didn't sneeze and the
> temperature didn't change a tenth of a degree, it might
> stay on frequency for a whole minute or two. :)
>
> >This cct (or 'ckt' if you prefer) will allow SSB/CW/DATA reception
> >on an AM receiver that uses a 455kHz I.F. (most have that frq i.f.).
> >
> >If anyone wants the .bmp file for this VERY simple cct, just let me
> >know.
> >I have it saved in b/w format, which makes it quite small (44kB in size)
> >
> >Thanks again to all for their suggestions !
> >
> >Mike ve9aa (and part time SWL)
> >
> >--
> >Michael Smith
> >271 Smith Road
> >Waterville Sunbury Co,
> >New Brunswick Canada E2V 3V6

> ><ve9aa@nbnet.nb.ca>
>
> Thanks for offering to pass along the info. to those interested.
>
> By the way, there was another modification that was popular back
> in the days when tubes ruled and the number of active components
> could still be counted on your fingers: regenerative feedback
> in the IF stages. At least in theory, a little positive feedback
> would sharpen the selectivity of the radio AND give you a fair
> bit more gain. Adjusting just the right amount of gain so it
> didn't start to oscillate, or take the Q of the circuit so high
> that it was too narrow for good speech, was purely trial-and-error.
>
> Hey, wait -- maybe if you turn up the regeneration gain
> high enough, the IF would oscillate, and you wouldn't need
> that BFO circuit. ;)
>
I don't know about the circuit in question, but if it's built into a shielded box it should be easy to add a trimpot on the output to adjust the level into the receiver. It is a good idea, though I think it will be something that will not need constant adjustment.

It's interesting you should bring up the idea of regeneration in the IF. This just came up recently, in rec.radio.shortwave and rec.radio.amateur.homebrew with two separate threads on the Star Roamer receiver. It had such feedback in the IF; the control is labelled "sensitivity".

I've never had a receiver with such a circuit, but it's my understanding that when you put the IF into oscillation to act as a BFO, it stops being as selective as before. So you can receive SSB and CW, but the bandwidth isn't very good.

One of the cheap Hallicrafters tube receivers used such a scheme instead of a separate BFO.

More common than putting the IF into regeneration was the Q-multiplier. It was a stage, often seen as an external addition, that tapped onto the output of the mixer. It was a tuned circuit and an amplfier. Feedback was introduced, and thus the bandwidth of the coil was improved and thus the selectivity of the receiver improved. Depending on the Q-multiplier, it could also be put into oscillation to act as a BFO.

The problem with Q-multipliers and regeneration in the IF is that while it narrows the bandwidth it does little for the skirt selectivity.

In one of the first issues of QST that I received, May or June of 1971, there was a neat article about converting an All American Five for shortwave use. After adding an isolation transformer to protect the user from shock, the author added some regeneration to the IF to increase selectivity. He added an outboard BFO for CW and SSB. And of course he put a crystal controlled converter ahead of it to cover the shortwave

range. He even added a tuning eye indicator for signal strength. I believe he also added a switch to disable the AGC in the receiver, and probably added an RF gain control. It was a rather neat project, especially to someone who was eleven at the time and who had only a table radio with a shortwave band (and no BFO) to listen to shortwave.

By the way, if someone is adding a BFO to a receiver without one, disabling the AGC and adding an RF gain control would be useful. Though it's probably difficult unless you have the schematic for the receiver.

Michael VE2BVW

3958. Deja News Messages Frozen - Help !!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7eor63ffa1@nnrp1.dejanews.com>
Source record: 71343

I'm trying to read the messages posted to this news group using my browser
(Netscape 4.08 pointing to dejanews.com), as I used to do.
The newest message I get is dated 6, april.
I can post a new message but I can't access it by the regular way, I mean,
ordering my browser to get the new messages.
I can read the message I posted, using the feature "author posting history".
Can anybody help me to solve this??
I wrote to Deja News but didn't get an answer until now.
Thank you.

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3959. Motorola Micor Converting Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: mikrounit@hughes.net
Message-ID: <7ep40h$m31$1@nnrp1.dejanews.com>
Source record: 71344

Hello All,

This is Mike, KQ6MU.
A friend of mine, and I, are trying to build
a 2m repeater. We got a Motorola Micor VHF Hi
Base Station. It was tuned to 155 MHz. We need some
help on duplexing this, tunning it to the 2m band, and
other things that will be needed to "Mod" this to a
repeater. If anyone can give us info on this, we would
greatly appreciate that. Anything is welcome.
E-mail me with info please.
Thanks & 73,

Mike Green KQ6MU
mikrounit@hughes.net
http://kq6mu.8m.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3960. Re: found 455kHz BFO ckt for AM SW RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: hinermad@woodnet.att.net
Message-ID: <37100a6e.4645763@netnews.worldnet.att.net>
Source record: 71345
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sat, 10 Apr 1999 08:58:17 GMT, dogbert@mindless.com (Woofle) wrote:
>By the way, there was another modification that was popular back
>in the days when tubes ruled and the number of active components
>could still be counted on your fingers: regenerative feedback
>in the IF stages. At least in theory, a little positive feedback
>would sharpen the selectivity of the radio AND give you a fair
>bit more gain. Adjusting just the right amount of gain so it
>didn't start to oscillate, or take the Q of the circuit so high
>that it was too narrow for good speech, was purely trial-and-error.
>
>Hey, wait -- maybe if you turn up the regeneration gain
>high enough, the IF would oscillate, and you wouldn't need
>that BFO circuit. ;)

I had a little shortwave receiver - I think it was a Hallicrafters - that had an "AM / CW" switch on it. (Which surprised me, since Dad's Zenith Trans-Oceanic lacked it.) I looked at the schematic to see if I could adapt what I assumed was a BFO to the Zenith.

Turned out it was nothing more than a piece of bell wire wrapped around the plate lead of the IF amplifier tube to make a small gimmick cap. The other end of the wire was attached (or maybe even wrapped - I don't recall exactly) to the grid lead of the same tube. The front panel switch, in the AM position, connected the wire to ground through a resistor, killing any feedback in the stage. In the CW position, the IF amp wouldn't quite oscillate, but it would ring nicely when there was a strong enough signal.

Dave

3961. VHF Telco radio duplexers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <37102B45.D9440542@up.net>
Source record: 71346

Anyone have any of those 5 MHz duplexers used in the
low VHF radios for the old telco radios?

3962. Re: tone generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904110045210.4839-100000@Ocean.CAM.ORG>
Source record: 71347

On Sat, 10 Apr 1999, Russ Nixon wrote:

> c.c.tqbssz@toneXgener.killspam.us.com wrote:
> >
> > Russ Nixon (rcnixon@mindspring.com) wrote:
> > : -- Ralph Mowery wrote:
> > : >
> > : > Any audio tone generator circuit can be used as long as it is a very
> > : > clean sine wave. When a pure sine wave is fed into a ssb audio
> > : > circuit, it will generate the equivilent of a cw signal.. You might
> > : > have to tune off a little with the RIT control so that you are
> > : > receiving and transmitting 'on the same frequency'.
> > : >
> > : > Scott wrote:
> > : > >
> > : > > Can someone point me in the direction of a circuit to generate CW that can
> > : > > be directly fed into the microphone input of a ssb rig to use for CW?
> > : > >
> > : > > Thanks
> > >
> > : Our local guru has suggested the use of a DTMF chip and only selecting
> > : one row or column. This has the benefit of providing a sine wave and
> > : eight different tones. You could get clever with switches or Berg
> > >
> > Is this really a good idea? Do DTMF chips really generate clean / low
> > distortion sine waves?
> > >
> > Stephen
> > >
> > : jumpers to select the tone you want. He is looking into designing an
> > : MCW generator to add CW practice to our local repeater.
> > >
> > : Russ Nixon - KF4WXD Subtract 9s to e-mail me
> > : The clock of life is wound but once and no man has the power
> > : to say just when the hands will stop, nor at what day and hour.
>
> I would have to look up the specs in my telephone engineering handbook,
> but I have been told that an individual row or column indeed produces an
> acceptable sine wave. It has to be better than the stuff a 555 or 556
> produces. I guess that it would depend on the part used too, wouldn't
> it?
>
It's not a matter of whether it's better than something else, but whether
it's good enough for the task.

A pure single tone audio frequency fed into an SSB transmitter will put out a cw signal. More commonly, you'd see this years ago for transmitting teletype, because it was easier to have an audio oscillator switched between two frequencies and fed into an SSB rig than modifying the rig to do direct FSK.

But if the output of the audio oscillator is not clean enough, you won't have a single frequency out of the transmitter.

You would never consider a sauare wave for this application (remember the original poster wanted to send CW on an SSB transmitter by feeding in an audio tone), the 555 puts out a square wave, because the result will not be a single frequency.

Even a bad sinewave may not be good enough. I've seen comments over the years about oscillators for this sort of application, and people have discarded certain circuits becuase the oscillator does not put out a pure sinewave.

The touchtone encoders I've seen use a D/A converter to produce a sinewave. The early ones seemed to produce a stepped sine wave. I don't know whether recent devices have used improved techniques.

I'm not saying the idea won't work, just that it's something that needs to be examined before using the idea.

Probably a fairly simple low pass or band pass (since we are talking about a single frequency) filter would take care of the problem, since at least the output of the oscillator is relatively close to a sinewave.

If someone wanted to send MCW, feeding a tone into an AM or FM transmitter, probably this would not be a consideration.

Finally, to add to the original suggestion of using a touch tone encoder, I think the ability to generate a single tone varies with the device. The old Motorola MC14410 had two outputs, one for each of the tone groups, and you were supposed to sum them externally. Glancing through a TI book, one of their's had a pin that enabled single tone output (I didn't check to see what the output circuit was like). An EXAR book turned up one encoder that didn't have a clear way of selecting a single tone. So this too needs to be watched. I've never used one, so I don't know if ignoring one set of inputs disables that tone or simply puts out a default tone.

Michael VE2BVW

3963. Re: Deja News Messages Frozen - Help !!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Jones <please_dont@qsl.com>
Message-ID: <7epi5m$30s$1@news.orbitworld.net>
Source record: 71348

Puppin wrote
>I'm trying to read the messages posted to this news group using my browser
>(Netscape 4.08 pointing to dejanews.com), as I used to do.
>The newest message I get is dated 6,
>I wrote to Deja News but didn't get an answer until now.

Why don't you use the newsreader in Netscape and access your news server? The messages download faster and you can use several functions of the newsreader not available in Deja News. If your ISP has a poor news server (like mine) there are several other news servers available on the net who don't limit access. (Are free.) The one I'm using now is one such server...

3964. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: dana <dana@randomc.com>
Message-ID: <Pine.GSO.3.96.990411032311.24242M-100000@cluster2>
Source record: 71349
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

what does that have to do with fixing radios? get that crap outa here.

On Sat, 10 Apr 1999 hlabrandt@my-dejanews.com wrote:

> Date: Sat, 10 Apr 1999 14:31:27 GMT
> From: hlabrandt@my-dejanews.com
> Newsgroups: rec.radio.amateur.homebrew, rec.radio.amateur.misc,
> rec.radio.amateur.policy, rec.radio.amateur.space
> Subject: Re: DO YOU BELIEVE IN REINCARNATION? 7422
>
> In article <7ee4vp$c43$1@pale-rider.INS.CWRU.Edu>,
> jl110@cleveland.Freenet.Edu (Trent Phillips) wrote:
> >
> > In a previous article, bfomsd@starmedia.com () says:
> >
> > >Do you believe in REINCARNATION?
> > >
> > >Do you want to know who you were and where you lived in your past life?
> > >
> > >Click here -> http://orbita.starmedia.com/~luizhenrique/reincarnation.html
> > >ckomlojfcpuoeyhxcmxjvjegpbkwsrcproxsuflencueoisevxrzdwsmkdvwbu
> > >
> > >
> >
> > Let's see, since we posting this stuff on rec.radio.shortwave...
> >
> > My Drake SW8 was a Philco Tombstone in it's past life.
> >
> > My Sony 7600G was a transistor AM back in the late 50's
> >
> > My Sangean 818 was an 8-track player back in '73.
> >
> > As for my Baygen, it was a detector back in 1915 !
> >
> > --
> > "You see ? You have no respect for excessive authority or obsolete trad-
> > itions. You're dangerous and depraved, and you ought to be taken outside
> > and shot !" Dr. Dobbs to Yossarian from "Catch-22" by Joseph Heller
> > ----------jl110@cleveland.freenet.edu------YOSSARIAN LIVES !-------------
> >
>
> my Grundig Ocean Boy also must have been a detector in it's former life,
> because I could not find the BFO. My Sony 7600G (Saudi model) obviously was
> used by T.E.Lawrence (Lawrence of Arabia), but that time using Wehrmacht

> tubes RV12P2000 or (battery model only RV2,4P700). Any more questions? Helmut
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>
>

3965. Lowest priced specially made crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7epk6rdae1@news7.svr.pol.co.uk>
Source record: 71350

There are a lot of crystal manufacturers out there who can make crystals to your specified frequency.......At a price. I need some HF crystals in HC18/U and HC25/U holders. Anyone know who's the cheapest crystal manufacturer for 1 off's specially made HF crystals ?????

John G3UGY

3966. Re: RTTY decoder circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <371054A3.435E2A60@ibm.net>
Source record: 71351

Instead of the 567 circuit, you might want to look for a program called Hamcom. It uses an op amp like a 741 and the program will do the decoading. There are also several other programs out that use the same interface. Not sure of the names, but there are some out that use the sound card also.
You usually use the lsb on a receiver to tune in the ham rtty and some of the comercial stuff is usually usb. Yu can really use either, but the program or decoder has to be set to the inverted mode to do it. A rtty signal is sent out as one frequency, then shifted to another about 170 hz away in the ham bands. The comercial stuff will be differant. Don't recall the frequencies or times, but the ARRL sends out bullitins on rtty at 60 WPM several times a day. This is a good place to hear wht you need to. After the Baudot portion is over, they switch to another mode, maybe two other modes. Most ham rtty is 60 wpm with some going to 100 wpm with a sshift of 170 hz.. The comercial stuff can be almost anything.

Look here for the Hamcom page.
http://www.accessone.com/~tmayhan/

There is a diagram in the softwear for the interface. and it is as simple as the 567 decoder and is powered by the voltages of the rs232 port also.

David Cunningham wrote:
>
> I recently found a circuit for a simple RTTY tone decoder, based on the
> NE567 PLL, in a 1987 magazine. I am considering making the decoder, and
> wondered if I would be likely to find much RTTY activity on the short
> wavebands, and if RTTY is used much in amateur radio these days. I would
> also like to know how I could connect it to my computer (standard 5-volt
> logic output), and where I can find suitable software on the internet.
> Could anyone describe what RTTY signals sound like on an AM radio? If anyone
> on the newsgroup wants the cct, I can scan and email it.
>
> Thanks, 73 de John.

3967. Re: Homebrewer's Heaven Web Site!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <37108B9D.22F@worldnet.att.net>
Source record: 71352

Brian Carling wrote:
>
> http://home.earthlink.net/~af4k/hamlynx/hamhomeb.htm

Brian,

Thanks for posting and, more importantly, setting up this page of
links. Any homebrewer would find this interesting and informative.

If you don't mind, I would like to link to the homebrew page from my
pages.

--
73' John Dilks, K2TQN

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum

Webmaster for the Antique Wireless Association
http://www.ggw.org/awa Click on "Page 2"
-=and=-
for the New Jersey Antique Radio Club
http://www.eht.com/oldradio
-

3968. LW/MW-loop antenna using telephone cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37109215.406613572@news.online.no>
Source record: 71353
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

The PE1ABR VLF loop-antenna was described in Electron nr 2/99 and Radcom TT nr 4/98, it used a large loop of 25x10m square from coax cable, possibly RG-8/U or RG-6/U

The antenna was made to cover 200-600kHz, but works fine for 136-2000kHz

Wonder if it is possible to use screened telephone cable instead, take a 20-pair cable with support wire, and connect 2-pairs in parallell as center conductor, possibly use vaselin filled cable

Mean impedance for 1 pair is 120 ohm, but connecting 4 wires in parallell might lower the impedance, has somebody measured the impedance for similiar connection? It shouldn't be too difficult to measure, and I believe the vaselin shouldn't cause any attenuation on this frequency range.

a scanned figure of the antenna is available as 5kB gif file

Jan-Martin
LA8AK

3969. Re: Ham-Homebrew Digest V99 #89

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <3710A72A.72918936@lafn.org>
Source record: 71354

Jones wrote

From: "Jones" <please_dont@qsl.com>
Subject: Deja News Messages Frozen - Help !!!!!

Puppin wrote
>I'm trying to read the messages posted to this news group using my browser
>(Netscape 4.08 pointing to dejanews.com), as I used to do.
>The newest message I get is dated 6,
>I wrote to Deja News but didn't get an answer until now.

>> If your ISP has a poor news server (like mine) there are
>> several other news servers available on the net who don't limit access. (Are
>> free.) The one I'm using now is one such server...

Searched net, did not find any free news servers.
Appreciate if you could list a few or advise How_to find 'free news
servers'.
Direct email to me will conserve bandwidth.
73, W6MIK
--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

3970. Wanted: Kit or plans for VHF (2M) RF Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: menoldre@mnsinc.com
Message-ID: <7eqefo$7qp$1@callisto.clark.net>
Source record: 71355

I have just moved further away from my father and would like to up the power of my 2M HT to communicate with my father via the local repeaters.

This need be only FM as I don't even own SSB equipment for this band.

I also wouldn't mind building it myself.

Something that would take 1 watt in and 25 out or so.

-Ron

http://www.mnsinc.com/menoldre
mailto://menoldre@mnsinc.com

3971. Re: Searching for a good QRP kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3710C73C.2F45@ix.netcom.com>
Source record: 71356

Hrafnkell Eiriksson wrote:
>
> Hi
>
> I'm searching for a good CW tranceiver QRP kit for a group of novice licenced
> hams that just received their licence.
> The kit should have the following features:
> * Simple
> * Easy to build and come with good building instructions
> * Should be usable on the 15m band
> * Nice, not not required, if the tranceiver can be switched
> to another band by replacing a plug-in module.
> * Cheap! :)
>
> Any hints, pointers, URLs?
>
> Thanks
> Hrafnkell

Howdy Hrafnkell -- lots of QRP Kit and Parts Links at URL:
http://www.ac6v.com/pageay.html

Loads of QRP Operating info including QRP Calling frequencies at UR:
http://www.ac6v.com/pageaj.html
--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 341,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

3972. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com>
Message-ID: <3710D8CF.2D580F83@primenet.com>
Source record: 71357

Don W6JL wrote:
>
> Monty Northrup wrote:
> >
> > On Tue, 6 Apr 1999 23:24:48 +0200, <beppe@ibm.net> wrote:
> >
> > >dear OM,
> > >anyone can suggest me an altimeter radar design
> > >to be usedon an ultra ligth plane ?
> > > (sorry for the bad english, hoping anyway to be clear)
> >
> > This may be one case where homebrew is NOT the answer, especially
> > if you have to ask for help. If I made a suggestion, and you crashed,
> > I'd have a hard time living with myself.
> >
> > In the USA, I think it's even illegal to use non-type accepted
> > flight-related electronics, and probably for good reason.
> >
> > Wanna know how to make a toaster?
> >
> > 73,
> > monty
>
> Hello,
> For experimental, non certified aircraft, you can use anything you
> want for 'avionics'. So a homebrew radar altimeter is not "illegal".

It still has to be type accepted by the FCC before you can attach
an antenna to it...

> After all, you can homebrew the entire airplane (and engine, too, if you
> want). Incidentally, homebuilt airplanes are now the largest source of
> lightplanes in the U.S; eclipsing all of the manufacturers of certified
> planes.
> My question would be, why have a radar altimeter in a non-IFR,
> VFR-only ultralight? Your eyeballs and/or a regular pressure altimeter
> are easier to use, and tell you everything you want to know.
>
> 73,
> Don, W6JL

3973. Info on MFJ HF loop antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <3710de03@news1.us.ibm.net>
Source record: 71358
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Does anyone have any experience using the MFJ HI-Q loop antennas models 1786
or 1782? Feedback welcomed.

Lane
Ku7i
San Diego

3974. Re: Deja News Messages Frozen - Help !!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7eqvn1$3dj$1@nnrp1.dejanews.com>
Source record: 71359

In article <7epi5m$30s$1@news.orbitworld.net>,
"Jones" <please_dont@qsl.com> wrote:

> Why don't you use the newsreader in Netscape and access your news server? The
> messages download faster and you can use several functions of the newsreader
not
> available in Deja News. If your ISP has a poor news server (like mine) there
are
> several other news servers available on the net who don't limit access. (Are
> free.) The one I'm using now is one such server...

I'm searching for a free news server in order to begin to access usenet
directly.
Could you suggest me some servers.
I'm in Brazil and my internet provider do not have this kind of service.
Thank you.

By the way, today I could get the messages without any problem.
Thank you all.
>
>

Gilson Puppin - PU5MPL

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

3975. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com>
Message-ID: <3710F707.188556F3@primenet.com>
Source record: 71360

Robin Birch wrote:
>
> In article <370c15f2.3538065@netnews.worldnet.att.net>, Dave Hinerman
> <hinermad@woodnet.att.net> writes
> Back to the question the man asked.
>
> From what I recall, radio altimeters don't use the pulse return time to
> measure the height. They either phase or frequency modulate the pulse
> and measure the phase or frequency difference between transmit and
> receive. This allows them to measure small differences inside the pulse
> rather than just looking for the pulse leading edge. The only details I
> can find are in an old (1946) radio and radar handbook which shows the
> TX/RX antennas on opposite wing tips, probably to get maximum separation
> between the TX/RX systems if they are sending and receiving
> simultaneously.

Sorry. Missed the original post.
Modern airborne radio altimeters operate in a 200 MHz band centered
at 4300 MHz.

The most common modulation type is FMCW. In this type of system the
transmitter is chirped i.e., the frequency is swept lineraly with
time. Therefore the frequency difference between what is transmitted
to the ground and what is being received from the ground reflection
is proportional to altitude. Pretty similar to what was done in
1946 is sounds...

Pulsed systems that measure the difference in time between when a
pulse is transmitted to the ground and received from the ground
are also common. The leading edge stuff gets important where
you want to find the altitude to the 'highest' point on the ground
instead of the average altitude of the ground... everything
past the leading edge gets corrupted by multipath.

Direct Sequence Spread Spectrum (DSSS) techniques are used where
jamming and low detectablity by bad guys are important.

Bob Doyle
WA3TGF

3976. kenwood tr7800fm

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: AZ <Zwakman@gironet.nl>
Message-ID: <371109C7.6A26@gironet.nl>
Source record: 71361

Who has information about modifications for
a kenwood tr7800fm 2 meter transciever for me.

az

3977. Re: Elecraft K2: Oops - Dayton #196

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: "Eric Swartz - Elecraft, WA6HHQ" <erics@elecraft.com>
Message-ID: <37111DE6.2BE97B77@elecraft.com>
Source record: 71362

A small correction to my last post. We will be at Dayton Booth #196.

73, Eric WA6HHQ

3978. Re: W1WCR tries frequency take-over 4-11-99 HAMS LISTEN

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <371137C1.133F@pop.removethistomailme.net>
Source record: 71363
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.amateur.homebrew

```
Act Right On 3950 wrote:
>
> W1WCR moved his net from 3947.5 to an "occupied frequency".

Sort of like what you're doing now? Quit spamming.

-- jm KE5FX

------------------------------------------------------
Note: My E-mail address has been altered to avoid spam
------------------------------------------------------
```

3979. Ten-tec swl 9 band rec.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: John Strunck <1jhs9867@unixstew.tstc.edu>
Message-ID: <37113da1.0@news>
Source record: 71364

Hello All,

Has anyone built the Ten-tec 9 band swl receiver?
I want to get one, but I would like to hear from others that have built this kit before I purchase it.

Thanks,

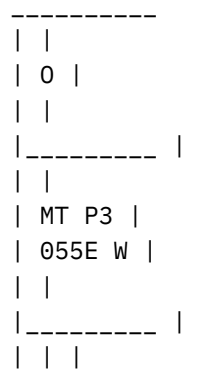
J. Strunck III
kc5ngx

3980. HELP..identifying transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: ke4ros <ke4ros@email.msn.com>
Message-ID: <udQ3r4Gh#GA.317@upnetnews05>
Source record: 71365

Hello all,

I have a T-220 transistor that I can't cross in NTE or ECG. It is marked a
follows:



I desperately need one. Can anyone identify this or cross it to something
else? I believe it was made by Motorola.

thanks,

Derf KE4ROS

3981. Ideas for radios.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Searoy <searoy@netquick.net>
Message-ID: <FOcQ2.143$b%1.147861@ralph.vnet.net>
Source record: 71366

Howdy to all.

First, I have no ticket yet (damned code) but I am on my way. We have all been there at some point in our lives. I'm just throwing out design ideas with no foundation to base them on.

OK, PC motherboard with expansion slots, expansion slots used to hold expansion boards, each board has a tranciever on it, 1 band per board, sans amp.
One amp to power all bands, or most bands, I haven't gotten that figured out yet.
Several antennae outs, selectable by configuration of boards (i.e. com1 com2 com3...)
LCD display.

Am I crazy? Doesn't sound simple, but it DOES sound possible.

--
*** Teach a Man to Fish *** ***** Proud owner of a *****
Searoy ***** New (?) 65 Bug *****
_____
a_real_hip_serb_dude@my-dejanews.com wrote in message

>When we are pricks, do not we bleed ?

3982. Re: Rqst for Comments -- Build your Own... -- Book

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: msb <msbSPAMMAPS@newpony.com>
Message-ID: <7erpld$goo@dfw-ixnews10.ix.netcom.com>
Source record: 71367

Thanks for the pointer to FAR -- I plan to
build my own circus boards. Maybe x2 sided where I can
get away w/ it. Thought it would be fun to
learn about schematic capture & board
layout software.

Yes, the peanut butter lid and motor combination
is 'interesting'.

msb

Russ Nixon wrote in message <370FFD28.7D32@mindspring.com>...
>msb wrote:
>>
>> Considering building the rig described in
>>
>> Build Your Own Intelligent Amateur Radio Transceiver
>> by Randy Lee Henderson
>> ISBN: 0070282641
>>
>> Anyone care to share their experience w/ this project?
>>
>> msb
>
>I have the book. The board set is available from FAR circuits for
>around $120 (US) as of September '98. There is a bit of mechanical
>fabrication in the tuning hardware that is mostly left to the ingenuity
>of the builder but to my novice homebrewer eyes, it looks ok.
>
>--
>Russ Nixon - KF4WXD Subtract 9s to e-mail me
>The clock of life is wound but once and no man has the power
>to say just when the hands will stop, nor at what day and hour.

3983. Re: LW/MW-loop antenna using telephone cable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <37116386.3DE1@northwest.com>
Source record: 71368
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

i built a 9' diameter loop some years ago, using 6-wire fone cable.
strung it thru 1/2" soft copper tubing. tied the ends together, so as to
have one continuous loop of wire. i tuned the loop with switched bank of
capacitors. too much wire will lose signal, thru the IR losses.

as you can tell, i prefer tuned loops to broadband loops.

general rule of thumb: make the loop as large (in area) as possible.

3984. Re: Impulse-domain radio... comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: rick@area.com
Message-ID: <7erq79$5q7$1@vax.area.com>
Source record: 71369
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <37100C1C.4BD5@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>Some interesting work is apparently being done in the area of
>single-cycle pulse-based communication in extremely wide bandwidths, on

>stuff before it showed up as a news item on Slashdot. Has anyone else
>looked into it?

I have been following this for some time. It apparently is based
on a system called CHESS developed by Lockheed-Sanders, although
Larry Fullerton of Time Domain also claims to have invented it.
>
>While the transmission technique (pulse-position modulation) is simple
>to understand, there doesn't seem to be any information on the site with
>regard to how to lock a receiver onto a low-power, low-duty-cycle pulse
>train in such a wide bandwidth. Anyone have any thoughts on how a
>"time-domain discriminator" might work?

There is a 5 GHz wireless LAN by Radiolan that uses pulse position
modulation (on a carrier), and is based on four slightly different timings of
pulses of a relatively low rep rate. The receiver locks onto the
rep rate and then looks for "jitter" of one pulse relative to another.
Perhaps Time Domain does this.
>
>This sounds like something out of the April issue of QST, but evidently
>it's 100% on the level, made practical by the advent of modern
>high-stability timebases at economical prices. It actually may not be
>much of an exaggeration to suggest that this family of techniques
>represents the End of Radio As We Know It.

Nothing in any of the literature about impulse radio that I have
seen refers to high stability timebases. What they claim is
furnished by modern technology is picosecond time interval measurement
(see the front page of Friday's USA Today for a photo of said
chip).
>
>-- jm KE5FX

It should be kept in mind that no impulse radio is legal at any
power level because it produces intentional radiation in forbidden
bands (See FCC part 15). We can all speculate what the chances
of the FCC having a religious conversion on this topic and allowing
radios to overlay existing allocations are; this observer thinks that
is a long way off if ever and in any event probably after Time Domain's
patent expires in 5 years. According to what I read, the FCC hasn't

even issued an *experimental* license for impulse radio, and you
can get those licenses for almost anything. And if you thought
the FCC was a tough sell, its a pushover compared to ETSI in Europe.
Then there is the rest of the world.

Rick Karlquist N6RK
rick@area.com

3985. Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: "Charlie T." <xctx@onr.com>
Message-ID: <01be849b$5363cf80$4933c8cf@ct>
Source record: 71370
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I'm trying to wind a coil with minimal skin effect losses.
I'd like to try Litz wire.

Does anyone know where you can find Litz wire these days?

thanks,

W5CDT

--
>>>Remove the X's from my email address before using<<<

XctX@onr.com

3986. Re: Deja News Messages Frozen - Help !!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: Jones <please_dont@qsl.com>
Message-ID: <7erv3ivse1@news.orbitworld.net>
Source record: 71371

Puppin wrote
>Could you suggest me some servers.

Do a search on any of the search engines for public news servers and you will get a list. I've been using this one: [news.orbitworld.net] and it's been quite reliable...

3987. Re: Impulse-domain radio... comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <371193B1.3178@pop.removethistomailme.net>
Source record: 71372
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Richard Karlquist wrote:
>
> I have been following this for some time. It apparently is based
> on a system called CHESS developed by Lockheed-Sanders, although
> Larry Fullerton of Time Domain also claims to have invented it.
> >

Haven't seen any references to that, mostly I've been looking through
the LLNL and Time Domain sites.

> >While the transmission technique (pulse-position modulation) is simple
> >to understand, there doesn't seem to be any information on the site with
> >regard to how to lock a receiver onto a low-power, low-duty-cycle pulse
> >train in such a wide bandwidth. Anyone have any thoughts on how a
> >"time-domain discriminator" might work?
>
> There is a 5 GHz wireless LAN by Radiolan that uses pulse position
> modulation (on a carrier), and is based on four slightly different timings of
> pulses of a relatively low rep rate. The receiver locks onto the
> rep rate and then looks for "jitter" of one pulse relative to another.
> Perhaps Time Domain does this.

Perhaps, although in a carrier-less mode you'd theoretically have to
examine the entire 1 GHz or so worth of frequency space to lock onto the
transmitter's PRN sequence. That is what bugs me about the Fullerton
stuff -- it seems to me that the "time domain" advantages could come
into play only after a synchronous link is established. Especially at
the microwatt ERP levels they are talking about, that must be the one of
the toughest hurdles to overcome. I note that most of the micro-power
impulse work at LLNL is geared toward single-point applications like
burglar alarms, studfinders, and such.

> Nothing in any of the literature about impulse radio that I have
> seen refers to high stability timebases. What they claim is
> furnished by modern technology is picosecond time interval measurement
> (see the front page of Friday's USA Today for a photo of said
> chip).

True, I stand corrected... although I'm still not sure what
ultra-precise time interval measurement does for them in an
asynchronous, low-duty-cycle system.

> It should be kept in mind that no impulse radio is legal at any
> power level because it produces intentional radiation in forbidden
> bands (See FCC part 15).

But they are running at such low power levels as to be virtually
undetectable, much less interfering.... basically they are trading BW
for log(S/N) in the Shannon equation. That is what seems so intriguing
to me about the concept -- a few microwatts of power can go a long way
when it's synchronously recovered in a 1 GHz channel. It sounds great
until you start to think about the practical implications of the
'synchronous' part.

> We can all speculate what the chances
> of the FCC having a religious conversion on this topic and allowing
> radios to overlay existing allocations are; this observer thinks that
> is a long way off if ever and in any event probably after Time Domain's
> patent expires in 5 years.

Could very well be. There is also the issue of the government not
wanting We The People to be messing with any more non-interceptable
communications modes than we already are.

> According to what I read, the FCC hasn't
> even issued an *experimental* license for impulse radio, and you
> can get those licenses for almost anything. And if you thought
> the FCC was a tough sell, its a pushover compared to ETSI in Europe.
> Then there is the rest of the world.

Still, you can imagine the radio spectrum looking like a very different
place in the next few decades, if even a fraction of the hype is to be
believed. Someone on Slashdot was pointing out the grim implications
for SETI, and the dangers of assuming that the rest of the universe uses
frequency-domain carriers. :-)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

3988. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-11 00:00:00 UTC
From: vantalon <vantalon.f6bwf@wanadoo.fr>
Message-ID: <7f0205$j6t$1@wanadoo.fr>
Source record: 71373
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Hello . In my past job i have had to use 3 bird 43 in our laboratory . All have given different measures (on the same load of course !)For an output of 40 watts , one of them gives 50w reading ! This one was used for " demo " with the customers !! 73 to all

3989. Yaesu 8100 Mod Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: _Mac_ <mcgyv@hotmail.com>
Message-ID: <37119350.8A23A64@hotmail.com>
Source record: 71279
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.ham-radio,alt.ham-radio.vhf-uhf,rec.radio.swap,es.rec.radio.amateur,uk.radio.amateur,alt.ham-radio.marketplace,rec.radio.amateur.misc

Yaesu FT 8100 R Modification Page

The Original 8100R Mod page. New Location

http://www.iw.net/~mac24

73's
Mac
Icq: # 3115848
mcgyv@hotmail.com

3990. gp88 for amateur band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Edi <yourmail@netscape.net>
Message-ID: <01be84b4$8c904f40$fe0110ac@cg-purwoko>
Source record: 71280

pls help,
i need to know how to modify gp88 (450-470 MHz) for 430-450 mhZ.

3991. Re: Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be8500$a4bb8700$75e3abc3@default>
Source record: 71281
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Above 2 or 3 MHz Litz wire offers negligible improvement.

This is because, to have any effect, the diameter of individual copper strands must be less than the skin depth in copper at the frequency of interest.

The skin depth in copper is approximately 0.0026 / Sqrt (F) inches where F is the frequency in MHz. And each strand must be individually insulated.

Copper wire cannot be drawn down to such small diameters as are needed at the higher frequencies.

The only way to increase the Q of a coil of given inductance at HF is to increase its physical size. Double the length and double the diameter allows the same inductance to be obtained with fewer turns of much thicker wire.

Very roughly, doubling all dimensions doubles the Q until radiation resistance losses begin to take effect.

As Mike says, you end up using copper pipe (as in magloops).

--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Charlie T. <xctx@onr.com> wrote in article
<01be849b$5363cf80$4933c8cf@ct>...
> I'm trying to wind a coil with minimal skin effect
losses.
> I'd like to try Litz wire.
>
> Does anyone know where you can find Litz wire these days?
>
>
> thanks,
>
> W5CDT
>
>

> --
> >>>Remove the X's from my email address before using<<<
>
> XctX@onr.com
>

3992. Re: Yaesu 8100 Mod Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Brad Kellison KA8TOK <KA8TOK@four-way.net>
Message-ID: <3711DE98.5D7F4981@four-way.net>
Source record: 71282
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.ham-radio,alt.ham-radio.vhf-uhf,
rec.radio.swap,es.rec.radio.amateur,uk.radio.amateur,alt.ham-radio.marketplace,rec.radio.amateur.misc
Body handling: Binary attachment payload not displayed: KA8TOK.vcf

you can also get the mod from WWW.QRZ.COM/MODS . I know I put it there
ehrn your site dropped the last time.

Mac wrote:

> Yaesu FT 8100 R Modification Page
>
> The Original 8100R Mod page. New Location
>
> http://www.iw.net/~mac24
>
> 73's
> _Mac_
> Icq: # 3115848
> mcgyv@hotmail.com

[One or more binary attachments are retained only in the source text.]

3993. Re: HELP..identifying transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FA2rAA.Kp7.0.queen@torfree.net>
Source record: 71283

It is a 12 Amp 60Volt 40 Watt N-Channel Power Mosfet.

Sorry, I don't have a Philips databook, but it looks like the BUK452-60
available from Digikey for under a dollar could be a replacement and
appears to have the same pin-out.

ke4ros (ke4ros@email.msn.com) wrote:
: Hello all,

: I have a T-220 transistor that I can't cross in NTE or ECG. It is marked a
: follows:
: _____
: | |
: | O |
: | |
: |_____ |
: | |
: | MT P3 |
: | 055E W |
: | |
: |_____ |
: | | |

: I desperately need one. Can anyone identify this or cross it to something
: else? I believe it was made by Motorola.

: thanks,

: Derf KE4ROS

3994. Re: Deja News Messages Frozen - Help !!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: hinermad@worldnet.att.net
Message-ID: <3711e6d9.1700367@206.132.26.100>
Source record: 71284

On Sun, 11 Apr 1999 20:12:21 GMT, Puppin <puppin@netpar.com.br> wrote:

>In article <7epi5m$30s$1@news.orbitworld.net>,
> "Jones" <please_dont@qsl.com> wrote:
>
>> Why don't you use the newsreader in Netscape and access your news server? The
>> messages download faster and you can use several functions of the newsreader
>not
>> available in Deja News. If your ISP has a poor news server (like mine) there
>are
>> several other news servers available on the net who don't limit access. (Are
>> free.) The one I'm using now is one such server...
>
>
>I'm searching for a free news server in order to begin to access usenet
>directly.
>Could you suggest me some servers.
>I'm in Brazil and my internet provider do not have this kind of service.
>Thank you.

There's a Web page that lists a number of free/open news servers:

http://home1.gte.net/docthomp/servers.htm

Most servers are read-only, but a few allow posting as well. Also,
many of these will not allow access if you have reverse DNS disabled.
(This may be the case if you're using the news reader at work (Who,
me?) and you're behind a company firewall.) The quickest way to find
out is to just try servers in the list until you get one that works.

Dave

3995. Re: Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <923920355.26982.0.nnrp-03.d4f06601@news.demon.co.uk>
Source record: 71285
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Charlie T. wrote in message <01be849b$5363cf80$4933c8cf@ct>...
>I'm trying to wind a coil with minimal skin effect losses.
>I'd like to try Litz wire.
>
>Does anyone know where you can find Litz wire these days?
>
>
>thanks,
>
>W5CDT

The Scientific Wire Company in London stocks a range of Litz wires. I could find the address if you are desperate.

Leon

3996. Re: Deja News Messages Frozen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Tom KA4RKT <badger@telalink.net>
Message-ID: <1KIQ2.206$IQ3.162@news2.atl>
Source record: 71286

Jones <please_dont@qsl.com> wrote in message
> Why don't you use the newsreader in Netscape and access your news server?
The
> messages download faster and you can use several functions of the
newsreader not
> available in Deja News. If your ISP has a poor news server (like mine)
there are
> several other news servers available on the net who don't limit access.
(Are
> free.) The one I'm using now is one such server...

I may be the only person on the list with this problem, but if I am using
the net from
work the NNTP ports are blocked via our firewall so I can't connect to ANY
news server and am limited to using Deja News to read newsgroups if I want
to do so during break, etc.

Now at home, no problem. :-)

73

Tom KA4RKT

3997. Re: Ideas for radios.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Harry Lythall <a@sm0vpo.8m.com.spam>
Message-ID: <01be84e5$907e5c10$8534d693@e0060b0eb282a>
Source record: 71287

Searoy <searoy@netquick.net> wrote in article
<FOcQ2.143$b%1.147861@ralph.vnet.net>...
> Howdy to all.
>
> OK, PC motherboard with expansion slots, expansion slots used to hold
> expansion boards, each board has a tranciever on it, 1 band per board,
sans
> amp.
> One amp to power all bands, or most bands, I haven't gotten that figured
out
> yet.
> Several antennae outs, selectable by configuration of boards (i.e. com1
com2
> com3...)
> LCD display.
>
> Am I crazy? Doesn't sound simple, but it DOES sound possible.

If you are crazy then so am I for reading it all the way through. I used to have an Apple][e and I had several slots available. I found that I had access to the data and address busses so I used a simple address decoder and bi-directional data latch. I was then able to pass information to and from my own boards using just BASIC! That is how I built my first EPROM burner.

I do not know how the PC is structured but it should not be too difficult to do something similar with a little research. I know that the printer ports are memory mapped and I still use them for passing information between my three PC computers, also using BASIC programs.

I hide my low-tech BASIC programs by compiling them to EXE files and no-one knows the difference (well, not many anyway). As regards the wireless, a parallel-load synthesizer could easily be programmed with frequency information so your one card per channel idea could be extended to one card for many channels.

Don't ask me to do anything about it, but I just replied to let you know that it should be quite possible to build a complete low-power inside the PC and have some quite sophisticated functions with very simple software.

Perhaps you may want to post that suggestion to my messageboard? the address is: http://www.insidetheweb.com/mbs.cgi/mb426630
I will not reply to it but you may get some feedback from elsewhere.

Best regards Harry

3998. Heathkit TC-2 Tube Checker Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: dheil@SPAMNOTiname.com
Message-ID: <3711ee5c.8752485@192.0.3.253>
Source record: 71288

Hi,

I am looking for a manual for a Heathkit TC-2 tube checker/tester.
Does anybody out there have one? Can we work a deal for a photocopy?

Thanks,

Dave

3999. Heath IM-11 VTVM meter "glass" needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990412091610.17138.00001745@ng-fd1.aol.com>
Source record: 71289

Hello, I need a reasonably good one to replace the missing meter clear plastic cover on my Heath IM-11 VTVM . If you can provide one reasonably, please let me know...Heath has one, but it is priced ridiculously...
Thank you,
Joe Pratt, Tubecntral@aol.com

4000. Re: test post--do not read

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Harry Lythall <a@sm0vpo.8m.com.spam>
Message-ID: <01be84e8$00501540$8534d693@e0060b0eb282a>
Source record: 71290

There IS nothing to read!!

4001. Ham Radio Resources

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: mikrounit@hughes.net
Message-ID: <7et95u$c6$1@nnrp1.dejanews.com>
Source record: 71291

Hello All,

I have a wep page that has info on
Satellites, Satellite Tracking, VHF/UHF/HF,
Yaesu, FT-847 Page, My HF Rig Reviews, Classifieds,
and TONS of useful Ham Radio & misc Reource Links.

Please visit my web page @ URL:

http://kq6mu.8m.com

Drop into my GuestBook, and sign my GuestBook.
Thanks & 73,

Mike Green KQ6MU

Web Masters:

Please add me to your links section, in return
I will add you to my links section.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4002. Re: ? MRF 477

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37122241.35317259@fallschurch.esys.com>
Source record: 71292

Those transistors are replacement parts in some Ten-Tec (Sevierville, Tennessee) transceivers. They will sell you a matched pair for less money than some parts distributors. www.tentec.com
73de W1AEL

4003. Re: HELP..identifying transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.00000150.0033c825@gto.gto.net.om>
Source record: 71293

MTP3055 N-channel MOSFET

Hi,

Possible crosses are the Hitachi 2SK970 or the Siemens BUZ71A.
Don't forget that, in replacing the MTP3055, the metal tab is also
connected to the drain.

Cheers - Joe, G3LLV

Muaskar Al Murtafa'a
Sultanate of Oman

4004. Help identify this receiver...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: dave@boatanchors.com
Message-ID: <7etdcg$41m$1@nnrp1.dejanews.com>
Source record: 71294
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello all,

I have just acquired an old regen chassis that I hate to see stripped out for parts. I'd like to restore it and make it operable, but I need to find out what it is first, and if anyone has the schematic. I don't have the coil or tube lineup (I'm sure it's coil, detector, and audio but I'm not sure). The underside components are all there and seem to be in good shape. There is a small inductor shaped like a very thick washer that's loose and I have no idea about. It's hanging under the chassis. A schematic would be very helpful!

It appears to be a Pilot 'kit' - the kind that had all the parts and panels, but you had to drill the holes yourself.

I have photos at:

http://www.boatanchors.com - then click on the link at the top of the page 'Help identify this receiver'.

I'd like to find a schematic, and a replacement vernier for the right dial which is broken. If anyone has one or is at all familiar with this little regen, drop me a note.

Thanks and 73

Dave WB7AWK
regen@boatanchors.com

http://www.boatanchors.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4005. WTB - Large Mod Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: John P Russo <jprusso@acsu.buffalo.edu>
Message-ID: <37122F37.148D8D97@acsu.buffalo.edu>
Source record: 71295

Subject says it all, I need a 400 - 500 watt modulation transformer for a project, prefer a multi-tap type if possible, like a CVM5.

Thanks, John KF2JQ

4006. BTX 127

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: "Mel E. Martin" <martin@spydee.net>
Message-ID: <371226F8.487E00E6@spydee.net>
Source record: 71296

Does anyone know how to program in a new frequency on the RS
BTX 127. Please let me know. Also does anyone have a service manual for
it. Thanks..

4007. Identifying a crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Sotiris Antoniou <samant@ath.forthnet.gr>
Message-ID: <7etdbc$r9h$4@medousa.forthnet.gr>
Source record: 71297

Hi,
I have a crystal and a need to get another one but I can not understand the
numbers on it. Does anyone know what it is.

57741-66 GB01C HY-Q

Best Regards.
Sotiris Antoniou .
samant@ath.forthnet.gr

4008. Re: Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: david@slack.com
Message-ID: <371242bd.0@news.spies.com>
Source record: 71298
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <01be849b$5363cf80$4933c8cf@ct>, Charlie T. <xctx@onr.com> wrote:
>I'm trying to wind a coil with minimal skin effect losses.
>I'd like to try Litz wire.
>
>Does anyone know where you can find Litz wire these days?

Johnson Shop Products
P.O. Box 2843
Cupertino CA 95015
johnsonshp@aol.com

4009. Components for clock synching to WWV?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Tom Kreyche <tomkr@microsoft.com>
Message-ID: <7etlj4$a3n@news.dns.microsoft.com>
Source record: 71299

There seem to be more clocks for the home advertised lately that synch their time to WWV or perhaps a local radio subcarrier.

Anyone know if there is a chip set available?

thanks, Tom KG6YJ

4010. Micro R/C FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Joe <joe@mistral.co.uk>
Message-ID: <7etloiiqm1@starburst.uk.insnet.net>
Source record: 71300

Hi,

I am looking for schematics of other info on building a sub micro (<3 grams in weight) FM radio control receiver for model aircraft. Does anyone know anything about these type of circuits (the transmission is FSK modulated on the 35MHz band). I was thinking along the lines of a programmable PLL where a pic micro sets the centre freq of the PLL to the transmitter xTal freq. and directly decodes the signal. Would this work?

Any Help would be apreciated

Joe

4011. Re: Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Charlie Thompson <xctx@onr.com>
Message-ID: <3712628e@mari.onr.com>
Source record: 71301
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hey Reg,

Check out:

http://www.neewcweb.com/litz/rd14m28m.htm

They make a Litz wire specifically for use between 1.4 and 2.8 MHz.

Some good tutorial info on Litz wire resistance calculations at:

http://www.neewcweb.com/litz/litz01.htm

This stuff should be better than solid wire of the equivalent AWG number.

thanks,

-Charlie

--
-->Remove the x's from my email address before using <--
Reg Edwards wrote in message <01be8500$a4bb8700$75e3abc3@default>...
>Above 2 or 3 MHz Litz wire offers negligible improvement.
>
>This is because, to have any effect, the diameter of
>individual copper strands must be less than the skin depth
>in copper at the frequency of interest.
>
>The skin depth in copper is approximately 0.0026 / Sqrt (F
>) inches where F is the frequency in MHz. And each strand
>must be individually insulated.
>
>Copper wire cannot be drawn down to such small diameters as
>are needed at the higher frequencies.
>
>The only way to increase the Q of a coil of given
>inductance at HF is to increase its physical size. Double
>the length and double the diameter allows the same
>inductance to be obtained with fewer turns of much thicker
>wire.
>
>Very roughly, doubling all dimensions doubles the Q until
>radiation resistance losses begin to take effect.
>
>As Mike says, you end up using copper pipe (as in magloops
>).
>

>--
>******************************
>Reg, G4FGQ For free software go to:-
>http://www.btinternet.com/~g4fgq.regp
>
>******************************
>
>Charlie T. <xctx@onr.com> wrote in article
><01be849b$5363cf80$4933c8cf@ct>...
>> I'm trying to wind a coil with minimal skin effect
>losses.
>> I'd like to try Litz wire.
>>
>> Does anyone know where you can find Litz wire these days?
>>
>>
>> thanks,
>>
>> W5CDT
>>
>>
>> --
>> >>>Remove the X's from my email address before using<<<
>>
>> XctX@onr.com
>>

4012. Re: Help identify this receiver...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Joe Schlatter <w4hh@3wave.com>
Message-ID: <b5xQ2.267$z3.34582@news20.ispnews.com>
Source record: 71302
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dave:

That's a really neat site you have there. RE: the photo: is all that
stuff on the shelves in front of you your station? I see a lot of old
Collins, Drake, Hallicrafters, and Hammarlund gear there.

--
Regards,
Joe Schlatter
joe@schlatter.org
http://www.schlatter.org/
http://www.miafacts.org/
http://www.asphome.org/
Amateur radio callsign W4HH

dave@boatanchors.com wrote in message <7etdcg$41m$1@nnrp1.dejanews.com>...
>Hello all,
>
>I have just acquired an old regen chassis that I
>hate to see stripped out for parts. I'd like to
>restore it and make it operable, but I need to
>find out what it is first, and if anyone has the
>schematic. I don't have the coil or tube lineup
>(I'm sure it's coil, detector, and audio but I'm
>not sure). The underside components are all there
>and seem to be in good shape. There is a small
>inductor shaped like a very thick washer that's
>loose and I have no idea about. It's hanging
>under the chassis. A schematic would be very
>helpful!
>
>It appears to be a Pilot 'kit' - the kind that had
>all the parts and panels, but you had to drill the
>holes yourself.
>
>I have photos at:
>
>http://www.boatanchors.com - then click on the link at
>the top of the page 'Help identify this receiver'.
>
>I'd like to find a schematic, and a replacement vernier
>for the right dial which is broken. If anyone has one
>or is at all familiar with this little regen, drop me a
>note.

>
>Thanks and 73
>
>Dave WB7AWK
>regen@boatanchors.com
>
>http://www.boatanchors.com
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4013. Re: Impulse-domain radio... comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: rick@area.com
Message-ID: <7euemv$qs0$1@vax.area.com>
Source record: 71303
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <371193B1.3178@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>
>Perhaps, although in a carrier-less mode you'd theoretically have to
>examine the entire 1 GHz or so worth of frequency space to lock onto the
>transmitter's PRN sequence. That is what bugs me about the Fullerton
>stuff -- it seems to me that the "time domain" advantages could come
>into play only after a synchronous link is established. Especially at
>the microwatt ERP levels they are talking about, that must be the one of
>the toughest hurdles to overcome. I note that most of the micro-power

Actually, it's probably less difficult than acquiring GPS satellites.

>impulse work at LLNL is geared toward single-point applications like
>burglar alarms, studfinders, and such.

If there is any future for this technology, I would say it is
in radar not communications.

>True, I stand corrected... although I'm still not sure what
>ultra-precise time interval measurement does for them in an
>asynchronous, low-duty-cycle system.

It's not asynchronous. The ultra-precise time intervals allow
shorter pulses to be used hence expanding the code space.
>
>> It should be kept in mind that no impulse radio is legal at any
>> power level because it produces intentional radiation in forbidden
>> bands (See FCC part 15).
>
>But they are running at such low power levels as to be virtually
>undetectable, much less interfering.... basically they are trading BW

The FCC rules don't say anything about that. They just say you
cannot have *any* intentional radiation in a forbidden band.

>for log(S/N) in the Shannon equation. That is what seems so intriguing

In Shannon's equation, you eventually become power limited at -1.6 dB
of Eb/No (energy per bit over noise density). This is only 2 dB better
than a state of the art rate=1/2 turbocode QPSK system.

>to me about the concept -- a few microwatts of power can go a long way
>when it's synchronously recovered in a 1 GHz channel. It sounds great

Again, spreading out the energy doesn't make it go significantly farther.

>until you start to think about the practical implications of the
>'synchronous' part.
>
>Still, you can imagine the radio spectrum looking like a very different
>place in the next few decades, if even a fraction of the hype is to be
>believed. Someone on Slashdot was pointing out the grim implications
>for SETI, and the dangers of assuming that the rest of the universe uses
>frequency-domain carriers. :-)

Rick Karlquist N6RK
rick@area.com

4014. Re: test post--do not read

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: Ryan Ashline <Ashline@sprintmail.com>
Message-ID: <7eufc1aah1@fir.prod.itd.earthlink.net>
Source record: 71304

Now there is :=)
Harry Lythall wrote in message <01be84e8$00501540$8534d693@e0060b0eb282a>...
>There IS nothing to read!!

4015. AM-tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37113671.448695176@news.online.no>
Source record: 71374

measured MW tuner coils, RF and MIXER coils tuned 0.5-1.6MHz with
ca200pF, value 50-500�H but RF coil was 10% smaller value than MIXER
Q varied between 30-75
isn't the Q-value somewhat low to be expected for an AM receiver?

Need a set of variable coils of maximum 1.5mH for 136kHz tuner, what sort of Amidon coils are suitable for this purpose?

73 Jan-Martin
LA8AK

4016. Re: 4-1000a tubes for sell

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: bindi39@aol.com
Message-ID: <19990411232807.15223.00001680@ng22.aol.com>
Source record: 71375

please send some more data on the history of the tubes to me. ive got 2 tubes in a g.g. linear amp. thats looking for one push in, and one for a back up.located in long beach california. puts lots of power out, but i'm not interested in a flat tube . n6dna is the call. with respect
george.

4017. Re: Impulse-domain radio... comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: wilco@my-dejanews.com
Message-ID: <7eruhh$sb7$1@nnrp1.dejanews.com>
Source record: 71376
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Also Lawrence Livermore seems to have claimed to invented it as well and files patents though their patent claims were files after time-domains. The interference issue is definitely a big one as Livermore sold licenses to several commercial customers, and sort of downplayed the fact that the FCC has not issued a type acceptance on the technology. So the licensees are suing since they spent a pile of money on a technology they can't use.

I saw mention of pulse on carrier wave, that sounds like an adaption we could use. What kind of data rates can you get with that technology and say compared to using spread spectrum?

Steve
WB9IRS

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4018. FA: Quantity of 10 New NiCd battery packs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: mcp@ricochet.net
Message-ID: <7ervgssur1@nnrp1.dejanews.com>
Source record: 71377
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.swap,alt.cellular,rec.photo.marketplace

Quantity of 10 New NiCd battery packs at Ebay. to find the auction first go here:

http://cgi3.ebay.com/aw-cgi/eBayISAPI.dll?ViewListedItems&userid=boatman9&sort=3&since=-1&page=1&rows=0

then select the auction hyper-link for the batteries.

These are Mitsubishi cellular telephone battery packs. Each pack contains five (5) size AA Nickel Cadmium rechargeable batteries. These are rated by the manufacturer at 850 MilliAmp hours. Since each cell is nominally 1.2 volts the entire pack is a 6 volts. These packs can be used by soldering onto the terminals or you can cut them open and remove the cells for use individually.

Connection to a digital camera can be made by soldering a small power cord onto the battery's positive and negative terminals and then attach the correct plug for your camera on the other end of the cord. Since the batteries are 850 mAH the correct charge rate is 85 MilliAmp for 14 to 16 hours. If you use the batteries individually you can simply charge them using an ordinary AA NiCd charger.

You get 10 of these packs for one price.

Pictures are here ==> http://members.xoom.com/simmtech/nicads/

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4019. Re: Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-12 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be84a1$087d8f00$8f864d0c@default>
Source record: 71378
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hi Charlie,

Here is a letter I saved a while back, I think it may have some useful
info.
This is where I learned you need to pick the proper size Litz wire for the
frequency of interest. I don't know what quantities the company sells in.
I'd be interested in the details of your project, I once made a coil that
we think we measured a Q of 893 at 1.8 Mhz.(1/4" copper tube)

Good luck
Mike

http://www.wiretron.com/litz.html
www.neewcweb.com/litz/litz.htm

I've been working a problem on current rating (ampacity) of Litz wire.
This
problem is not as simple as for solid cable. The copper conductor is
intermingled with the separator material, thus lowering thermal transfer.
On
the other hand, the construction results in larger surface area due to the
nonconductive center.
Futher complications are frequency related proximity effects. In general,
Litz
wire is selected for operation in a distinct frequency range. For
broadcast
use, highest circuit Q results at the lowest frequency (if not voltage or
current limited). This means selection is predominated by the lowest
frequency
regime. The individual strand size is selected for that frequency.
New England Wire has a good technical reference for calculating resistance
of
Litz wire.
See <http://www.neewcweb.com/litz.htm>.
The formula for resistance is given on
<http://www.neewcweb.com/litz02.htm>
from Terman, Radio Engineers Handbook, pp 30-83.
Rac=Rdc(H+K(NDi/Do)^2G
where for large cable H=1, K=2,
F = Operating frequency in Hz
N = Number of strands in the cable
Di = Diameter of the individual strands over the copper in inches
Do = Diameter of the finished cable over the strands in inches
and G=(Di/10.44)^4*f^2 is the eddy current factor

An alternate equation I found was referenced in a reference on WWVB.
See
<http://guppy.nosc.mil/services/sti/publications/pubs/tr/1693/tr1693.pdf>
WWVB Antenna and Antenna Tuning System, pp 36-37, by Peder Hansen and
Darell
Gish

Resistance of the Litz cable is given by
Rac=Rdc(1+ (f/fb)^2)
where f=frequency and fb=critical frequency
fb is defined as the frequency at which Rac=2*Rdc
This refers to a paper by Hansen in 1983 on the Cutler, Maine antenna which
shows a correction table for fb based on wire spacing ratio in a coil
(S/Do)
and coil length to diameter ratio (L/D)
For practical broadcast coils L/D=1 and the correction for fb is about .8.

For f<fb Imax=600Do(n Di)^.5
For f>fb Rac is multiplied by ((1+ (f/fb)^2)/2)^2, for f<fb correction is 1
This factor corrects for use of a cable above its designed frequency range.

Two rule of thumb parameters are also given for rating the cable.
First: 1A/mcm (1000 circular mils)
2nd: 1/4 W/in^2 surface area

Using 1/4 W/in^2 and the corrected formula Rac=Rdc(1+ (f/fb)^2) yields
similar
results to Imax=600Do(n Di)^.5.

Using 1A/mcm is conservative for f<fb. (~ 1/2 the heating power)

So, the question I pose is what are reasonable parameters for setting cable
ampacity? 1A/mcm or 1/4 W/in^2 or some other formula?

Charlie T. <xctx@onr.com> wrote in article
<01be849b$5363cf80$4933c8cf@ct>...
> I'm trying to wind a coil with minimal skin effect losses.
> I'd like to try Litz wire.
>
> Does anyone know where you can find Litz wire these days?
>
>
> thanks,
>
> W5CDT
>
>
> --
> >>>Remove the X's from my email address before using<<<
>
> XctX@onr.com
>

4020. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3713F30A.24BB@northwest.com>
Source record: 71229
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

why not call Digikey and get the datasheets from them?

==========

Robin Birch wrote:
>
> Dear All,
> TOKO's manual quotes their ceramic filters as having an impedance of 330
> ohm for the 10.7MHz FM ones and various values between 1 and 5k ohm for
> the AM (455kHz) ones.
>
> Can anyone tell me if this is purely resistive or whether there is a
> reactive element and if so, how much?.
>
> Regards
>
> Robin Birch
> ---
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

4021. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: rick@area.com
Message-ID: <7f0v31$e37$1@vax.area.com>
Source record: 71230
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <3713CF75.1B80F728@teleport.com>,
Roy Lewallen <w7el@teleport.com> wrote:
>
>Packaged filters are generally designed to work properly when
>terminated at input and output with a pure resistance of a specified
>value. Without information other than given in the above posting, I
>assume that's what the "impedance" refers to.
>
>Roy Lewallen, W7EL

Roy is right. What the catalog means is that if you terminate it with
a 330 ohm *resistive* source/load, it will meet its specs. Other resistances
will give different (usually less desirable) responses. Adding reactances
has different effects. I actually did a fair amount of experimenting with
using non-standard and reactive terminations with some Murata 10.7 MHz
ceramic filters specified for 330 ohms to change the response to suit
my needs. This is discussed in my 1995 and 1996 IEEE Frequency Control
Symposium papers on my web site: <http://www.karlquist.com> (see
"professional papers".)

Many crystal filters specify a termination that is a combination of resistance
and reactance, BTW.

Rick Karlquist N6RK
rick@area.com

4022. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19990414.0352.9901519snz@microvest.demon.co.uk>
Source record: 71231
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

On Sunday, in article <7f0205$j6t$1@wanadoo.fr>
vantalon.f6bwf@wanadoo.fr "vantalon" wrote:

> Hello . In my past job i have had to use 3 bird 43 in our laboratory . All
> have given different measures (on the same load of course !)For an output
> of 40 watts , one of them gives 50w reading ! This one was used for " demo "
> with the customers !! 73 to all

What is your point? Are you claiming that Bird watt meters do not
meet their specified accuracy?

Your comments raise a few questions, such as how do you know that the
true power was 40 watts and what were the ranges and conditions of
the Bird elements with which you made those measurements? And also,
if you were serious about the last comment there's the ethical
question of why you were showing a reading to your customers that you
believed was false and fully 25% greater than the true power.

New standard Bird 43 meters are specified at +-5% of Full Scale in
carrier mode (and +-8% in PEP mode where that's available). So, even
if the true power was 40 watt (and you didn't explain how you reached
that conclusion), then measuring it with a new meter and new 250 watt
element will not guarantee a reading any of better than around 237 to
263 watts, and using an old and mishandled meter and element of any
rating may also not give a particularly accurate measurement.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4023. Re: ebay- Need a MINT Yaesu FRG-7 RCVR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <924065811.221.64@news.remarQ.com>
Source record: 71232

RLucch2098 <rlucch2098@aol.com> wrote in message
news:19990413233948.24773.00000474@ng-fv1.aol.com...
> Hi Guys;
> Please check this out will ya! It looks like new!
> URL>>
[snip]
> Thanks es 73....Rich WA2RQY (1961
> "Keep those heaters on"

rec.radio.amateur.homebrew is *not* a forsale group. If you must post ebay
stuff please limit it to rec.radio.swap, which is a sale group.

- Bob W7OV

4024. Re: Help identify this receiver...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Bill Smith <billsmith@jps.net>
Message-ID: <3VMQ2.702$MQ1.7804@typhoon-sf.pbi.net>
Source record: 71233
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi, Dave.

I talked to a friend of mine who is very knowledgeable about these units, and he seems to feel this was likely a homebrew. From the photos, it seems there are three tube sockets. One would be used for a coil, another for the regenerative stage, and the third for an audio amplifier. The transformer was likely an interstage between the regen and audio. The (magnetic) earphones would typically be hooked to the battery and plate of the audio amplifier.

It looks like a battery set - that is the tubes were directly heated filament/cathode. It was hard to tell from the pix whether the tube sockets were four or five pin. The resistance control is likely to adjust filament voltage, and the presence of a transformer in the regen circuit was more typical of battery sets than later "AC" sets that used tubes with indirectly heated cathodes.

Regarding the schematic. You are probably best off by finding a typical regen schematic, then tracing out the wiring in your set. There were many minor variations but all followed the same basic approach. From the size of the tuning capacitors (one was tuning, the other is likely a regeneration control) it looks like it was built as a short wave receiver.

The coil will probably take some educated guessing, but if you can find a typical schematic, you might borrow the coil winding data from that project. The coil windings are probably not too critical provided you have the basic windings and taps hooked to the proper places.

It should be straightforward to make the set work again, after all these years. Good Luck!

73 de Bill, AB6MT
billsmith@jps.net

<dave@boatanchors.com> wrote in message
news:7etdcg$41m$1@nnrp1.dejanews.com...
> Hello all,
>
> I have just acquired an old regen chassis that I
> hate to see stripped out for parts. I'd like to
> restore it and make it operable, but I need to
> find out what it is first, and if anyone has the
> schematic. I don't have the coil or tube lineup
> (I'm sure it's coil, detector, and audio but I'm
> not sure). The underside components are all there

> and seem to be in good shape. There is a small
> inductor shaped like a very thick washer that's
> loose and I have no idea about. It's hanging
> under the chassis. A schematic would be very
> helpful!
>
> It appears to be a Pilot 'kit' - the kind that had
> all the parts and panels, but you had to drill the
> holes yourself.
>
> I have photos at:
>
> http://www.boatanchors.com - then click on the link at
> the top of the page 'Help identify this receiver'.
>
> I'd like to find a schematic, and a replacement vernier
> for the right dial which is broken. If anyone has one
> or is at all familiar with this little regen, drop me a
> note.
>
> Thanks and 73
>
> Dave WB7AWK
> regen@boatanchors.com
>
> http://www.boatanchors.com
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4025. Has Anyone Used MDT Pic type Processors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: David deSouza-Kirby <dave@vfpnet.demon.co.uk>
Message-ID: <hpTJ9IAotnE3EwSM@vfpnet.demon.co.uk>
Source record: 71305

Hi.

Has anyone used any MDT pic type micro controllers in a project or evaluation.

Any information would be useful.

Many thanks in advance.

Dave.

Reply to Dave@vfpnet.demon.co.uk

4026. Put a Noise Blanker that Works in your Drake R-4C for $25!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: frohro@wwc.edu
Message-ID: <frohro-1204991759160001@csp-frohro.wwc>
Source record: 71306
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.swap

Hi All,

After Drake's 4NB didn't do much for me on my QRN I decided to cobble something together that would work. While it is still a work I'd like to improve, I have something that works a whole bunch better than the 4NB. I used Ten-Tec's Model 297 accessory blanker for the Scout. The details of the project are on my web site. See them at:

http://www.wwc.edu/~frohro/R-4C/NoiseBlanker.htm

If you have any suggestions, I'd love to hear them.

73,

Rob, KL7NA

4027. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Keith Piercey <salmo@nf.sympatico.ca>
Message-ID: <37132cc3.0@209.128.1.3>
Source record: 71307
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

If you want something really simple, how about one of those switches they use in closets where, when you open the door the light comes on. In this can "lifting" the equipment would open the switch and turn on an alarm.

Or, instead of an audio alarm, you could use one of those strobe lights that are used for letting you know that a phone is ringing (Radio Shack sells them). Better still, use both the alarm and the light.

Good luck.

Keith Piercey VO1AE

4028. MFJ-9030 IMPROVEMENT

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Paul Gili <paul.e.gili@lmco.com>
Message-ID: <371355D7.2B8E@lmco.com>
Source record: 71308
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.antenna,rec.radio.amateur.misc

Improvement to the great little MFJ-9030 QRP transceiver for elimination
of the 6MHz i.f. feedthrough QRM are described at:

http://www.qsl.net/aa1ll

73, Paul, AA1LL
Greenville, NH

4029. Re: kenwood tr7800fm

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <7evlaqndv1@hirame.wwa.com>
Source record: 71309

In article <371109C7.6A26@gironet.nl>, AZ <Zwakman@gironet.nl> wrote:
>Who has information about modifications for
>a kenwood tr7800fm 2 meter transciever for me.
>
>az
****

What mods are you looking for??

I inherited one and put in a PL tone generator. Its power output is low. I want to put in a diode to prevent backup battery drain when power supply is turned off.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

4030. Centenial 80M SSB kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Michael Stevenson <mike@gi4xsf.freeserve.co.uk>
Message-ID: <7evmfoaoc1@news7.svr.pol.co.uk>
Source record: 71310

Hi,

I have seen advertised "Centennial" 80m SSB transceiver kits.

Has anyone made any of these transceivers. I'm not familiar with it, so any comments are welcome.

Mike GI4XSF

mike@gi4xsf.freeserve.co.uk

4031. Re: Components for clock synching to WWV?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: david@slack.com
Message-ID: <37136e9f.0@news.spies.com>
Source record: 71311

In article <7etlj4$a3n@news.dns.microsoft.com>,
Tom Kreyche <tomkr@microsoft.com> wrote:
>There seem to be more clocks for the home advertised lately that synch their
>time to WWV or perhaps a local radio subcarrier.
>
>Anyone know if there is a chip set available?

The consumer radio clocks receive WWVB (in the US).

Temic had the U4221B/U4223B/U4224B/U4226B series for this.

Does anyone know if these are now with Temic, Atmel, Vishay, or ???

P.S. For a good bibliography on radio clocks see:

http://gorzarg5.phy.bnl.gov/~scott/radio-clocks.html

4032. Re: Centenial 80M SSB kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <371377E8.8209DFCD@mlecmn.net>
Source record: 71312

Michael Stevenson wrote:
>
> Hi,
>
> I have seen advertised "Centennial" 80m SSB transceiver kits.
>
> Has anyone made any of these transceivers. I'm not familiar with it, so any
> comments are welcome.
>
> Mike GI4XSF
>
> mike@gi4xsf.freeserve.co.uk

The following is a copy of a response I made to a similar question a few weeks ago:

I purchased a partial kit (PC board, crystals, and ICs) and built the kit about a year and a half ago. The rig has adequate sensitivity, clear audio on transmit and receive, and the receive current drain is only about 35 mA. After checking out the transceiver, I made the following modifications:

1. The author of the plans seemed to have a misunderstanding of how you measure PEP. He talked about measuring peak-to-peak voltage across a 50 ohm resistor, squaring it, and dividing by 50 to get PEP. He left out a factor of 8. At the time I bought the kit, it was advertised as having 5 to 8 watts output, but mine would only put out about 5/8 to 1 watt PEP. I used a voltage doubling transformer between the output transistor and the filter to bring the PEP up to about 3 watts with a 13-volt supply.

2. The VFO uses a type 2 (red) toroid core for the inductor. Substituting a type 6 (yellow) core (and adding a couple of turns to get the same inductance) improves the temperature stability by a factor of about 3.

3. The VFO inductor is very close to the T-R switching relay and experiences a slight inductance change due to the stray magnetic field. To minimize the amount of frequency shift between transmit and receive, it was necessary to rotate the inductor until the best position was found.

Possibly some of these design flaws have been corrected since I built my kit.

Lyle, K0LR

Lyle, K0LR

http://www.computerpro.com/~lyle

4033. LM373 equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: edh@xxxqualcomm.com
Message-ID: <7evsp5atf1@thefuture.qualcomm.com>
Source record: 71313

I was poking around in my parts bins and found a couple of LM373's. I know that these were discontinued a long time ago but they seem to have most of the functions to build simple receivers - AGC amp, mixer, AGC detector. I've looked at the NE602 but it doesn't have the AGC functions. Are there any similar components available today that contain most of the functions for a simple receiver?

Thanks,
Ed

4034. Want Swan PSU-6 power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <371382f4@news1.us.ibm.net>
Source record: 71314
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

The companion supply for the Cubic Astro 102BX and 103 rigs. Need not work.

Lane Zeitler
Ku7i
San Diego zip 92139

4035. Re: Elecraft K2 - Easy to Build

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: "Timothy J. Strong" <kg2noX@arrl.net>
Message-ID: <371382F4.9118C9E6@arrl.net>
Source record: 71315

Please note, I don't post/read many newsgroups, so to prevent spamming, you must remove the X that is preceding the @ sign in my email address.

"Eric Swartz - Elecraft, WA6HHQ" wrote:
>
> I've noticed several messages here asking how difficult the K2 is to
> build and how much experience is required.
>
> We've designed the K2 so that anyone with good soldering skills can
> build it. If you have build any other kit, such as the Wilderness
> NC40, Sierra, Ten-Tec kits etc, you will have no problems building
> the K2. It is just as easy (sometimes easier) to build - it just has
> more parts to stuff in the PCB. Since we only use through hole parts
> it doesn't require tweezers and a microscope to build.

As a field tester for Elecraft, I can tell you that the K2 was easy to build. There were some difficult sections, but mostly these were just tight areas where a steady hand was required. I expect that based on our suggestions, the production units will be even easier to build. I may have to talk my XYL into getting one - and she's not even a ham! But I'll volunteer to build it for her! ;-) It was fun to build!

So, what kind of prior experience did I have before I built the K2? Well, I haven't even admitted this yet to Elecraft yet. This was my very FIRST kit I have ever put together. Heck, even the torroids were fun to wind as I never had done that either! The only soldering experience that I had was a little computer controlled interface I built from scratch for my big rig (I have not gotten the interface to work yet - and it only contains about a dozen components).

My original plan was to warm up with the NorCal 20, but since they both shipped at the same time, I decided to start with the K2. I still need to start the NC20.

I only encountered several problems. Looking back on them, 2 of them should not have been problems, if I knew what I was doing in the first place. In fixing some ground shorts, I etched all around some pins, isolating them from the circuit. Another problem was a solder bridge, or atleast that's what I think it was. There was a ground short, so I removed the component, no short, resoldered the component, and it was fixed. For the experienced builder, these problems would not have been a problem, but I learned a lot in building the K2 and fixing the problems. Wayne and Eric's support was great!

I think that this is a huge testimonial to Wayne and Eric in designing a complex rig like the K2, but making it easy to build. The manual is written for the beginner (atleast the first 2 chapters), by the 3rd, the builder should know the basic stuff. I would definitely go the Elecrafts web page and download the manual if you're thinking of building the K2.

> We eliminated the use of wiring harnesses with our 'wireless' design
> and we also built in key test equipment (volt-meter, freq-meter etc.)
> so that you don't need a room of equipment to align it. Actually only
> a digital VOM is suggested.

Actually, when I first aligned mine, I did not use any external test equipment. I just connected an antenna and aligned the K2 based on maximum receive signal based on how I heard the signal. I later realigned it using meter, although very little change was required. I did use a DMM to double check some resistors, but if you know how to read a resistor (they tell you how in the manual) then you shouldn't have any problems. Just double check your parts placement before soldering!

The K2 is a nice "big" radio in a little package. It was fun to build and even better to operate!

If you would like to see some pictures, goto:

http://members.spree.com/family/tkstrong

Follow the link for "Tim", then "Elecraft K2". As you'll notice, our site isn't complete yet. If you visit, please let me know what you think and if you have any suggestions for making it better.

73,

--

-Tim
kg2noX@arrl.net

To reply, remove the X preceding the @ sign.

KG2NO
------- ___o Timothy J Strong o___
------- `\-<, Northern Telecom ,>-/'
------- (*)/'(*) 97 Humboldt Street (*)`\(*)
---------- Rochester, NY 14629 --o---o-o-
-------- Summer -------- QRP-L #780 -------- Winter ------

4036. TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <itQvgBAEj4E3Ewis@falstaf.demon.co.uk>
Source record: 71316
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear All,
TOKO's manual quotes their ceramic filters as having an impedance of 330 ohm for the 10.7MHz FM ones and various values between 1 and 5k ohm for the AM (455kHz) ones.

Can anyone tell me if this is purely resistive or whether there is a reactive element and if so, how much?.

Regards

Robin Birch

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4037. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: wrh@cbemg.cb.lucent.com
Message-ID: <7f02i3$ifv@nntpa.cb.lucent.com>
Source record: 71317
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap,rec.roller-coaster

In article <370b9479.137021276@news.istep.com>,
<mshannon@[nospam]fusionsites.com> wrote:
>On 6 Apr 1999 23:22:33 GMT, jl110@cleveland.Freenet.Edu (Trent
>Phillips) wrote:
>
>>
>>In a previous article, bfomsd@starmedia.com () says:
>>
>>>Do you believe in REINCARNATION?
>>>
>>

now i do

i recall being a wooden clothes pin
(not the type with the spring)

i hope to, someday, be a small can of green beans

billh

4038. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Pathagarus <n2yii@erols.com>
Message-ID: <3713875B.2E21869F@erols.com>
Source record: 71318
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap,rec.roller-coaster

I've always fancied myself as being a no pest strip!

- wrote:

> In article <370b9479.137021276@news.istep.com>,
> <mshannon@[nospam]fusionsites.com> wrote:
> >On 6 Apr 1999 23:22:33 GMT, jl110@cleveland.Freenet.Edu (Trent
> >Phillips) wrote:
> >
> >>
> >>In a previous article, bfomsd@starmedia.com () says:
> >>
> >>>Do you believe in REINCARNATION?
> >>>
> >>
>
> now i do
>
> i recall being a wooden clothes pin
> (not the type with the spring)
>
> i hope to, someday, be a small can of green beans
>
> billh

4039. Re: EL 519

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Phil -F5IYJ <f5iyj@qsl.net>
Message-ID: <3713989E.E9F1D28A@qsl.net>
Source record: 71319
Cross-posted to: fr.rec.radio.amateur,rec.radio.amateur.homebrew

Claude Frantz wrote:
À mon avis, une 6146B à la place d'une
> 6146 serait un choix plus judicieux, car il s'agit d'une version
> renforcée du même tube, donc pas de support à changer, même
> encombrement.
voire même des 6146W, qui ne sont pas chères chez RFParts
(rfp@rfparts.com)

Phil- F5IYJ

4040. Re: screwdriver h.f. mobile antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: ka7w@my-dejanews.com
Message-ID: <7f0bsm$mq5$1@nnrp1.dejanews.com>
Source record: 71320

In article <19990320215937.00439.00000630@ng-ca1.aol.com>,
pitts5051@aol.com (PITTS5051) wrote:
> Appreciate any info.on a screwdriver type antenna text,pictures,plans etc.
> thanks Marvin AC5QW.
>
Look up tjantenna company www.tjantenna.com you can't beat it !

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4041. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: dynastic@0spam.cwcom.net
Message-ID: <37139657.27681640@news.cwcom.net>
Source record: 71321
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

On Tue, 13 Apr 1999 19:11:16 +0100, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>Dear All,
>TOKO's manual quotes their ceramic filters as having an impedance of 330
>ohm for the 10.7MHz FM ones and various values between 1 and 5k ohm for
>the AM (455kHz) ones.
>
>Can anyone tell me if this is purely resistive or whether there is a
>reactive element and if so, how much?.

Would have thought that 'impedance' would, by
definition, include reactance (?) Must do, in an
inductor.

--
- 73 de Jim, g(m)4rga | For we hae faith in Scotland's
olympus%jimdee.prestel.co.uk | hidden poo'ers, the present's
dynastic%cwcom.net | theirs, but a' the past and
marula%zdnetmail.com | future's oors.
g4rga@gb7tjf.#45.gbr.eu | - McDiarmid.
Rallies Info: www2.prestel.co.uk/jimdee
Pgp key: pgpkeys.mit.edu:11371

4042. Re: Dissassembly advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3713b137.0@news.netwalk.com>
Source record: 71322

Will White wrote in message <370C60D3.B68118CB@asu.uswest.net>...
>I am having trouble removing them from the steel box they are mounted
>in. I can't get a wrench in to grab the nuts, or figure how to release
>the mounting clips. Help!
>

Try a nut driver with a hollow shaft.

Jim
N8EE

4043. Re: found 455kHz BFO ckt for AM SW RX!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3713b0a6.0@news.netwalk.com>
Source record: 71323
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

One thing that I have done is tune a cheap pocket size AM BCB receiver to a strong station and turn down the volume. Place the BCB radio next to the SW radio and adjust the BCB tuning slightly to get the desired beat note.

Jim
N8EE

4044. FS: 44 year accumulation of Tubes & Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: "m.pasternack" <m.pasternack@cwix.com>
Message-ID: <01be85ff$50d8e920$8c9c3ea6@pavilion>
Source record: 71324
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

e-mail to "m.pasternack@cwix.com" to receive 10 page list. Murray, W6KRC

4045. Re: LM373 equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: abcd1234 <abcd1234@ix.netcom.com>
Message-ID: <7f0i35$kb9$1@news1.exit109.com>
Source record: 71325

ne602 is doubly balanced mixer + oscilator, while LM373 has a simple mixer.

Yes, alot of japanese IC which are very commonly used in BOOM boxes
implement the whole AM RX + FM IF chain +disc in one chip.
EG.
SANYO LA1205 used in SONY ICF2001
LA1206 used in YB400 and countless other BOOMBOX type AM/FM
radios.

Yes you can get data sheets for these in english on the www.

4046. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3713CF75.1B80F728@teleport.com>
Source record: 71326
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Jim Dunnett wrote:
>
> On Tue, 13 Apr 1999 19:11:16 +0100, Robin Birch
> <robin@falstaf.demon.co.uk> wrote:
>
> >Dear All,
> >TOKO's manual quotes their ceramic filters as having an impedance of 330
> >ohm for the 10.7MHz FM ones and various values between 1 and 5k ohm for
> >the AM (455kHz) ones.
> >
> >Can anyone tell me if this is purely resistive or whether there is a
> >reactive element and if so, how much?.
>
> Would have thought that 'impedance' would, by
> definition, include reactance (?) Must do, in an
> inductor.

Packaged filters are generally designed to work properly when terminated at input and output with a pure resistance of a specified value. Without information other than given in the above posting, I assume that's what the "impedance" refers to.

Roy Lewallen, W7EL

4047. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7f0pt5frr1@news1.fast.net>
Source record: 71327
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

Robin Birch <robin@falstaf.demon.co.uk> wrote in message
news:itQvgBAEj4E3Ewis@falstaf.demon.co.uk...
> Dear All,
> TOKO's manual quotes their ceramic filters as having an impedance of 330
> ohm for the 10.7MHz FM ones and various values between 1 and 5k ohm for
> the AM (455kHz) ones.
>
> Can anyone tell me if this is purely resistive or whether there is a
> reactive element and if so, how much?.

The impedance is more or less resistive in the passband, but
soars to much higher (and more reactive) values than 330 Ohms
outside of the passband.

If you try to use the filter input as a load for an amp
or (active) mixer you will see the gain peak either side
of the passband and actually dip in the passband.

You can reduce the effect of this somewhat by using an
"umbrella" filter (a relatively low Q L-C tank resonant
at 10.7 MHz, perhaps with a resistor in parallel with it)
to roll off the load impedance seen by the active device
far from the passband.

This will also give an added benefit of helping to supress
filter spurious responses outside the passband (more as you
get further away, obviously) ... I haven't looked at the
specs on the TOKO ceramic filters in a while ... but the
"el-cheapo" Murata ones are only spec'd for 30 dB spurious
supression, and that only over a band of something like
9-12 MHz ... outside that, spurious responses are not spec'd.
(and can be quite substantial ... particulary the 3rd harmonic
response as I recall.

73,

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!

Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

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3TOutl3YUfgTAdpz89XgBjfc
=i6DU
-----END PGP SIGNATURE-----

4048. Re: Components for clock synching to WWV?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-13 00:00:00 UTC
From: Tom Kreyche <tomkr@microsoft.com>
Message-ID: <7f0rh4$a6g@news.dns.microsoft.com>
Source record: 71328

That for the tip David, I found it at
http://www.temic-semi.de/hn/broadcas/broadcas.htm

David DiGiacomo <david@slack.com> wrote in message
news:37136e9f.0@news.spies.com...
> In article <7etlj4$a3n@news.dns.microsoft.com>,
> Tom Kreyche <tomkr@microsoft.com> wrote:
> >There seem to be more clocks for the home advertised lately that synch
their
> >time to WWV or perhaps a local radio subcarrier.
> >
> >Anyone know if there is a chip set available?
>
> The consumer radio clocks receive WWVB (in the US).
>
> Temic had the U4221B/U4223B/U4224B/U4226B series for this.
>
> Does anyone know if these are now with Temic, Atmel, Vishay, or ???
>
> P.S. For a good bibliography on radio clocks see:
>
> http://gorzarg5.phy.bnl.gov/~scott/radio-clocks.html

4049. FSK decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Norm Melick <henmel@worldnet.att.net>
Message-ID: <37153F13.80CF5E6B@worldnet.att.net>
Source record: 71129

Does anyone have a good, 4 level FSK decoder schematic that
they would share with me?

Thanks much.

Norm/KQ6SD

4050. sync detect

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: PGH <hubelp@mail.capital.net>
Message-ID: <37153D6A.B74A3590@mail.capital.net>
Source record: 71130

I would like to construct a sync detector to use to replace a diode in a simple SW circuit. Is there any thing out there that uses a bal mixer/PLL or whatever. The simpler the better.

Thanks PGH

4051. Re: Quantity of 10 New NiCd battery packs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <924141515.878.62@news.remarQ.com>
Source record: 71131

<mcp@ricochet.net> wrote in message news:7ervgssur1@nnrp1.dejanews.com...

[SPAM SNIPPED]

> then select the auction hyper-link for the batteries.
>
> These are Mitsubishi cellular telephone battery packs. Each pack contains
> five (5) size AA Nickel Cadmium rechargeable batteries. These are rated by
> the manufacturer at 850 MilliAmp hours. Since each cell is nominally 1.2
> volts the entire pack is a 6 volts. These packs can be used by soldering
onto
> the terminals or you can cut them open and remove the cells for use
> individually.
>
> Connection to a digital camera can be made by soldering a small power cord
> onto the battery's positive and negative terminals and then attach the
> correct plug for your camera on the other end of the cord. Since the
> batteries are 850 mAH the correct charge rate is 85 MilliAmp for 14 to 16
> hours. If you use the batteries individually you can simply charge them
using
> an ordinary AA NiCd charger.
>
> You get 10 of these packs for one price.
>

>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

PLEASE DO NOT SPAM USENET GROUPS. If you must post ebay stuff please
confine it to sale groups. Rec.radio.amateur.homebrew is not a sale group.

4052. Re: Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Ken Smmons <ksimmons@jempac.com>
Message-ID: <37154F03.1DAC0FBA@jempac.com>
Source record: 71132
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Surplus Sales of Nebraska has some litz wire forget what size, also I
think Hustler uses it on some coils.
Ken K5UHF

Reg Edwards wrote:

> > They make a Litz wire specifically for use between 1.4
> and 2.8 MHz.
> > This stuff should be better than solid wire of the
> equivalent AWG number.
> ================================
> Unless you can say HOW MUCH better the stuff will be you
> don't know what you are talking about.
>
> I suggest any improvement at 2.8 MHz will be less than the
> thickness of the needle on the S-meter.
>
> And at higher frequencies it will be even less !
>
> And if it costs 1000 times more to purchase the improvement
> equivalent to the thickness of the S-meter needle - is it
> worth it ?
>
> The same improvement can be obtained by increasing the size
> of coil wire. Say from 18 to 17 gage.
>
> Cheerio, Reg.

4053. long-play recorders

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <7206-37154B68-72@newsd-112.bryant.webtv.net>
Source record: 71133

i have seen ads for cassett recorders with a conversion done to enable them to get 5 times the record time. does anyone know how its done? can it be done with common parts? please give all the info you guys have. thanks

4054. Re: Where to get Litz wire??? ---> Reg Edwards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "Charlie T." <xctx@onr.com>
Message-ID: <01be86ec$aa1bb920$2733c8cf@ct>
Source record: 71134
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reg Edwards <G4fgq.Regp@btinternet.com> wrote in article
<01be86ec$ca0ce880$f8e5abc3@default>...
> > They make a Litz wire specifically for use between 1.4
> and 2.8 MHz.
> > This stuff should be better than solid wire of the
> equivalent AWG number.
> ================================
> Unless you can say HOW MUCH better the stuff will be you
> don't know what you are talking about.
>
> I suggest any improvement at 2.8 MHz will be less than the
> thickness of the needle on the S-meter.

Hey Reg....

A LOT BETTER!!!
Firstly I'm not comparing S units but rather AC resistance vs. DC
resistance.
I disagree with your pessimistic assesment and I will respectfully attempt
to prove it:

Firstly, here's one datapoint from a manufacturer of Litz wire bundles...

Frequency vs. AWG Strand Size

All Values in KHz

1 To 10.0 - 30 AWG
10 To 50.0 - 33 AWG
50 To 100.0 - 36 AWG
100 To 200.0 - 38 AWG
200 To 400.0 - 40 AWG
400 To 800.0 - 42 AWG
800 To 1600 - 44 AWG
1600 To 3200 - 46 AWG
3200 To 5000 - 48 AWG

So the skin depth demands a rather narrow frequency range for each
AWG bundle configuration to be effective.

Secondly, take a look at the "H" ratio defined at this web site and
look at their product offerings in the 1.6 MHz range. Notice the H
ratio is nearly 1. H being the AC/DC ratio of resistances.
This very excellent reference can be found at:
http://www.neewcweb.com/litz/litz01.htm

I rest my case....

Finally, if it wasn't worth making Litz wire then no company would make
it...
this obviously isn't true...so there you have it.

Cheers,
Charlie
W5CDT

4055. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <5McR2.276$GQ2.30204@news20.ispnews.com>
Source record: 71135
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

In all my years of working with instrumentation in the mechanical, electrical, and chemical areas, my training and experience tell me that Roy's understanding of percent of full scale is correct. If a manufacturer specifies percent of _reading_, that is exactly what is meant. But percent of _full scale_ is quite different - the actual reading can be in error as much as this percentage of the full scale reading _anywhere_ along the scale. In general, stating accuracy as percent of full scale is done to make a poor calibration look better than it actually is. For those wanting to quibble about definitions, ISA (formerly Instrument Society of America, now International Society for Measurement and Control) publishes a number of International Standards giving definitions of all of these terms.

I suspect Bird is just lazy in not giving better accuracy statements. For example, I have seen precision digital instruments specify accuracy as X% of reading + Y% of full scale +/- 1 count. In this case, the X value relates mostly to how well the true reading matches the divisions of the instrument's scale. The Y value relates more to the errors obtained when switching from one scale to the next. Finally the +/- one count relates to the ambiguity of the digital electronics (such as a counter or A/D converter).

What Bird really needs to do is present a calibration curve of actual value versus indicated value. Added to this should be two additional curves, one above and one below, indicating the 95% confidence limits as determined for a large number of instruments. This sort of statistical accuracy presentation is expensive, obviously, and I doubt if Bird will ever give one.

Percent of full scale is, in my opinion, a cop-out for Bird. Whenever accuracy is stated this way, it means the actual accuracy of any reading will always be worse than the full scale accuracy (unless the reading IS full scale, in which case the accuracy is the full scale accuracy).

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

4056. Your Personal Callsign Mug.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Jaw Jabber <jawjabber@earthlink.net>
Message-ID: <7f3m05muu1@birch.prod.itd.earthlink.net>
Source record: 71136
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

What better way is there to start off your morning except by drinking a cup of coffee using your very own CALLSIGN MUG. See at http://home.earthlink.net/~jawjabber
All mugs are made with quality control in mind. They are dishwasher and microwave safe and if after you receive your mug you are unsatisfied just send the mug back in its original shipping container and I will refund you the cost of the mug. See at http://home.earthlink.net/~jawjabber for details.

Georges Mug Shop
http://home.earthlink.net/~jawjabber

4057. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37156C36.608214E6@mwci.net>
Source record: 71137
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Barry L. Ornitz wrote:

> In all my years of working with instrumentation in the mechanical,
> electrical, and chemical areas, my training and experience tell me that
> Roy's understanding of percent of full scale is correct.

It is not correct. High quality meters of all types routinely specify full scale accuracy. Because of quality control of the relationship between "deflection" and "input" they can mark the scale with considerable confidence. The accuracy degrades "gracefully" below full scale.

I definitely do not agree with your comments on this. They are contrary to my experience with high quality laboratory analog meters of many types.

Bill W0IYH

4058. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37156A00.9CF7CD94@mwci.net>
Source record: 71138
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Roy Lewallen wrote:

> Virtually all test equipment manufacturers guarantee and stand by the
> accuracy of their instruments.

5% of full scale is 12.5 watts. The error at 40 watts (or 12.5 watts) cannot be "assumed" to
also be 12.5 watts by any reasonable person. That is nonsense and anyone who knows anything about analog meters knows that it is nonsense.

The % error in any high quality analog meter degrades "gracefully" as you go downscale. The errors at less than full scale are definitely related to the full scale accuracy. Pick up a catalog of meters and you will see that the full scale accuracy is what is specified. That does
not mean the meter is "junk" at other readings.

Here is the main idea. A properly designed D'Arsonval meter maintains a certain definite relationship between "deflection" vs "input" over its range. The full scale accuracy is correlated to that relationship. Because of that relationship the scale can be marked with considerable confidence across most of the scale. At this moment I am looking at a Simpson catalog that specs full scale accuracy. Yet the picture shows finely spaced markings all across
the scale. Is this some kind of "fraud"?

Hogwash.

Meter designers and manufacturers learned long ago how to deal with this problem of reproducibility, so that "one" meter scale can be used over and over.

For a rectifier meter the rectifiers do introduce a problem, but with quality control this problem is manageable, and is responsible for a slightly relaxed spec for this kind of meter.
AC meters also have a crest factor problem.

> If the accuracy of the
> Bird 43 wattmeter is not specifed at some points on the scale, as you
> say, then it's useless for making any kind of meaningful measurement,
> as is any piece of test equipment with unspecified accuracy.

My experience with my 43, with its 2-30 MHz elements, is that it is quite "accurate" across most of the scale within that frequency range.

> I'll bet that if you were to send the
> Bird 43 meter to the calibration lab and it measured 30 watts with 40
> applied, or even 12 watts with zero in, it would be returned as being

> in calibration.

Baloney. It would be sent to the factory repair shop.

> Most labs will
> return a meter as calibrated if it meets its spec. If it has no spec,
> it can't be calibrated. The fact that the Boonton was returned as
> calibrated doesn't mean that it's dead on, only that it meets whatever
> spec Boonton or your company put on it.

It meets the requirements that Boonton says it supposed to meet. And when it is adjusted at full scale, it is very accurate across a 13 dB range, as determined by accurate RF attenuators.
I have been using these meters for 30 years and I know their quality.

As for going separate ways, go which ever way you like. If that is the way you want to behave
toward me, I couldn't care less.

Bill W0IYH

4059. Re: Your Personal Callsign Mug.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37157C52.4AFA9A92@teleport.com>
Source record: 71139
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

Do you really think you'll sell more product by being obnoxious and cluttering up the newsgroup with frequent advertising? If you're rewarded for this behavior, I foresee the day when the newgroups won't have any postings except ads like this. (This has already happened to some.) So I sure hope no one responds to this by buying your product.

Roy Lewallen, W7EL

A fellow entrepeneur, but with a very different philosophy

Jaw Jabber wrote:
>
> What better way is there to start off your morning except by drinking a cup
> of coffee using your very own CALLSIGN MUG. See at
> http://home.earthlink.net/~jawjabber
> All mugs are made with quality control in mind. They are dishwasher and
> microwave safe and if after you receive your mug you are unsatisfied just
> send the mug back in its original shipping container and I will refund you
> the cost of the mug. See at http://home.earthlink.net/~jawjabber for
> details.
>
> Georges Mug Shop
> http://home.earthlink.net/~jawjabber

4060. Looking for Boontoon 076A Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <7f5u22nfd1@juliana.sprynet.com>
Source record: 71140

Hi,

I am looking for a manual for a Boonton
076A automatic capacitance bridge. I have
looked through all used manual websites that
I have been able to find so far with no luck.

Any suggestions or ones for sale out there.

Also looking for diode matrix info on a HAL
communications ID-1A Morse Code
Repeater Indentifier, circa 1971.

Thanks for reading,

David
KD4NUE

4061. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <2JbqZDAq38E3Ewi5@falstaf.demon.co.uk>
Source record: 71234
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <37139657.27681640@news.cwcom.net>, Jim Dunnett
<dynastic@0spam.cwcom.net> writes
>On Tue, 13 Apr 1999 19:11:16 +0100, Robin Birch
><robin@falstaf.demon.co.uk> wrote:
>
>>Dear All,
>>TOKO's manual quotes their ceramic filters as having an impedance of 330
>>ohm for the 10.7MHz FM ones and various values between 1 and 5k ohm for
>>the AM (455kHz) ones.
>>
>>Can anyone tell me if this is purely resistive or whether there is a
>>reactive element and if so, how much?.
>
>Would have thought that 'impedance' would, by
>definition, include reactance (?) Must do, in an
>inductor.
>
Yes,
I agree, but what I need to know is what its X and R components are in
case I have to build a matching circuit to it. I'm interested in
matching both the reactive and resistive components in angle, not just
in magnitude.

Cheers

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4062. To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: b_runner@hotmail.com
Message-ID: <3713eef4.10013605@news.eisa.net.au>
Source record: 71235
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hello,

Am I missing something here? This is the problem:

Example: SSB phase noise of an oscillator in 1Hz of bandwidth,
relative to carrier:

-30dBc/Hz

[distance from carrier is irrelevant here, it is probably very close
or it is a crappy oscillator ;-)].

Is then phase noise in 10kHz of bandwidth

+10dBc/10kHz ?

I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
more phase noise than actual carrier power? This seems
counterintuitive to me.

Thanks for any insights...

4063. EBAY- Heath VOM in case only@$7.50!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990413220116.24773.00000401@ng-fv1.aol.com>
Source record: 71236

Hi Guys;
Dont let this one get away.
Its a excellent heathkit VOM in its case, only $7.50 with 2 days left!
Heres the URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=88762381

Also a real clean working SWR meter HM-15
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=88769501

Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

4064. ebay- Erie 500pf@30kv DoorKnob Caps, DUTCH!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990413215408.24773.00000393@ng-fv1.aol.com>
Source record: 71237

Hi Guys;
I have another 3 pairs of these great ERIE 500pf @ 30KV Doorknob caps!
Heres the URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=90124812

Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

4065. ebay- Heathkit "tunnel Dipper" GDO, Cheep!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990413220629.24773.00000409@ng-fv1.aol.com>
Source record: 71238

Hi Guys;
Heres another Neat Heathkit Item, The "tunnel Dipper" GDO.
Only 2 days and only at $20.00. Cant hurt to look! Right?
Heres the URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=88780779

Thanks es 73..........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

4066. Receiver compare test tools

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be861c$bf05fec0$d1d0a0cd@kovar.inav.net>
Source record: 71239

Receivers compared the correct easy way!
Motorola commercial receiver test splitters.
New condition and a great time saving tool!
High quality 4 into 1, 50 ohm RF splitters.
They very well shielded cast aluminum boxes that provide a constant 50 ohm impedance match to compare
all your receivers signals at the same time.
They are small in size! about the size of three cigarette packs side to side.
I will provide new Motorola rg58 crip on connectors needed to path to your radios.
They have common connectors used in Motorola service shops.
I will sell each splitter for $29 or less if you want more than one.
I would also trade just about any ham item for a bunch of them.

Thanks for interest,

Jack Kovar
k0var
Iowa
319-551-7503

--
Jack Kovar
k0var
Iowa

4067. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Don <dk@home.com>
Message-ID: <3713F731.63693A80@home.com>
Source record: 71240
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

runner wrote:
>
> Hello,
>
> Am I missing something here? This is the problem:
>
> Example: SSB phase noise of an oscillator in 1Hz of bandwidth,
> relative to carrier:
>
> -30dBc/Hz
>
> [distance from carrier is irrelevant here, it is probably very close
> or it is a crappy oscillator ;-)].
>
> Is then phase noise in 10kHz of bandwidth
>
> +10dBc/10kHz ?
>
> I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
> more phase noise than actual carrier power? This seems
> counterintuitive to me.
>
> Thanks for any insights...

The distance from the carrier is very relevent. The phase noise varies
as a function of frequency from the carrier, so you need to measure
it over frequency until it bottoms out below the sensitivity of your
measuring equipment. Don't assume it's flat until you measure it.
If it helps your understanding, use dBm/Hz instead of dbc/Hz.

Don

4068. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Russell Shaw <russell@martin.com.au>
Message-ID: <3714071E.BD71BDC@martin.com.au>
Source record: 71241
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

The noise this high is probably very close to the carrier. It
probably drops very rapidly further from the carrier. You must
therefore do an integration of P(f).df to get the true power in
the 10kHz span.

runner wrote:
>
> Hello,
>
> Am I missing something here? This is the problem:
>
> Example: SSB phase noise of an oscillator in 1Hz of bandwidth,
> relative to carrier:
>
> -30dBc/Hz
>
> [distance from carrier is irrelevant here, it is probably very close
> or it is a crappy oscillator ;-)].
>
> Is then phase noise in 10kHz of bandwidth
>
> +10dBc/10kHz ?
>
> I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
> more phase noise than actual carrier power? This seems
> counterintuitive to me.
>
> Thanks for any insights...
>

--

Regards,
Russell

MARTIN COMMUNICATIONS Pty. Ltd
87 Peters Ave. Mulgrave Vic. 3170
Ph. +61 3 9560 9999 Fx. +61 3 9560 9055
http://www.martin.com.au

"Faders and Receivers for New Horizons"

-- -- -- -- -- --
/ \ \ / \ \ / // / MARTIN COMMUNICATIONS
/ /\ \\ / /\ \\ / // / Russell Shaw, B.Eng, M.Eng(Research), MIREE
/ // \ \/ // \ \/ // / Electronic RnD Engineer

/_//_/ __/__/ __/__/ EMAIL: russell@martin.com.au

4069. ebay- Rare Hallicrafters HP-1 Test Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990413233231.24773.00000465@ng-fv1.aol.com>
Source record: 71242

Hi Guys;
Please check this out will ya! Only at $25.00
URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=90097321
Thanks es 73..........RICH-WA2RQY RLUCCH2098@aol.com
Web-Page URL> HTTP://members.aol.com/rlucch2098/index.html

4070. ebay- Need a MINT Yaesu FRG-7 RCVR?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: rlucch2098@aol.com
Message-ID: <19990413233948.24773.00000474@ng-fv1.aol.com>
Source record: 71243

Hi Guys;
Please check this out will ya! It looks like new!
URL>>
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=90113334
Thanks es 73....Rich WA2RQY (1961)
WA2RQY's "confusion Radio" Web-Page
Http://members.aol.com/rlucch2098/index.html
RLUCCH2098@aol.com
"Keep those heaters on"

4071. Re: LM373 equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904132139280.5589-100000@Stratus.CAM.ORG>
Source record: 71244

On Tue, 13 Apr 1999, abcd1234 wrote:

> ne602 is doubly balanced mixer + oscilator, while LM373 has a simple mixer.

Actually, the LM373 has two mixers, both of which are double balanced. They were Gilbert Cell mixers long before I heard the term, which seemed to come into popularity when the NE602 hit the scene.

One mixer is the IF strip with the gain control pin. It's used as a gain control element. But in reality it could be used as a mixer, if you use the gain control input as the input for the second frequency. One of the diagrams in the application note actually shows this useage. It's funny, but if you look at the block diagram, it looks like there is a stage of gain, the mixer, and another stage of gain in that IF section, when in reality it's not much more than the mixer alone.

The second mixer is of course most commonly used as the detector. It too is a balanced mixer, which of course comes in handy as a demodulator since by e-arranging things a bit it can be a product detector, AM detector and FM detector.

You'd see the LM373 most commonly in receiver articles years ago, but they could be used in other circuits. Most of the time the "amplifier section" was used as an amplifier. A few articles used them in transmitters or transceivers the second section ould be used as a balanced modulator, and I think one article showed the mixer in the second section working as both a product detector on receive and transmitting mixer on transmit.

> Yes, alot of japanese IC which are very commonly used
in BOOM boxes > implement the whole AM RX + FM IF chain +disc in one chip.
> EG.
> SANYO LA1205 used in SONY ICF2001
> LA1206 used in YB400 and countless other BOOMBOX type AM/FM
> radios.
>
> Yes you can get data sheets for these in english on the www.

But this would really depend on the intent of the question. I remember when the RCA CA3088 came out, and it seemed like a neat thing, a receiver in an IC. But the mixer was just a single transistor, and because it was intended for AM reception (specifically broadcast band) it was less than perfect for other modes. The LM373 was meant for communication use, the ICs used in broadcast radios are meant for broadcast reception. While I think some of the ICs do use balanced mixers (getting information can be problematic, and something like the ECG replacement guide lacks enough

information to be clear), I wouldn't count on it in every device. If the detector is built in, you'll have to work around that if you want it for other modes, and even for AM in most cases it won't be more than a simple diode detector. Probably the higher the integration, the harder it would be to transfer it to other applications.

On the other hand, if the original question was about finding useful ICs among consumer ICs, there is still hope. People have used, and described in the magazines, using IC's meant for FM communication. Something like the MC3362 that's a double conversion FM receiver. The first mixer is used as a mixer, and the second mixer is used as a product detector. The MC3357 (there are others with slight variation) is a ust the IF strip for a double conversion receiver (you have to add the first mixer, etc) and it's mixer is a double conversion unit. And as Jan-Martin has mentioned a number of times here, and I've seen the idea elsewhere too, some of the FM detectors, in these ICs or others, can be used as product detectors. It depends on whether the detector is in fact a double balanced mixer, and the actual layout of the IC (some have a hard wired connection that messes up using it this way). But you'd feed the BFO into the limiter stage, and where the discriminator coil is hooked up would be your low level input. You can also use it for AM by feeding the IF into both the limiter and the other input.

If you start looing inside car radios, the IC selection there is often better. They'll have a separate IF amplifier, which may or may not do limiting. I've also pulled MC1350's or equivalents out of car radios and a tv set or two (and they too can be used as mixers, since the gain element is a "Gilbert Cell" though there is amplification after it which might be a problem in a lot of applications). Car radios will also offer up some AM bandwidth ceramic filters.

I've often wondered whether IC chroma demodulators from color tv sets have any homebrew potential. They too have "Gilbert Cell" balanced mixers inside. But their specific use in the IC may prohibit using them as standalone mixers.

Michael VE2BVW

4072. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <ThFjzAAXSEF3EwMU@falstaf.demon.co.uk>
Source record: 71245
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

To Jim, Roy, Carl, Richard etc.

Thank you, you have given me all I need plus some interesting ideas.

Regards

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4073. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37144BE3.3661C078@teleport.com>
Source record: 71246
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Anthony R. Gold wrote:
>
> On Sunday, in article <7f0205$j6t$1@wanadoo.fr>
> vantalon.f6bwf@wanadoo.fr "vantalon" wrote:
>
> > Hello . In my past job i have had to use 3 bird 43 in our laboratory . All
> > have given different measures (on the same load of course !)For an output
> > of 40 watts , one of them gives 50w reading ! This one was used for " demo "
> > with the customers !! 73 to all
>
> What is your point? Are you claiming that Bird watt meters do not
> meet their specified accuracy?
>
> Your comments raise a few questions, such as how do you know that the
> true power was 40 watts and what were the ranges and conditions of
> the Bird elements with which you made those measurements? And also,
> if you were serious about the last comment there's the ethical
> question of why you were showing a reading to your customers that you
> believed was false and fully 25% greater than the true power.
>
> New standard Bird 43 meters are specified at +-5% of Full Scale in
> carrier mode (and +-8% in PEP mode where that's available). So, even
> if the true power was 40 watt (and you didn't explain how you reached
> that conclusion), then measuring it with a new meter and new 250 watt
> element will not guarantee a reading any of better than around 237 to
> 263 watts, and using an old and mishandled meter and element of any
> rating may also not give a particularly accurate measurement.
>
> Regards,
> --
> Tony - G3SKR / W2TG email: tgold@panix.com

With a 250 watt element, +/-5% of full scale is +/-12.5 watts. So it
can read as much as 52.5 or as little as 27.5 watts with a 40 watt
power level and still be within its specified accuracy. If you want
better accuracy than this you'll have to use a different instrument,
or perhaps get the meter specially calibrated against a known standard
of greater accuracy.

People frequently misunderstand the 43's spec to be 5% of reading.
It's not.

Roy Lewallen, W7EL

4074. Re: LM373 equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37144DBF.2EE2DCC2@teleport.com>
Source record: 71247

Michael Black wrote:
>
> On Tue, 13 Apr 1999, abcd1234 wrote:
>
> > ne602 is doubly balanced mixer + oscilator, while LM373 has a simple mixer.
>
> Actually, the LM373 has two mixers, both of which are double balanced.
> They were Gilbert Cell mixers long before I heard the term, which seemed
> to come into popularity when the NE602 hit the scene.
> . . .

It may have been before Barrie Gilbert heard the term, too.

I've had the good fortune to attend a couple of talks by Barrie, and he began them with an overhead transparency of the patent for the "Gilbert cell". He explained that he didn't invent it, and never claimed to. (I feel very badly that I don't recall the name of the inventor!) Shortly after it was invented, Barrie wrote an article in a trade magazine illustrating its use in various applications. Someone later mistakenly dubbed it the "Gilbert cell", and the name stuck. Barrie feels very badly about it and has worked diligently ever since to correct the error, but it seems it'll be the "Gilbert cell" forever. (I believe he begins all his talks with this explanation.)

Barrie has invented many very ingenious and innovative analog circuits in his years with Analog Devices, and is probably one of the world's foremost experts on mixers. But not the "Gilbert cell". As he'll be the first to tell you.

Roy Lewallen, W7EL

4075. COMPUTER PROGRAM FOR HOMEBREWERS.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: ANTHONY EDWARDS <TONY@agegraphics.freeserve.co.uk>
Message-ID: <7f1lgh$hf2$1@news8.svr.pol.co.uk>
Source record: 71248

Are you a genuine "homebrewer" taking previously used parts and putting them into your own designed circuits ? Do you have a box of inductors lying round, unable to be used because you can't work out their inductance ? You want to build a notch filter for slow scan TV ; a matching network for that new ATU you plan to build. You've got a one micro-henry inductor and you want to know what capacity is required to tune it to 3.644 MHZ. This program will do that and lots,lots more. Just look at the details on http://www.agegraphics.freeserve.co.uk and you'll be pleasantly surprised at what the program can do for YOU THE HOMEBREWER .

4076. [Q] RF modules, data needed: Philips BGY113 and Motorola RYT901 6024/2

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Anto Veldre <anto@anubis.kbfi.ee>
Message-ID: <37147401.EBE3C9CC@anubis.kbfi.ee>
Source record: 71249

Hi folks,

I have got some old RF power modules (proposedly for NMT
band). These are BGY113 from Philips (with BeO warning
on these) and Motorola RYT901 6024/2.

Could somebody give a hint or link to databooks?
These pieces seem to be rather old and no data
available today.

Anto
ES1LAU
anto@anubis.kbfi.ee

4077. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <XIC20mAPiFF3EwcE@jmwa.demon.co.uk>
Source record: 71250
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

<3713eef4.10013605@news.eisa.net.au>, runner <b_runner@hotmail.com>
inimitably wrote:
>Hello,
>
>Am I missing something here? This is the problem:
>
> Example: SSB phase noise of an oscillator in 1Hz of bandwidth,
>relative to carrier:
>
> -30dBc/Hz
>
>[distance from carrier is irrelevant here, it is probably very close
>or it is a crappy oscillator ;-)].
>
> Is then phase noise in 10kHz of bandwidth
>
> +10dBc/10kHz ?
>
>I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
>more phase noise than actual carrier power? This seems
>counterintuitive to me.
>
Yes. Your calculation assumes that the phase-noise spectrum is uniform
over a 10 kHz bandwidth, which is not likely. If it were, then indeed
the noise would be bigger than the carrier, as in an SSB signal with
noise as the modulation. The anomaly arises becuase -30 dBc/Hz is really
BAD. Normally, phase noise is so low that even over a considerable
bandwidth, the total power is well below the carrier power.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?

4078. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19990414.1200.9901524snz@microvest.demon.co.uk>
Source record: 71251
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

On Wednesday, in article <37144BE3.3661C078@teleport.com>
w7el@teleport.com "Roy Lewallen" wrote:

> Anthony R. Gold wrote:

> > New standard Bird 43 meters are specified at +-5% of Full Scale in
> > carrier mode (and +-8% in PEP mode where that's available). So, even
> > if the true power was 40 watt (and you didn't explain how you reached
> > that conclusion), then measuring it with a new meter and new 250 watt
> > element will not guarantee a reading any of better than around 237 to
> > 263 watts, and using an old and mishandled meter and element of any
> > rating may also not give a particularly accurate measurement.
>
> With a 250 watt element, +/-5% of full scale is +/-12.5 watts. So it
> can read as much as 52.5 or as little as 27.5 watts with a 40 watt
> power level and still be within its specified accuracy.

Roy, I must remember not to try arithmetic late at night :-)

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4079. B&W 334A Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: nsnadel@worldnet.att.net
Message-ID: <371689a2.3034192@netnews.att.net>
Source record: 71252

A friend of mine just sent me, as a gift, a B&W 334A dummy load. It is in mint condition ... ALMOST !!! On the trip across country via UPS most of the oil leaked out of the sealed can .. yes, a mess.

I contacted B&W and have been advised that repairing the can is can create an explosion hazard. So, I need a replacement can.

Does anyone out there have a non-working unit that has a good can that they would want to sell, trade, or whatever ...

Norm
K9NSN

4080. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37149496.E6999E61@mwci.net>
Source record: 71253
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Roy Lewallen wrote:

> With a 250 watt element, +/-5% of full scale is +/-12.5 watts. So it
> can read as much as 52.5 or as little as 27.5 watts with a 40 watt
> power level and still be within its specified accuracy. If you want
> better accuracy than this you'll have to use a different instrument,
> or perhaps get the meter specially calibrated against a known standard
> of greater accuracy.
>
> People frequently misunderstand the 43's spec to be 5% of reading.
> It's not

This is not correct.

Within the past month or so, I purchased a *new* Model 43 with a *new* 250H element. I compared it with a recently calibrated Boonton Model 92B RF voltmeter and 50 ohm load setup. The readings compared as closely as I could read the scale at all levels from 10 watts to 250 watts. I found this to be impressive. I found the accuracy to be quite a bit better than the "guaranteed 5% of full scale".

The meter scale on the 43 is highly compressed at full scale but spreads out greatly at readings below full scale and is easier to read. For example, midscale is about 80 watts. At 40 watts the error is not +/- 12.5 watts for a 250 watt element. It is definitely not off by 31% at 40 watts.

5% of 250 watts does not imply 12.5 watts at "all" meter readings. That is not what the term means. In fact, the term doesn't really say much of anything about the accuracy at lower readings.

The manner in which they mark the meter scale indicates the confidence they have in those markings. The validity of the markings is verified at the factory, where they have made more than 230,000 Model 43s. The skeptical owner should verify this for himself, as I did.

The nonlinearity of the meter scale has to be considered.

I also checked my new 1000H element with the same results.

Bill W0IYH

4081. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37149815.EBF8CC96@mwci.net>
Source record: 71254
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

William E. Sabin wrote:

> Roy Lewallen wrote:
>
> > With a 250 watt element, +/-5% of full scale is +/-12.5 watts. So it
> > can read as much as 52.5 or as little as 27.5 watts with a 40 watt
> > power level and still be within its specified accuracy. If you want
> > better accuracy than this you'll have to use a different instrument,
> > or perhaps get the meter specially calibrated against a known standard
> > of greater accuracy.
> >
> > People frequently misunderstand the 43's spec to be 5% of reading.
> > It's not
>
> This is not correct.
>
> Within the past month or so, I purchased a *new* Model 43 with a *new* 250H
> element. I compared it with a recently calibrated Boonton Model 92B RF voltmeter
> and 50 ohm load setup. The readings compared as closely as I could read the scale at
> all levels from 10 watts to 250 watts. I found this to be impressive. I found the
> accuracy to be quite a bit better than the "guaranteed 5% of full scale".
>
> The meter scale on the 43 is highly compressed at full scale but spreads out greatly
> at readings below full scale and is easier to read. For example, midscale is about
> 80 watts. At 40 watts the error is not +/- 12.5 watts for a 250 watt element. It is
> definitely not off by 31% at 40 watts.
>
> 5% of 250 watts does not imply 12.5 watts at "all" meter readings. That is not what
> the term means. In fact, the term doesn't really say much of anything about the
> accuracy at lower readings.
>
> The manner in which they mark the meter scale indicates the confidence they have in
> those markings. The validity of the markings is verified at the factory, where they
> have made more than 230,000 Model 43s. The skeptical owner should verify this for
> himself, as I did.
>
> The nonlinearity of the meter scale has to be considered.
>
> I also checked my new 1000H element with the same results.
>
> Bill W0IYH

One other thing. The RF should have all harmonics and sub-harmonics greatly attenuated.

4082. FS/Trade 4CX250's, sockets, chimneys

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Doug Snowden <dsnowden@ncdc.noaa.gov>
Message-ID: <3714A171.4FB0ACEE@ncdc.noaa.gov>
Source record: 71255
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have 3 barely used /tested 4CX250's, 3 screen bypassed sockets, and 3
ceramic chimneys. Tested in my linear full output (uses a pair of
4CX250's).
The sockets are used also. If cash - give me an offer for it all.
.
I need a really good squirrelcage blower for a pair of 3-500Z's.
I good air or vacuum variable - 250 pf @ 4kv
A good sized variac
Jennings vacuum relay (RJ1H type)
A mediocre Wattmeter (1KW)
Other RF type parts.

Doug N4IJ
dsnowden@ncdc.noaa.gov

4083. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3714B4C7.61CBAB7@teleport.com>
Source record: 71256
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

William E. Sabin wrote:
>
> Roy Lewallen wrote:
>
> > With a 250 watt element, +/-5% of full scale is +/-12.5 watts. So it
> > can read as much as 52.5 or as little as 27.5 watts with a 40 watt
> > power level and still be within its specified accuracy. If you want
> > better accuracy than this you'll have to use a different instrument,
> > or perhaps get the meter specially calibrated against a known standard
> > of greater accuracy.
> >
> > People frequently misunderstand the 43's spec to be 5% of reading.
> > It's not
>
> This is not correct.

Which part of my statement is not correct: That the Bird accuracy is not as I said, that readings of 27.5 to 52.5 watts for a 40 watt signal are within its specified accuracy, or that you have to use a different instrument to get better accuracy than this? If you're referring to the last of this list, is your sole evidence the measurement of a single new meter? Certainly, any single meter or even the vast majority of meters could be much better than the specification. None should be worse. And a given one can be calibrated or verified to better than the specified accuracy, as I suggested in my posting. But it's perilous to infer the accuracy of all meters from a single sample. If all Bird meters were as good as yours, it would be foolish for Bird to specify them so loosely.

If "5% of full scale" doesn't mean 5% of full scale, then what does it mean? If I measure, say, 40 watts, exactly what range of power could actually be going through the meter with certainty guaranteed by Bird? If they can't specify a range of values, then there is no specification at all. I say this as a person who has spent most of his career designing test equipment, all with carefully defined specifications, although this is very basic metrology.

Out of curiosity, what was the specified accuracy of the Boonton you compared it with?

Roy Lewallen, W7EL

> Within the past month or so, I purchased a *new* Model 43 with a *new* 250H
> element. I compared it with a recently calibrated Boonton Model 92B RF voltmeter

> and 50 ohm load setup. The readings compared as closely as I could read the scale at
> all levels from 10 watts to 250 watts. I found this to be impressive. I found the
> accuracy to be quite a bit better than the "guaranteed 5% of full scale".
>
> The meter scale on the 43 is highly compressed at full scale but spreads out greatly
> at readings below full scale and is easier to read. For example, midscale is about
> 80 watts. At 40 watts the error is not +/- 12.5 watts for a 250 watt element. It is
> definitely not off by 31% at 40 watts.
>
> 5% of 250 watts does not imply 12.5 watts at "all" meter readings. That is not what
> the term means. In fact, the term doesn't really say much of anything about the
> accuracy at lower readings.
>
> The manner in which they mark the meter scale indicates the confidence they have in
> those markings. The validity of the markings is verified at the factory, where they
> have made more than 230,000 Model 43s. The skeptical owner should verify this for
> himself, as I did.
>
> The nonlinearity of the meter scale has to be considered.
>
> I also checked my new 1000H element with the same results.
>
> Bill W0IYH

4084. Re: elf\ulf reciever!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: srh@iname.killspam.com
Message-ID: <srh-1404991251090001@user-2ivegks.dialup.mindspring.com>
Source record: 71257

In article <7f26j3$e9h$3@news.eisa.net.au>, "TempEst" <blcs@eisa.net.au> wrote:

> I am looking for an ELF/ULF reciever (ie- 0Hz to 150kHz or as low as
> possible) either a complete unit or a schematic with ariel design.
> Also can anyone recomend the best ariel to try and use on a reciever
> designed for around 20kHz.

Have a look at Stephen McGreevy's web pages on ELF receivers:

http://www-pw.physics.uiowa.edu/mcgreevy/
http://pw1.netcom.com/~spmcgrvy/index.html

He also sells assembled receivers; you'll find info on these pages.

/s.holmes

4085. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3714c539.0@news.netwalk.com>
Source record: 71258
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Don wrote in message <3713F731.63693A80@home.com>...

>The distance from the carrier is very relevent. The phase noise varies
>as a function of frequency from the carrier, so you need to measure
>it over frequency until it bottoms out below the sensitivity of your
>measuring equipment. Don't assume it's flat until you measure it.
>If it helps your understanding, use dBm/Hz instead of dbc/Hz.

Something that may cause some confusion.....

The units of noise should be thought of as dB(mW/Hz) ...dB relative to 1mW
in a 1 Hz bandwidth...as this is the way that it is calculated.

Although everyone writes it as dBm/Hz this may cause the uninitiated to
become confused as to its true meaning.

Jim
N8EE

4086. Re: elf\ulf reciever!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3714c7cf.0@news.netwalk.com>
Source record: 71259

TempEst wrote in message <7f26j3$e9h$3@news.eisa.net.au>...
>I am looking for an ELF/ULF reciever (ie- 0Hz to 150kHz or as low as
>possible) either a complete unit or a schematic with ariel design.
>Also can anyone recomend the best ariel to try and use on a reciever
>designed for around 20kHz. I am a bit of a newbe so I dont want to waste a
>lot of time on the wrong thing!
>Any help is much appreciated!
>
>Tom Richardson
>Blcs@eisa.net.au
>
>
>

There are two types of antennas that you could use. The first, which I would recommend, is a multiturn loop. It should be as big as you care to make it. Don't worry about making it too big at these frequencies.

The second is a voltage probe antenna. This is simply a short (_very_ short at these wavelengths) vertical antenna---working against a good ground connection---feeding a high impedance amplifier, typically with an FET first stage.

The reason I prefer the loop? You can shield it against locally induced electrostatic noise. It also has a null which can be used to reject interference..

The vertical will pick up any and all signals, including noise and interference.

As far as the receiver is concerned, do you have a good quality shortwave receiver (Kenwood or Yaesu, for example)? Build an up converter using a stable crystal oscillator. A crystal at 3.5 MHz, for example, fed into a mixer will shift 0-150 kHz to the range of 3.5 to 3.65 MHz. Palomar Engineering used to sell such a device, but I do not know if it is still available.

The mixer should have good strong signal characteristics to avoid problems with nearby MF broadcast stations. Of course there should be a 150 kHz low pass filter in front of it.

Jim
N8EE

4087. WTB HBR Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: stevem <wb9tow@egr.msu.edu>
Message-ID: <3714CA9D.FFE517CD@egr.msu.edu>
Source record: 71260

Looking for a HBR receiver. State condition, price and model
vri 73 steve
wb9tow/8

4088. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3714c907.0@news.netwalk.com>
Source record: 71261
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Carl R. Stevenson wrote in message <7f0pt5frr1@news1.fast.net>...
>If you try to use the filter input as a load for an amp
>or (active) mixer you will see the gain peak either side
>of the passband and actually dip in the passband.
>

If the filter is after a mixer it would be better to use a diplexer.

A mixer works properly only if it is terminated in the proper impedance at
all frequencies, not just the desired one.

Jim
N8EE

4089. Re: EL 519

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: claude@netwoman.rz.unibw-muenchen.de
Message-ID: <3714c551.3306474@news.unibw-muenchen.de>
Source record: 71262
Cross-posted to: fr.rec.radio.amateur,rec.radio.amateur.homebrew

On Tue, 13 Apr 1999 21:18:54 +0200, Phil -F5IYJ <f5iyj@qsl.net> wrote:

>Claude Frantz wrote:
> =C0 mon avis, une 6146B =E0 la place d'une
>> 6146 serait un choix plus judicieux, car il s'agit d'une version
>> renforc=E9e du m=EAme tube, donc pas de support =E0 changer, m=EAme
>> encombrement. =
>
>voire m=EAme des 6146W, qui ne sont pas ch=E8res chez RFParts
>(rfp@rfparts.com)

Les 6146W sont des 6146 renforc�es du point de vue de la dur�e de vie et de la r�sistance aux chocs et vibrations. Les caract�ristiques �lectriques sont les m�mes. La 6146B par contre, est plus grosse, �lectriquement parlant. Selon les sources, on trouve effectivement des 6146, 6146A et 6146W � des prix int�ressants. La 6146B est g�n�ralement plus ch�re. Comme dit, �a d�pend des sources. Les prix des tubes diff�rent sensiblement selon les vendeurs.

Il faut d'ailleurs remarquer, que les types de tubes utilis�s de fa�on intensive sur le mat�riel militaire, se trouvent aujourd'hui � bon prix alors que les tubes grand-public (surtout ceux de la p�riode plus r�cente) sont � un niveau de prix sensiblement plus �lev�, surtout s'il s'agit de tubes de d�flection lignes. Ce ph�nom�ne d'abord surprenant est du au grand nombre de tubes mis en stock durant de longues ann�es pour le mat�riel militaire en service. Maintenant que la p�riode de stockage prescrite arrive � sa fin pour de nombreux appareils, les stocks sont liquid�s � bas prix, si jamais on trouve un acheteur, ce qui n'est pas toujours le cas.

Claude Frantz

4090. Re: LM373 equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: edh@xxxqualcomm.com
Message-ID: <7f2odo$s6e$1@thefuture.qualcomm.com>
Source record: 71263

Thanks for the responses,

I couldn't find the LA1205 or LA1206 data sheets on the Sanyo web site. I did find info on the MC335X-MC337X parts. I have found others like these but they all are designed for FM use with limiting amplifiers. I am interested in devices for HF SSB/CW use. The idea of feeding the LO/BFO into the limiter is an interesting one that I may try.

I do have some MC1496 devices (Gilbert cells?) and MC1350's which I plan to experiment with for mixers and amplifiers. Plessey also had some devices on the market in the '70's but they don't seem to be available today.

Thanks,
Ed

>> ne602 is doubly balanced mixer + oscilator, while LM373 has a simple mixer.
>
>Actually, the LM373 has two mixers, both of which are double balanced.
>They were Gilbert Cell mixers long before I heard the term, which seemed
>to come into popularity when the NE602 hit the scene.
>
[...]

> > Yes, alot of japanese IC which are very commonly used
>in BOOM boxes > implement the whole AM RX + FM IF chain +disc in one chip.
>> EG.
>> SANYO LA1205 used in SONY ICF2001
>> LA1206 used in YB400 and countless other BOOMBOX type AM/FM
>> radios.
>>
>> Yes you can get data sheets for these in english on the www.
>
>But this would really depend on the intent of the question. I remember
>when the RCA CA3088 came out, and it seemed like a neat thing, a receiver
>in an IC.

[...]

>On the other hand, if the original question was about finding useful ICs
>among consumer ICs, there is still hope. People have used, and described
>in the magazines, using IC's meant for FM communication. Something like
>the MC3362 that's a double conversion FM receiver. The first mixer is used
>as a mixer, and the second mixer is used as a product detector. The
>MC3357 (there are others with slight variation) is a ust the IF strip for
>a double conversion receiver (you have to add the first mixer, etc) and
>it's mixer is a double conversion unit. And as Jan-Martin has mentioned

>a number of times here, and I've seen the idea elsewhere too, some of
>the FM detectors, in these ICs or others, can be used as product
>detectors. It depends on whether the detector is in fact a double
>balanced mixer, and the actual layout of the IC (some have a hard wired
>connection that messes up using it this way). But you'd feed the BFO into
>the limiter stage, and where the discriminator coil is hooked up would be
>your low level input. You can also use it for AM by feeding the IF into
>both the limiter and the other input.
>
>If you start looing inside car radios, the IC selection there is often
>better. They'll have a separate IF amplifier, which may or may not do
>limiting. I've also pulled MC1350's or equivalents out of car radios and
>a tv set or two (and they too can be used as mixers, since the gain
>element is a "Gilbert Cell" though there is amplification after it which
>might be a problem in a lot of applications). Car radios will also offer
>up some AM bandwidth ceramic filters.
>
>I've often wondered whether IC chroma demodulators from color tv sets have
>any homebrew potential. They too have "Gilbert Cell" balanced mixers
>inside. But their specific use in the IC may prohibit using them as
>standalone mixers.
>
> Michael VE2BVW
>
>

4091. Re: Where to get Litz wire???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be86ec$ca0ce880$f8e5abc3@default>
Source record: 71264
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

> They make a Litz wire specifically for use between 1.4
and 2.8 MHz.
> This stuff should be better than solid wire of the
equivalent AWG number.
==========
Unless you can say HOW MUCH better the stuff will be you
don't know what you are talking about.

I suggest any improvement at 2.8 MHz will be less than the
thickness of the needle on the S-meter.

And at higher frequencies it will be even less !

And if it costs 1000 times more to purchase the improvement
equivalent to the thickness of the S-meter needle - is it
worth it ?

The same improvement can be obtained by increasing the size
of coil wire. Say from 18 to 17 gage.

Cheerio, Reg.

4092. Re: B&W 334A Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3714E7D8.7EB0@ixpres.com>
Source record: 71265

Norm Nadel wrote:
>
> A friend of mine just sent me, as a gift, a B&W 334A dummy load. It is
> in mint condition ... ALMOST !!! On the trip across country via UPS
> most of the oil leaked out of the sealed can .. yes, a mess.
>
> I contacted B&W and have been advised that repairing the can is can
> create an explosion hazard. So, I need a replacement can.
>
> Does anyone out there have a non-working unit that has a good can that
> they would want to sell, trade, or whatever ...
>
> Norm
> K9NSN

Norm OM,
C'mon now. That B&W response sounds like the canned lawyer-authored boilerplate that almost any company nowadays is inclined to tell anyone who asks how to repair a piece of their equipment. I would not hesitate to repair the can. You did not say what the damage was, but if it can be completely opened up and pounded back into original shape, and if it is steel or otherwise solderable, you can solder it with a soldering gun or iron, after cleaning out whatever is left of the oil, of course. I would use paper towels, and a bit of paint thinner to clean up the rest of the transformer oil in the can. Get it nice and clean and shiny, then address the soldering, if it is necessary. You can also epoxy any holes shut, using structural two-part epoxy. I have solded car gas tanks, after they are totally clean, of course, without problems. Use of a soldering iron or gun is flameless, and with the absence of any volatile vapors, is safe. You can also, in addition, fill it with water, except where you want to solder the can, and solder it that way. There are lots of ways Norm.
You can refill it with standard, (drinkable even), mineral oil.

73 and GL,
Don, W6JL.

4093. Re: Food for thought

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Paul Lovekamp <plvekamp@ptd.net>
Message-ID: <1y6R2.2228$Mu2.4390@nnrp2.ptd.net>
Source record: 71266
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I was following along pretty well until the part about 'negative energy'...
Yeah, you can have negative energy flow, but energy's gotta be conserved
somehow!! Think 'unterminated transmission line'... where does the
energy go?? High SWR, reflected waves, hmmmm.... I bet the final amp is
getting pretty warm by now.... !!! Unless you use a tuner, which
probably will dissipate some heat itself.

Of course, you can also have ground losses, radiation patterns straight up
into space, maybe others I haven't thought of. The point is, there are a
lot of possibilities besides breaking a law of physics that hasn't been
disproved in 100 years. You'd have to eliminate all those things and then
some to make me drop my trust in thermodynamics. (Not faith.. trust...)

Paul, KE3LR

4094. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <LPMfkAAgXPF3Ewd7@falstaf.demon.co.uk>
Source record: 71267
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

In article <3714c907.0@news.netwalk.com>, Jim
<jbolinger@Nloisnptaemk.com> writes
>
>Carl R. Stevenson wrote in message <7f0pt5frr1@news1.fast.net>...
>>If you try to use the filter input as a load for an amp
>>or (active) mixer you will see the gain peak either side
>>of the passband and actually dip in the passband.
>>
>
>
>If the filter is after a mixer it would be better to use a diplexer.
>
>A mixer works properly only if it is terminated in the proper impedance at
>all frequencies, not just the desired one.
>
>Jim
>N8EE
>
>
Ok, here we go, foot in mouth time :-).

The circuit that I am drawing up is for the RX section of a 50 MHz QRP FM transceiver suitable for UK novices. It'll use a PLL for the local oscillator/modulator based around Philips devices.

The RX is going to be:

Preselector (broad band input - Q set to cover the 50MHz band)
some RF gain.
Mixer
10.7 MHz IF strip
455 kHz IF IC for second IF, detector and AGC generator (from the RSSI circuit).

I was intending to use ceramic filters for the 10.7 MHz IF strip as they don't need any setting up and this is intended for novices.

Now, this is where I make a pratt of myself.

1) I'm afraid that I don't actually know what a diplexer as opposed to a mixer, either single or double balanced, is. Is it just a different name for a particular type of mixer or is it something totally different?

2) Every traditional superhet that I can think of uses some form of mixer, often quite simple, followed by a tuned amplifier or filter built from either wound or ceramic/crystal components. Does this mean that every superhet is wrong or is there a "hidden" requirement to the tuned amplifier's or the collector/drain filter in a simple mixer's that their input impedance should be constant across all frequencies.

Forgive what may be a dumb question but part of the exercise is for me to teach myself some more RF design skills, the coarser, let alone finer, points of which I am sadly lacking in.

Cheers and thanks for the input so far

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4095. Re: LM373 equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: edh@xxxqualcomm.com
Message-ID: <7f2tpb$s6e$2@thefuture.qualcomm.com>
Source record: 71268

>If you start looking inside car radios, the IC selection there is often
>better. They'll have a separate IF amplifier, which may or may not do
>limiting.
[...]
> Michael VE2BVW

I did a little more research and found some Philips parts that show promise. The TDA1072 and TDA1572 have all the necessary functions and look like they have a port for injecting a bfo signal into the detector. The detector is described as a 'balanced full-wave' detector which may work for SSB/CW demodulation. There are many other AM/FM circuits but they don't have a port for injecting the bfo signal.

Does anyone have experience with these devices?

Ed

4096. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3714F4EC.743218B8@mwci.net>
Source record: 71269
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Roy Lewallen wrote:

> Which part of my statement is not correct: That the Bird accuracy is
> not as I said, that readings of 27.5 to 52.5 watts for a 40 watt
> signal are within its specified accuracy?

Yes. That is what I said. Suppose you read 12.5 watts. Does that mean the power is between 0 and 25 watts. Read the scale on a 43 in good condition and you will see that this does not make sense.

> If all Bird meters were as good as yours, it would be
> foolish for Bird to specify them so loosely.

It would not be foolish at all. See explanation below.

> If "5% of full scale" doesn't mean 5% of full scale, then what does it
> mean?

It means what it says and should not be extrapolated. If the reading is 250 watts the error can be +/- 12.5 watts (0.22 dB). It does not say that a 40 watt reading is also +/- 12.5 watts. In certain applications, for best "percent" error, we would try to pick a plug-in element whose full scale coincides with the power that we are interested in.

The maximum error in watts is not a constant number at every point on the scale.

> If I measure, say, 40 watts, exactly what range of power could
> actually be going through the meter with certainty guaranteed by Bird?

As I said before, the exact accuracy at readings below full scale is not specified (there may be some formula that they use and that my inquiry to them could not determine). It is very difficult and dangerous legally to "guarantee" the accuracy at every point on the scale. My guess is that they computer-check maybe five points in the factory. I also guess that their diodes are tightly specified and hand picked (I have seen this practice also). For reasons of their own they do want to be involved with tight specs on portable instruments that may be misused or abused or operated over a wide ambient temp range (because of the tempco of the diodes).

But if you look at the scale, the markings are very well done, and the pointer is an anti-parallax type for accurate reading. I don't think this is just "window dressing." There is a certain error associated with the ability to read the meter that has to be considered. At low wattage the percent error can increase somewhat because of this. If the needle gets bent because of misuse, or if the meter has an aging effect, these things aggravate errors over time. The D'Arsonval meter does have certain systematic errors with age.

There are digital instruments that are used only in metrology laboratories such as Rock-Col that are used to check things such as 43s, which are then used at the test stations on the production line. In some applications there may be a correction chart attached to the 43.

> If they can't specify a range of values, then there is no
> specification at all. I say this as a person who has spent most of his
> career designing test equipment, all with carefully defined
> specifications, although this is very basic metrology.

I am sure that I know as much about these matters as you do. And I know exactly what 5% of full scale means, and what it does not mean.

> Out of curiosity, what was the specified accuracy of the Boonton you
> compared it with?

It was calibrated by the Rockwell Collins metrology dept. I don't know the exact number but you can be damned sure it is not off by 1.6 dB at 40 watts. Government contracts require periodic and accurate calibration of all test equipment. And the 92B is an excellent instrument that is capable of very close calibration. I use a Boonton 100:1 voltage divider for xmit measurements, and it has been verified also.

The 43 and the two elements that I bought are just a random sample of one each. Also, I am confident that Bird checks the 43 at their test stations to better tolerance than what they guarantee at the customer's site. This is common practice. The guarantee to the customer is more relaxed than their production line test. Companies have to do this to cover their butts. Tek does the same thing, I'll wager.

I also know that the 43 can be abused. I have seen plenty of that.

And if the instrument is initially much better than 5% of full scale, then over a long time, with proper usage, it will probably still be within 5% of full scale. I know that is how I would spec it.

And be sure to filter out the harmonics, amplitude ripple and other spurious.

Bill W0IYH

4097. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Michael Lee <M.D.L@btinternet.com>
Message-ID: <7f33jj$5f4$1@mendelevium.btinternet.com>
Source record: 71270
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

runner wrote in message <3713eef4.10013605@news.eisa.net.au>...
>Hello,
>
>Am I missing something here? This is the problem:
>
> Example: SSB phase noise of an oscillator in 1Hz of bandwidth,
>relative to carrier:
>
> -30dBc/Hz

I infer from this that the noise floor at your arbitary offset is 30dB down on peak carrier power, as for the measurement to be valid you must use the same bandwidth for both figures

>[distance from carrier is irrelevant here, it is probably very close
>or it is a crappy oscillator ;-)].

> Is then phase noise in 10kHz of bandwidth
>
> +10dBc/10kHz ?
>
>I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
>more phase noise than actual carrier power? This seems
>counterintuitive to me.
>
>Thanks for any insights...
>
>

Why is it paradoxical for more power to be contained in a 10Khz bandwidth than a 1Hz bandwidth ?

If you could gather up all the power in a 10Khz bandwidth and concentrate it in a 1Hz bandwidth, can you see how (intuitively) this would give +40dB signal? This is in fact the basis of spread spectrum techniques and chirping radars.

4098. Re: Help identify this receiver...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7f3425$mo2$1@autumn.news.rcn.net>
Source record: 71271
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dave

I suspect it is a homebrew.

Most of the components are 1920 vintage
and are very common items. Early homebrews
typically used wood breaboards and bakelite
front panels, not metal; so there is a bit of
an anachronism here. The large
rheostat is for controlling the filament voltage
on the two tubes. The tube sockets appear
to be wafers--again a contrast to the earlier
vintage vernier dials and transformer.

The larger capacitor was probably used for
tuning. 140-pF was a "standard" tuning capacitor
value during the 30s and 40s, manufacturers
supplied coil sets for that value tuning capacitor.
The smaller variable was most likely used in series
with the tickler winding, as a throttle control, to set
the regeneration point.

If the tube sockets are 4-pin, likely tube candidates
are 30, UX199, and UX201. Blank 4-pin coil forms
are available from Ocean State Electronics. Antique
Electronic Supply I believe offers 5 and 6 pin forms.

Regards

Peter, K1ZJH
restoration columnist, PopComm Magazine
dave@boatanchors.com wrote in message <7etdcg$41m$1@nnrp1.dejanews.com>...
>Hello all,
>
>I have just acquired an old regen chassis that I
>hate to see stripped out for parts. I'd like to
>restore it and make it operable, but I need to
>find out what it is first, and if anyone has the
>schematic. I don't have the coil or tube lineup
>(I'm sure it's coil, detector, and audio but I'm
>not sure). >It appears to be a Pilot 'kit' - the kind that had
>all the parts and panels, but you had to drill the
>holes yourself.
>
>I have photos at:

>
>http://www.boatanchors.com - then click on the link at

4099. Homebrew xtal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "Dale R. Parfitt" <parinc@bellsouth.net>
Message-ID: <37151D88.87176A66@bellsouth.net>
Source record: 71272

Can anyone point me to a site dealing with building your own xtal filters?

Thanks,

Dale W4OP

4100. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7f37mh$564$1@news1.fast.net>
Source record: 71273
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

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Jim <jbolinger@Nloisnptaemk.com> wrote in message
news:3714c907.0@news.netwalk.com...
>
> Carl R. Stevenson wrote in message <7f0pt5frr1@news1.fast.net>...
> >If you try to use the filter input as a load for an amp
> >or (active) mixer you will see the gain peak either side
> >of the passband and actually dip in the passband.
> >
>
>
> If the filter is after a mixer it would be better to use a diplexer.
>
> A mixer works properly only if it is terminated in the proper impedance at
> all frequencies, not just the desired one.

Jim,

That is certainly true of almost all passive double-balanced
mixers (the diode type, which have insertion loss and require
relatively high LO drive.) ... most of which are intended for
50 Ohm source and load impedances ... it is not always equally
applicable to active mixers, some of which can be rather tolerant
of loads which are not equal at all frequecies over a very wide
band.

73,

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
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4101. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7f3880$5je$1@news1.fast.net>
Source record: 71274
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

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Robin Birch <robin@falstaf.demon.co.uk> wrote in message
news:LPMfkAAgXPF3Ewd7@falstaf.demon.co.uk...
> >
> Ok, here we go, foot in mouth time :-).
>
> The circuit that I am drawing up is for the RX section of a 50 MHz QRP
> FM transceiver suitable for UK novices. It'll use a PLL for the local
> oscillator/modulator based around Philips devices.
>
> The RX is going to be:
>
> Preselector (broad band input - Q set to cover the 50MHz band)
> some RF gain.
> Mixer
> 10.7 MHz IF strip
> 455 kHz IF IC for second IF, detector and AGC generator (from the RSSI
> circuit).

There are chips around that can do the entire IF/demod at 10.7
MHz, eliminating the need for a 2nd LO and 455 kHz filters.

> I was intending to use ceramic filters for the 10.7 MHz IF strip as they
> don't need any setting up and this is intended for novices.
>
> Now, this is where I make a pratt of myself.
>
> 1) I'm afraid that I don't actually know what a diplexer as opposed to a
> mixer, either single or double balanced, is. Is it just a different
> name for a particular type of mixer or is it something totally
> different?

In this context, a "diplexer" is a circuit which is designed
to provide a broadband resistive termination at the IF port
of a mixer ... they are *usually* applied to passive, double-
balanced mixers, since that type of mixer's spurious performance
is almost always highly sensitive to the termination on the
output port, "desiring" to "see" a broadband 50 Ohm load (there
are "termination insensitive" mixers, which generally have an
output buffer which properly terminates the mixer's IF port and
buffers it from the external load, but they are relatively more
expensive.)
```

> 2) Every traditional superhet that I can think of uses some form of
> mixer, often quite simple, followed by a tuned amplifier or filter built
> from either wound or ceramic/crystal components. Does this mean that
> every superhet is wrong or is there a "hidden" requirement to the tuned
> amplifier's or the collector/drain filter in a simple mixer's that their
> input impedance should be constant across all frequencies.

Many receivers either use active mixers, which may not be as
sensitive to the (broadband) termination, or (if using passive
mixers) ignore the diplexer to reduce complexity at the expense
of spurious and intermodulation performance.

> Forgive what may be a dumb question

There's no such thing as a dumb question when seeking more
understanding of how/why things work the way they do ...
no need to seek forgiveness :-)

> but part of the exercise is for me
> to teach myself some more RF design skills, the coarser, let alone
> finer, points of which I am sadly lacking in.

I think it's great that you're interested in learning,
experimenting, and building ... we need more hams like
you.

73,

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
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http://www.nocode.org

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4102. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <371524AB.F69A4CE1@ibm.net>
Source record: 71275
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

> William E. Sabin wrote:
>
> > Roy Lewallen wrote:
> >
> > > With a 250 watt element, +/-5% of full scale is +/-12.5 watts. So it
> > > can read as much as 52.5 or as little as 27.5 watts with a 40 watt
> > > power level and still be within its specified accuracy. If you want
> > > better accuracy than this you'll have to use a different instrument,
> > > or perhaps get the meter specially calibrated against a known standard
> > > of greater accuracy.
> > >
> > > People frequently misunderstand the 43's spec to be 5% of reading.
> > > It's not
> >
> > This is not correct.
> >
>

That is correct. It is not speced at 5% of the reading, but of full
scale.
That means it could be way off at the lower power readings. Lots of
meters becides the Bird watt meters are speced that way, that is why
for the analog meters, you should try to get the reading on the
upper portion of the scale.
The scale is not linear and the diodes are very poor in calibration
at the lower levels. They are operating in the square low reagon
and could be way off.

I will agree that the Birds are usually more accurate than that. I
work with lab instruments calibrating other instruments every day
and find a quality instrument will normally beat the specs by a
large ammount under controlled conditions, but if they are operated
in a very hot area or very cold area, they can 'drift' near the
limits. Don't know about the Bird, but suspect if you place one at
the extream ends of the temp range, it will be luckey to hold as
near as 2 or 3 %.

4103. Re: Identifying a crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <37155831.663F@nbnet.nb.ca>
Source record: 71276

Hello....Most typical info on a crystal are its frequency (maybe 57741.66 kHz ???)...its holder or grind type...which might be the inhouse number GB01C and then the manufacturer's name or logo....HY-Q. What is the crystal used in? What is the operating frequency (if a communications receiver or transmitter). Best of luck.

4104. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3715332A.5110C470@teleport.com>
Source record: 71277
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

William E. Sabin wrote:
>
> Roy Lewallen wrote:
> . . .
> > If I measure, say, 40 watts, exactly what range of power could
> > actually be going through the meter with certainty guaranteed by Bird?
>
> As I said before, the exact accuracy at readings below full scale is not specified (there
> may be some formula that they use and that my inquiry to them could not determine). It is
> very difficult and dangerous legally to "guarantee" the accuracy at every point on the
> scale. My guess is that they computer-check maybe five points in the factory. I also
> guess that their diodes are tightly specified and hand picked (I have seen this practice
> also). For reasons of their own they do want to be involved with tight specs on portable
> instruments that may be misused or abused or operated over a wide ambient temp range
> (because of the tempco of the diodes).
>. . .

Virtually all test equipment manufacturers guarantee and stand by the accuracy of their instruments. Certainly all the companies I worked for did. I've spent many, many hours writing specifications, verifying them, and establishing that I had with high confidence that all instruments would meet their published specifications. The specifications are written so they can be met. If the accuracy of the Bird 43 wattmeter is not specifed at some points on the scale, as you say, then it's useless for making any kind of meaningful measurement, as is any piece of test equipment with unspecified accuracy. I'll qualify that to say that it's useless unless you've specifically calibrated it against a standard which does have known accuracy. (Incidentally, I've heard that at least on some of the ranges, the Bird is near the lower end of its spec at one end of the frequency range and near the upper end at the other. I haven't investigated this personally, though.) I believe that the reason Bird gets by with such a sloppy spec is that they don't have any serious competitor that's willing to guarantee a better one. Or perhaps the market for their instrument feels as you do -- that hey, what the heck, I know they're pretty good.

You mentioned the calibration of the Boonton meter. (I apologize for cutting the quote too quickly.) I'll bet that if you were to send the Bird 43 meter to the calibration lab and it measured 30 watts with 40 applied, or even 12 watts with zero in, it would be returned as being in calibration. You might check this with the lab. Most labs will return a meter as calibrated if it meets its spec. If it has no spec,

it can't be calibrated. The fact that the Boonton was returned as calibrated doesn't mean that it's dead on, only that it meets whatever spec Boonton or your company put on it.

At this point it's clear that you have an entirely different approach to measurement verification than I do, so this is probably a good time to once again go our separate ways.

Roy Lewallen, W7EL

4105. Re: That damn E-Bay again!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-14 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990414180503.12547I-100000@oso.slonet.org>
Source record: 71278

Look people, is this newsgroup a simple extension to E-Bay??
If I wanted to see four out of five messages concerning E-Bay,
I'd go there! This used to be a group of experimenters, not
marketing experts wanting to make a quick buck!! 73 Cliff K7RR

4106. Re: RF TX Amp Circuit or Module?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37168FB4.B9DCB6DA@att.net>
Source record: 71079
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Check out: http://www.rfparts.com/
Look under RF power modules. There are mitsubishi parts
(probably others as well) which will run 30-40 wats out -
class AB. To get as much gain as you need, you may well
need to use two modules. One low power, followed by the
high power module. These modules are typically 50 ohms
in/out and require only a few bypass caps and ferrite chokes
to implement.
Woody

DavidC wrote:
>
> I have a 10m to 2m transverter board that provides
> 5-10mw linear (all-mode) output on 2m.
>
> I am looking for a kit, module, or adapted rf strip that
> will get me 10-30 watts output (all-mode) from the
> transverter's 5-10mw drive (more power is better than
> less since this will often be driving a 170w 2m amp that
> likes 20-30 watts of drive for full output, but price is an
> object as well).
>
> BTW: I am not in a position to build a circuit up from scratch
> at the moment, but I can handle a kit.
>
> Thanks for suggestions, offers, and/or referrals.
> ~~~
> ï¿½ï¿½ï¿½
> \ ~ / .... 73, DavidC K1YP@qsl.net

--

----------- de Woody, WB4QXE -----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

4107. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <f9xR2.708$GQ2.75060@news20.ispnews.com>
Source record: 71080
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

William E. Sabin wrote in message <37156C36.608214E6@mwci.net>...
>
>Barry L. Ornitz wrote:
>
>> In all my years of working with instrumentation in the mechanical,
>> electrical, and chemical areas, my training and experience tell me that
>> Roy's understanding of percent of full scale is correct.
>
>It is not correct.

Yes it is by definition of what an accuracy statement referenced to
full-scale is. Read ANY elementary book on instrumentation.

>High quality meters of all types routinely specify full
>scale accuracy. Because of quality control of the relationship between
>"deflection" and "input" they can mark the scale with considerable
>confidence. The accuracy degrades "gracefully" below full scale.

What you refer to here is a different accuracy statement. This implies
accuracy as a percent of reading. This was not what was specified.

As I stated yesterday, precision instruments usually give an accuracy
statement including both percent of reading and percent of full-scale.
Percent of reading accuracy is easy to measure with a linear scale, but
much more difficult with a nonlinear scale. With nonlinear instruments,
you are concerned with two things - how well the scale calibration fits the
instrument response curve, and how well the curve represents reality. The
Bird accuracy statement tells you only that the one reading, that taken at
the full-scale reading of the dial, is within 5% of the actual value. It
tells
you nothing of how well the dial calibration fits the actual instrument
response.

In the instrumentation industry, manufacturers routinely go through the
game of "specmanship". I would much rather have an instrument with an
accuracy of 1% of reading plus 20% of full scale than I would one with 5%
of reading and 5% of full scale. In the first case, I can do one
calibration at the full-scale value and then make any measurement to within
1%. In the second, all measurements are no better than 5%. And when a
manufacturer gives only the full scale accuracy for a nonlinear
measurement, you have no actual idea of the real accuracy at lower scale.
It likely is not as bad as only the full-scale accuracy suggests, but the
only guarantee from the manufacturer is the one point.

>I definitely do not agree with your comments on this. They are contrary to
>my experience with high quality laboratory analog meters of many types.

Please go back and consult the actual accuracy specifications on these meters. The better ones will state accuracy as a percent of reading. The excellent ones will give you a full set of statistics.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

4108. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990415193448.14982E-100000@oso.slonet.org>
Source record: 71081

You fellows must be talking about the "Tail End Charlie" which I believe
was an APN21. It used a pair of 6J6's in a push pull oscillator around
450 MHz as we used to convert them back to the 430 MHz band after the war.
It used a gated delay line as you suggest. The TR switch was a quarter
wave on one side and a half wave on the other side of a N tee connector.
Apparently the B25 had a blind spot in the rear in which a zero could
slide in and score a hit. This was the radars primary mission but of
course the alarm would go off with low altitude as well. Cliff K7RR

On Thu, 15 Apr 1999, Tom Bruhns wrote:

> One I worked on in the early 70's that had been around a while then
> (APN-141) transmitted a pulsed signal and used a regenerative receiver
> to look at the return. It was small and pretty light even with
> technology available then (and it was old in the early 70's!). The
> regen receiver was something akin to a super-regen, in that it was
> gated. The gate was delayed from the transmitted pulse, and the delay
> time was proportional to the altitude. Feedback let the gate delay
> track the elevation. I only worked on them in the shop; I never heard
> what sort of trust they garnered with pilots.
>
> Cheers,
> Tom
>
>
> Reg Edwards wrote:
> >
> > A 1944-5 radio altimeter used a few milliwatts (from a
> > pair of push-pull acorn triodes) Tx power, about 1 GHz if I
> > remember correctly, frequency modulated with a sinewaveform
>
> > The receiver simply mixed the the transmitted signal with
> > the received signal to give a DC output proportional to
> > height above ground. When the phase difference was zero so
> > was the height, or very nearly so.
>
> ...
>
> Much as Doppler radars work... except there the FM comes from the motion
> of the target relative to the transmitter. Also similar to another
> technology developed during WWII...
>
>

4109. Re: Where to get Litz wire??? ---> Reg Edwards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: "Charlie T." <xctx@onr.com>
Message-ID: <01be87c3$b5a03320$1d33c8cf@ct>
Source record: 71082
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Reg,

The HIGHEST frequency Litz I've seen is 2.4 MHz
and it requires many strands of #48 wire...tiny stuff!
The coils I'm winding are in the 300-400uH range
and operate at 1.6-1.8 MHz. My airwound
4" diameter coil has an AC resistance of
about 4-5 ohms using solid copper #14 wire.

According to New England Electric this can be
reduced by a factor of 20...using a 165/48
Litz makeup. (i.e. 1/20th the AC resistance of
solid copper it replaces). To be honest ground resistance
dominates but with many radials the ground
loss can be reduced and then the coil losses
start to look like bigger percentage of the resistive
losses.

-Charlie
W5CDT

Reg Edwards <G4fgq.Regp@btinternet.com> wrote in article
<01be8768$af416680$5fe5abc3@default>...
> Hello again Charlie,
>
> DC/HF resistance values are not relevant to the improvement
> in Q of coils due to the use of Litz.
>
> What matters is the ratio of the HF resistance of a
> Litz-woven wire to the HF resistance of the solid wire of
> the same overall diameter it replaces.
>
> Above a few MHz the improvement is tiny. At higher
> frequencies Litz has a higher resistance than solid wire of
> the same diameter. It is more economic just to increase the
> diameter of the solid wire or convert to copper tube.
>
> Litz is at its best at a few hundred kilo-hertz such as in
> 110 KHz, 455 KHz and 1.6 MHz IF transformers. Have you
> ever seen any Litz-wound 9 MHz IF transformers ?
>
> Manufacturers will continue to manufacture it for as long
> as there are customers to buy it.
>

> Yours, Reg.
>
>

4110. elf\ulf reciever!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: TempEst <blcs@eisa.net.au>
Message-ID: <7f26j3$e9h$3@news.eisa.net.au>
Source record: 71141

I am looking for an ELF/ULF reciever (ie- 0Hz to 150kHz or as low as possible) either a complete unit or a schematic with ariel design.
Also can anyone recomend the best ariel to try and use on a reciever designed for around 20kHz. I am a bit of a newbe so I dont want to waste a lot of time on the wrong thing!
Any help is much appreciated!

Tom Richardson
Blcs@eisa.net.au

4111. SST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: JimC <jimc@msa.attmil.ne.jp>
Message-ID: <7f329thnd1@news.misawa.attmil.ne.jp>
Source record: 71142

SST for 20 meters
used only 5 or 6 times
need to sell to buy school books!!
Paid $85
Will sell for $50
Jim

4112. Xtals for notch filter for NPR test circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37154a38.715942721@news.online.no>
Source record: 71143
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Need xtal notch filter for receiver NPR-method intermodulation immnity measurements. A friend made a 10MHz notchfilter with 70dB notch, 60dB for 1 xtal and 70dB for two.
connected xtals in parallel with tuned circuits (BPF) loaded down to 1000 ohm with critical coupling.
I wish to copy a similiar circuit, but for 3.68MHz. Bought some cheap 3680kHz xtals, but could not achieve more than 30dB notch with one or two xtals.
Seems like Rs is substantially higher for my 3680kHz xtals than the 10MHz xtals, the latter having Rs=1 ohm (?). What can I expect from an xtal? Would perhaps be better to use 10k top impedance in the BPF. The passband should be at least 3.4-4.1MHz with not more than 6dB loss

Jan-Martin
LA8AK

4113. Re: SST

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: JimC <jimc@msa.attmil.ne.jp>
Message-ID: <7f3n8dbbh1@news.misawa.attmil.ne.jp>
Source record: 71144

oops,sorry, I didn't know this group was not for selling things!!
I'll learn
Jim
JimC wrote in message <7f329thnd1@news.misawa.attmil.ne.jp>...
>SST for 20 meters
>used only 5 or 6 times
>need to sell to buy school books!!
>Paid $85
>Will sell for $50
>Jim
>
>

4114. Maxon re-programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Jamie White <jamie@popstars.demon.co.uk>
Message-ID: <924148749.8904.0.nnrp-11.9e98926e@news.demon.co.uk>
Source record: 71145

I have recently bought two Maxon smx-4050nla mobile radios (25watt) and I was wondering if if anyone could help me with ideas on how to reprogramme them.

Does anyone have the software and a rough idea on how to build an interface????

cheers all

Jamie

G7KLM

4115. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <37121336.4709004@news.gv.net>
Source record: 71146

Bob Doyle <doyle@primenet.com>
shared these priceless pearls of wisdom:

->> For experimental, non certified aircraft, you can use anything you
->> want for 'avionics'. So a homebrew radar altimeter is not "illegal".
->
->It still has to be type accepted by the FCC before you can attach
->an antenna to it...
->

Not if it is for your own personal use, not for commercial purposes, and in the ham bands. That's PROBABLY why the guy posted here instead of sci.electronics, don't you suppose?

Having said that, for his purposes in an ultralight, I suggest that a good ultrasonic high-power (a couple of dozen watts) scheme will get him more altitude range than he probably needs. As yet, there is no FCC requirement for audio transmissions.

Jim
Jim Weir, VP Eng. RST
A&P, CFI, and other good alphabet soup

4116. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <3713147b.5034565@news.gv.net>
Source record: 71147

Bob Doyle <doyle@primenet.com>
shared these priceless pearls of wisdom:

->The most common modulation type is FMCW. In this type of system the
->transmitter is chirped i.e., the frequency is swept lineraly with
->time. Therefore the frequency difference between what is transmitted
->to the ground and what is being received from the ground reflection
->is proportional to altitude. Pretty similar to what was done in
->1946 is sounds...

That's interesting. I've never considered the problem, having worked
mostly with pulse type systems. How do you keep the relatively high-level
transmitted signal from interfering with the microvolt level return pulse?
Is the transmitter pulsed as well as swept and the receiver muted during
the transmit pulse? Or is it a true CW system with physical isolation of
the transmit and receive antennas?

Jim
Jim Weir, VP Eng. RST
A&P, CFI, and other good alphabet soup

4117. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: allan.herriman.hates.spam@fujitsu.com.au
Message-ID: <371564be.7056340@newshost>
Source record: 71148
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Runner,
The definition of phase noise indicates a measurement relative to the total signal power. (IIRC. I used to work on microwave synthesisers, but that was a long time ago.)

So no, you can't have phase noise > 0dBc in any bandwidth.

Total signal power is *not* the same as the measured power at the carrier frequency. (Although it is an excellent approximation for clean signals.) For example, sinusoidal phase or frequency modulation with a particular modulation index can cause a deep null at the carrier frequency. Total power is still the same, however.

Before anyone flames this and mentions SSB spectra, I should point out that this thread is discussing *phase noise*. A carrier phase modulated (or frequency modulated) with a real baseband signal will always have a symmetric spectrum, as seen on a spectrum analyser.

If the spectrum is asymmetric about the carrier then there is also an amplitude modulation component, which plays no part in the measurement of phase noise. You must be sure you are not letting AM components interfere with your phase measurements. It's impossible to distinguish them on a spectrum analyser (as it doesn't measure phase).

As you suggested, you can add up the noise density over a band to get the total noise power in that band.
This is actually an approximation that only works for small values of noise. This is called the "small angle approximation".
If you have large values of noise (from your "crappy oscillator" example) then you will get nonsensical results.
The usual rule of thumb employed by RF engineers is that the total phase noise must be < 0.1 radians in the band of interest for the approximation to be valid.

This can be explained in two ways:

(1) convert the phase noise density to frequency noise density. Sum the frequency noise density over the band of interest to give the total frequency noise (called "residual fm" IIRC).
If the residual fm is not significantly smaller than the noise offset frequency, then the small angle approximation doesn't apply.
In this case, we are trying to measure the phase noise density at an offset from the carrier when the carrier is deviating more than the offset away from its nominal centre. Thus we get a crappy measurement.

(2) View the phasor diagram at
http://www.wenzel.com/documents/noise.html
The phase noise phasor component is orthogonal to the carrier phasor.
Theta is the phase noise due to the phase noise phasor.
Tan(theta) = noise amplitude / carrier amplitude.
For small values of theta, we can approximate this by:
theta = noise amplitude / carrier amplitude.
This approximation allows us to assume that the phase contribution of
the noise is a linear function of the noise. Therefore we can simply
multiply the density by the bandwidth to get the total noise, but only
if theta ~= tan(theta) is valid. If it's not, we get a crappy
measurement.

So what do you do if you wish to work with very noisy oscillators?
I suggest using other metrics, such as frequency noise or Allan
variance (no relation :)

We should all remember from our lectures (the ones that we shouldn't
have slept through) that angle modulation is not linear in terms of
converting baseband spectra to spectra of the modulated signal.
Amplitude modulation is linear in this sense. Angle modulation is
approximately linear only for small angles. I think the other posters
who replied to your post forgot this important snippet of information.

Regards,
Allan.
(How many angles fit on the head of a pin? Quite a few if the small
angle approximation holds.)

On Wed, 14 Apr 1999 01:46:13 GMT, b_runner@hotmail.com (runner) wrote:

>Hello,
>
>Am I missing something here? This is the problem:
>
> Example: SSB phase noise of an oscillator in 1Hz of bandwidth,
>relative to carrier:
>
> -30dBc/Hz
>
>[distance from carrier is irrelevant here, it is probably very close
>or it is a crappy oscillator ;-)].
>
> Is then phase noise in 10kHz of bandwidth
>
> +10dBc/10kHz ?
>
>I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
>more phase noise than actual carrier power? This seems
>counterintuitive to me.
>
>Thanks for any insights...
>

>

4118. Repair Hlp wid TS-130-S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Dave Rude <rude@maqs.net>
Message-ID: <94fR2.872$Oz.232265@homer.alpha.net>
Source record: 71149

Hi,
Not sure if this is the correct group, but would think so.
Problem: I can listen to a good strong sig on SSB for ages and sig stays strong, but when I try to work the station, the rcvd sig fades to barely audible. Why? Something wrong in the TR circuit, arching in the bandswitch from the xmitted RF? Anyone with an idea?
Appreciate the help.
Dave Rude
KA9SRU

4119. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Carl Schulz <meteu@mailbag.com>
Message-ID: <7f43oc$g2q$1@grandprime.binc.net>
Source record: 71150
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I had an idea for a car "alarm'. The idea was to hook up a fuel pump cut off switch to a reciever. When you transmit the right DTMF code on that frequency. it kills the fuel pump and stalls the car.

If anyone actually tries this, I want a 10% cut of the profits. :)

4120. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <IMn+YAAckZF3EwZL@falstaf.demon.co.uk>
Source record: 71151

In article <3713147b.5034565@news.gv.net>, Jim Weir <jim@rst-engr.com>
writes
>Bob Doyle <doyle@primenet.com>
>shared these priceless pearls of wisdom:
>That's interesting. I've never considered the problem, having worked
>mostly with pulse type systems. How do you keep the relatively high-level
>transmitted signal from interfering with the microvolt level return pulse?
>Is the transmitter pulsed as well as swept and the receiver muted during
>the transmit pulse? Or is it a true CW system with physical isolation of
>the transmit and receive antennas?
>
From the ones that I've seen physical separation is used with the
antennas on opposite wingtips. This works best with a metal airframe as
the wings and fuselage providing screening. How well this would work
with a plastic, wooden or fabric airframe I don't know.

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4121. Re: Where to get Litz wire??? ---> Reg Edwards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be8768$af416680$5fe5abc3@default>
Source record: 71152
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hello again Charlie,

DC/HF resistance values are not relevant to the improvement in Q of coils due to the use of Litz.

What matters is the ratio of the HF resistance of a Litz-woven wire to the HF resistance of the solid wire of the same overall diameter it replaces.

Above a few MHz the improvement is tiny. At higher frequencies Litz has a higher resistance than solid wire of the same diameter. It is more economic just to increase the diameter of the solid wire or convert to copper tube.

Litz is at its best at a few hundred kilo-hertz such as in 110 KHz, 455 KHz and 1.6 MHz IF transformers. Have you ever seen any Litz-wound 9 MHz IF transformers ?

Manufacturers will continue to manufacture it for as long as there are customers to buy it.

Yours, Reg.

4122. FS 7036 (6BE6) tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: wa9vrh <wa9vrh@ocslink.com>
Message-ID: <01be8740$97345ac0$0b7b9ece@larry>
Source record: 71153
Cross-posted to:
rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

For Sale NEW 7036 (6BE6) tubes.
The boxes have the following information on them:
5960-00-074-4833 ELECTRON TUBE
1 EACH DLA900-82-G-0017-005
A-3/83 GE-7036 GENERAL ELECTRIC CO. Tubes are 5 to a sleeve.
$10.00 per sleeve plus $3.00 priorty mail shipping U.S. locations only
Thanks Larry WA9VRH

4123. Need Sanyo LA7673 Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <3715f6f9.8677377@news.revealed.net>
Source record: 71154

Need a Sanyo chip above for a Sanyo TV Model DS19550 Chassis 19550-01.
ECG doesn't cross it.
Any ideas?

4124. Swap HC-9 xtals for 30-meter FT-243 xtals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Art Winterbauer <artwinte@sprynet.com>
Message-ID: <7f548s$8ie$1@juliana.sprynet.com>
Source record: 71155
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

My little homemade 6J5/6L6 transmitter is only happy with crystals in FT-243 holders, so I'd like to trade away, one-for-one, various crystals in HC-9 holders.

Want: 30-meter xtals (10.101 to 10.119 mhz) in FT-243 holders

Trade: Crystals in HC-9 holders (the 3/4-inch by 3/4-inch, sturdy aluminum holders):

40 meters: 7.005, 7.010, 7.030, 7.040
30 meters: 10.105, 10.110, 10.115, 10.120
20 meters: 14.005, 14.020, 14.030, 14.040, 14.050

These little xtals work fine in my various homemade solid-state rigs.

73/Art, WA5OES

--
Windows NT crashed.
I am the Blue Screen of Death.
No one hears your screams.

4125. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Joseph Mowery <jmowery@nswc.navy.mil>
Message-ID: <37161DE7.A32E8D0@nswc.navy.mil>
Source record: 71156
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Ralph,
You don't want the readings near full scale. While I was a Calibration
Tech, the method was to keep
the meter reading between 20%-80% of full scale deflection. The middle of the
scale was were the
accuracy was checked.

Joe,
KF4YYA

Ralph Mowery wrote:

> > William E. Sabin wrote:
> >
> > > Roy Lewallen wrote:
> > >
> > > > With a 250 watt element, +/-5% of full scale is +/-12.5 watts. So it
> > > > can read as much as 52.5 or as little as 27.5 watts with a 40 watt
> > > > power level and still be within its specified accuracy. If you want
> > > > better accuracy than this you'll have to use a different instrument,
> > > > or perhaps get the meter specially calibrated against a known standard
> > > > of greater accuracy.
> > > >
> > > > People frequently misunderstand the 43's spec to be 5% of reading.
> > > > It's not
> > >
> > > This is not correct.
> > >
> >
> That is correct. It is not speced at 5% of the reading, but of full
> scale.
> That means it could be way off at the lower power readings. Lots of
> meters becides the Bird watt meters are speced that way, that is why
> for the analog meters, you should try to get the reading on the
> upper portion of the scale.
> The scale is not linear and the diodes are very poor in calibration
> at the lower levels. They are operating in the square low reagon
> and could be way off.
>
> I will agree that the Birds are usually more accurate than that. I
> work with lab instruments calibrating other instruments every day
> and find a quality instrument will normally beat the specs by a

> large ammount under controlled conditions, but if they are operated
> in a very hot area or very cold area, they can 'drift' near the
> limits. Don't know about the Bird, but suspect if you place one at
> the extream ends of the temp range, it will be luckey to hold as
> near as 2 or 3 %.

4126. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3716202F.A3C1255@teleport.com>
Source record: 71157
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

William E. Sabin wrote:
>
> Roy Lewallen wrote:
>
> > Virtually all test equipment manufacturers guarantee and stand by the
> > accuracy of their instruments.
>
> 5% of full scale is 12.5 watts. The error at 40 watts (or 12.5 watts) cannot be "assumed" to
> also be 12.5 watts by any reasonable person. That is nonsense and anyone who knows anything
> about analog meters knows that it is nonsense.

I have to confess that I know more about oscilloscopes than analog meters. Tektronix scopes not only has specifications on all important parameters but the manual generally contains a verification procedure. This is a list of equipment, and complete setup instructions, for a customer to verify that the scope is meeting its specifications. Some of the larger customers routinely order this equipment at the same time they order the scope, and the scope won't get past incoming inspection unless it meets all the specs during the verification test. I was the project engineer for a 50 GHz sampling head. (I didn't design that sampler, but improved production control on the existing 40 GHz one.) We had to reduce the stated accuracy of the instrument substantially because of the uncertainty in our ability to verify it. (Even such normally mundane items as the uncertainty in connector adapter SWR added to the overall uncertainty.) I have good evidence that a large percentage of the sampling heads would actually do 60 GHz. But we were never able to assemble a system to reliably verify it. So the spec remains 50.

Some typical specifications from my 2246 manual: Step response (5-division step) Rise Time -10C to 35C: 3.5 ns or less. Vertical deflection system accuracy (includes ADD MODE and Ch 2 INVERT) 15 to 35C: Within +/- 2%. -10C to 15C and 35C to 55C: Within +/- 3%. And so forth. You've undoubtedly got manuals for Tek or HP equipment, so know how these instruments are specified.

And every specification is taken literally, by both the manufacturer and the customers. Those specifications which aren't guaranteed are plainly labeled "typical".

> The % error in any high quality analog meter degrades "gracefully" as you go downscale. The

> errors at less than full scale are definitely related to the full scale accuracy. Pick up a
> catalog of meters and you will see that the full scale accuracy is what is specified. That does
> not mean the meter is "junk" at other readings.

That's nice, but "gracefully" is a pretty loose spec for serious measurement, don't you think?

> Here is the main idea. A properly designed D'Arsonval meter maintains a certain definite
> relationship between "deflection" vs "input" over its range. The full scale accuracy is
> correlated to that relationship. Because of that relationship the scale can be marked with
> considerable confidence across most of the scale. At this moment I am looking at a Simpson
> catalog that specs full scale accuracy. Yet the picture shows finely spaced markings all across
> the scale. Is this some kind of "fraud"?

Absolutely not. My 260 manual states DC accuracy of 2% of full scale. On the 50 volt range, I expect the reading to be within one volt of the actual value. Period. Anywhere on the scale.

> Hogwash.

Now there's a statement that's difficult to rationally argue against.

> Meter designers and manufacturers learned long ago how to deal with this problem of
> reproducibility, so that "one" meter scale can be used over and over.
>
> For a rectifier meter the rectifiers do introduce a problem, but with quality control this
> problem is manageable, and is responsible for a slightly relaxed spec for this kind of meter.
> AC meters also have a crest factor problem.
>
> > If the accuracy of the
> > Bird 43 wattmeter is not specifed at some points on the scale, as you
> > say, then it's useless for making any kind of meaningful measurement,
> > as is any piece of test equipment with unspecified accuracy.
>
> My experience with my 43, with its 2-30 MHz elements, is that it is quite "accurate" across
> most of the scale within that frequency range.

"Quite accurate" isn't a specification. I wish all the customers I've designed instruments for were as easy to please as you are. My life would have been much easier! (I can see it now, "Roy's Pretty Good Scopes".)

> > I'll bet that if you were to send the
> > Bird 43 meter to the calibration lab and it measured 30 watts with 40
> > applied, or even 12 watts with zero in, it would be returned as being

> > in calibration.
>
> Baloney. It would be sent to the factory repair shop.
>
> > Most labs will
> > return a meter as calibrated if it meets its spec. If it has no spec,
> > it can't be calibrated. The fact that the Boonton was returned as
> > calibrated doesn't mean that it's dead on, only that it meets whatever
> > spec Boonton or your company put on it.
>
> It meets the requirements that Boonton says it supposed to meet.

Yet if the Bird meter were sent to the cal lab it would have to exceed the accuracy Bird says it will meet? How do they decide which meters have to meet spec and which have to be better than spec? Quite a cal lab you've got there!

> And when it is adjusted at
> full scale, it is very accurate across a 13 dB range, as determined by accurate RF attenuators.
> I have been using these meters for 30 years and I know their quality.

I wondered about the spec on the Boonton, and you say "very accurate", and it was used to verify the Bird, which you describe as "quite accurate". By this I infer that "very accurate" is more accurate than "quite accurate". Perhaps we can get the meter manufacturers to standardize these terms for those of us more used to working with numbers. Your cal lab obviously knows how to translate them.

> As for going separate ways, go which ever way you like. If that is the way you want to behave
> toward me, I couldn't care less.
>
> Bill W0IYH

Sorry I've made you grumpy again. I know there's no way of changing your mind once set, but I'll continue posting a bit longer for the benefit of other readers who'd like to decide for themselves what specifications mean.

Roy Lewallen, W7EL

4127. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Brian Boorman <XZY.bboorman@harris.com>
Message-ID: <3715E8E6.5E62F637@harris.com>
Source record: 71158
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

If I only *try* this, then obviously there is no profit.

Are you willing to chip in 10% of the cost?

Carl Schulz wrote:
>
> I had an idea for a car "alarm'. The idea was to hook up a fuel pump cut
> off switch to a reciever. When you transmit the right DTMF code on that
> frequency. it kills the fuel pump and stalls the car.
>
> If anyone actually tries this, I want a 10% cut of the profits. :)

--
Brian C. Boorman
Harris RF Communications
Rochester, NY 14610
XYZ.bboorman@harris.com
<Remove the XYZ. for valid address>

4128. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Hop_a_Long <jtipton@korrnet.org>
Message-ID: <Pine.GSO.3.95.990415151302.5236A-100000@georgia.korrnet.org>
Source record: 71159
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

What you are talking about is not new. You can buy one at either Auto
Zone or PepBoys. Sorry to burst your bubble.

HL

==========
"But they that wait upon the LORD shall renew their strength; they shall mount
up with wings as eagles; they shall run, and not be weary; and they shall
walk, and not faint.

--Isaiah 40:31--
==========

On Thu, 15 Apr 1999, Carl Schulz wrote:

>-:I had an idea for a car "alarm'. The idea was to hook up a fuel pump cut
>-:off switch to a reciever. When you transmit the right DTMF code on that
>-:frequency. it kills the fuel pump and stalls the car.
>-:
>-:If anyone actually tries this, I want a 10% cut of the profits. :)
>-:
>-:
>-:
>-:

4129. Website Upgrade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Michael Masterson <wn2a@qsl.net>
Message-ID: <01be8790$e5808c80$a51f4f0c@default>
Source record: 71160

Hello All:
I Have added lots more to my website dedicated to Ham Homebrew.
The MOSFET transmitters ["Three Fine Mice-MOuSeFET Transmitters for
80/40 and 30 Meters"] fully updated schematics and Bill of Material was
added to the site. Updated the Links page and added better descriptions
for the Tantalum Caps and Chokes that I have for sale.
73's Mike,WN2A

e-mail <wn2a@qsl.net>
Packet: WN2A@N2QAE.#NNJ.NJ.USA.NOAM.

4130. Re: Lowest priced specially made crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Michael Masterson <wn2a@qsl.net>
Message-ID: <01be8793$4fb29b00$a51f4f0c@default>
Source record: 71161

Hello John:
I don't know if this helps you in G3 land but for us over here
in N.A. the "favorite" changes from year to year, but currently
my two favorites are:
Petersen Radio Company 2735 Ave A [Fund and 3RD OT ONLY]
Council Bluffs , IOWA 51501
(712)- 323-7539

K-W MANUFACTURING [FUND AND ALL OT]
(405)-567-2285

At one time Marden Electronics made super XTALs for the money,
but after they sold out to JAN crystals that was that.
Good Luck,73's
Mike WN2A

John Mortlock <jmort@global.freeserve.co.uk> wrote in article
<7epk6rdae1@news7.svr.pol.co.uk>...
> There are a lot of crystal manufacturers out there who can make crystals
to
> your specified frequency.......At a price. I need some HF crystals in
> HC18/U and HC25/U holders. Anyone know who's the cheapest crystal
> manufacturer for 1 off's specially made HF crystals ?????
>
> John G3UGY
>
>
>
>
>
>
>
>
>
>
>

4131. Amateur Radio Design Assistant

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: ANTHONY EDWARDS <TONY@agegraphics.freeserve.co.uk>
Message-ID: <7f5gllmon1@news6.svr.pol.co.uk>
Source record: 71162

Are you a genuine homebrewer, taking previously used parts and putting them into your own circuit designs ? Do you have a bag of inductors lying around, unable to use them because you don't know what their values are ? You want to build a notch filter for RTTY or SSTV: a matching network for that new ATU you plan to build . You've got a one microhenry inductor and you want to know what capacity is required to tune it to 3.644 MHZ. This program will do all that and lots, lots more. Full details are at http://www.agegraphics.freeserve.co.uk you'll be pleasantly surprised. A program by a homebrewer for fellow homebrewers.

4132. Re: Litz wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <37164B0A.541C22E7@tri.net>
Source record: 71163

I may be dreaming after a night on call, but is this thread going on two lists?
Anyway, here is a repeat from the antenna list:

Going to jump in here to add some controversy:

A couple of years ago I was talking to a novice about coils in IF transformers and mentioned Litz
wire. He asked what that was and I went into a typical Ham explanation of skin effect, surface area,
etc. based upon 46 years of reading stuff when I suddenly thought: Skin effect, 400KHz, weird
interwoven bundles, this doesn't make sense, and as often happens, the teacher became the student.

Reference Data for Radio Engineers, 1974. p. 12-17

"Rw represents the copper loss in the coil winding. It is made up of the dc resistance of the wire and
the eddy-current losses generated in the winding by stray flux from the core cutting the winding. This
eddy-current loss can be minimized at high frequencies by dividing the wire into many small wires.
This type of wire is called Litz wire."

Someone other than this anesthesiologist might comment, but I suspect that eddy currents in larger
conductor might still a loss rather than skin effect and be the reason that Litz wire is still used.

N0UU

4133. Re: Xtals for notch filter for NPR test circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <UFOuXEAIwkF3EwOS@ddwyer.demon.co.uk>
Source record: 71164
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

In article <37154a38.715942721@news.online.no>, J M Noeding
<la8ak@online.no> writes
>Seems like Rs is substantially higher for my 3680kHz xtals than the
>10MHz xtals, the latter having Rs=1 ohm (?). What can I expect from an
>xtal? Would perhaps be better to use 10k top impedance in the BPF. The
>passband should be at least 3.4-4.1MHz with not more than 6dB loss
Your reasonable quality 3.6MHz crystals should have a higher Q than
10MHz and the ESR will be higher up to 100ohms.
Beware spurious responses.
--
douglas dwyer

4134. Re: LM373 equivalent

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37155342.718257680@news.online.no>
Source record: 71165

On 14 Apr 1999 20:28:27 GMT, edh@xxxqualcomm.com (Ed) wrote:

>>If you start looking inside car radios, the IC selection there is often
>>better. They'll have a separate IF amplifier, which may or may not do
>>limiting.
>[...]
>> Michael VE2BVW
>
>I did a little more research and found some Philips parts that show promise.
>The TDA1072 and TDA1572 have all the necessary functions and look like they
>have a port for injecting a bfo signal into the detector. The detector is
>described as a 'balanced full-wave' detector which may work for SSB/CW
>demodulation. There are many other AM/FM circuits but they don't have a port
>for injecting the bfo signal.
>
>Does anyone have experience with these devices?
>
>Ed
>
most FM quadrature demodulators will work, TBA120, SN76660, S041P,
MC1351, NE614 etc, you may even use some part of the IC as BFO for the
product detector. I have only tested MC1351P and SN76660N=TBA120 in
multimode demodulators
One problem with some quadrature demodulators when using them for a
different application is crossover or harmonic distortion, but you may
not hear it

Jan-Martin LA8AK

4135. Re: Homebrew xtal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: la8ak@online.no
Message-ID: <371554b8.718631823@news.online.no>
Source record: 71166

On Wed, 14 Apr 1999 22:58:20 GMT, "Dale R. Parfitt"
<parinc@bellsouth.net> wrote:

>Can anyone point me to a site dealing with building your own xtal
>filters?
>
>Thanks,
>
>Dale W4OP
>

Just mentioned how to use ceramic resonnators for SSB filters up to
500kHz, work almost as good as with xtals

4136. Transformer repair service offered

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: VE6NAP <ve6nap@oanet.com>
Message-ID: <01be8785$7a69b260$8a1a99cf@ve6nap1>
Source record: 71167
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Will repair or rewind most transformers ie
Audio /Modulation /Filiment/Power/Plate

No oil filled or PCB types because of shipping problems

packaging and shipping extra

for quote please provide the following

Complete discription of transformer end use, including coy of scheme for
equipment -

Discription of transfomer
- is it sealed /potted or otherwise difficult to dismantle.
- details of weight and dimensions
- details of lead lengths and color codes unless obvious

Firm quote and repair scope will be issued on receipt of the transformer at

our repair shop

please email prior to shipping transformer to
:
JAYMCEE Enterprises Ltd.
9116-79 street
Edmonton, AB
T6C 2R4
(780)-465-3082

email -ve6nap@oanet.com

Hope we can be of service
de
ve6nap@oanet.com

4137. RF TX Amp Circuit or Module?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7f5lqnrce1@news2.bit-net.com>
Source record: 71168
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a 10m to 2m transverter board that provides
5-10mw linear (all-mode) output on 2m.

I am looking for a kit, module, or adapted rf strip that
will get me 10-30 watts output (all-mode) from the
transverter's 5-10mw drive (more power is better than
less since this will often be driving a 170w 2m amp that
likes 20-30 watts of drive for full output, but price is an
object as well).

BTW: I am not in a position to build a circuit up from scratch
at the moment, but I can handle a kit.

Thanks for suggestions, offers, and/or referrals.
~~~
���
\ ~ / .... 73, DavidC K1YP@qsl.net
~~~

4138. homebrew controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Roger <n0yoxNOSPAM@iland.net>
Message-ID: <924212164.824.46@news.remarQ.com>
Source record: 71169

I have made many updates to this page in the last few weeks. Check it out!

http://www.iland.net/~n0yox/n0yox.html

4139. Ferrite core losses

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be8791$2ff5d400$b1864d0c@default>
Source record: 71170

Can the loss factor figure for a core be put into ohms?
As in a FT-240 #61 toroid has a loss factor of 32 x 10-6
@ 2.5 MHz and a volume of 22.608. If it is wound to have
350uh can the losses be put into ohms I would prefer to
know the resistance at 1.6Mhz.

Mike

4140. Motorolla CD 100 SRBR (UK)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <e%tR2.1660$DX2.306@news-reader.bt.net>
Source record: 71171
Cross-posted to: rec.radio.amateur,rec.radio.amateur.homebrew,rec.ham-radio

Hi,
I've recently got two Motorolla CD 100 SRBR (Short Range Business Radio)
rigs, they are set on 461.170mhz. I've been told that I can convert these
for use on the 70cm/2m band?!
Is this true? Plus I need any info on these rigs...Plus(again) does anyone
have any info on "Zycomm U-200" SRBR handheld?

Cheers..

David

please remove "zen.coM.uk" so it reads "zen.co.uk"
W/out the quotes

4141. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37166C6F.D0DBBA86@mwci.net>
Source record: 71172
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Roy Lewallen wrote:

> Sorry I've made you grumpy again. I know there's no way of changing
> your mind once set, but I'll continue posting a bit longer for the
> benefit of other readers who'd like to decide for themselves what
> specifications mean.

This kind of arrogant garbage doesn't deserve a reply, so I won't bother.

Bill W0IYH

4142. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <37166A53.3FDA273C@mwci.net>
Source record: 71173
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Joseph Mowery wrote:

> Ralph,
> You don't want the readings near full scale. While I was a Calibration
> Tech, the method was to keep
> the meter reading between 20%-80% of full scale deflection. The middle of the
> scale was were the
> accuracy was checked.

That does make some sense. The top end of the scale is quite crowded and the 20% to 80% has much better resolution. Below 20% the diodes can effect the readings at high/low ambient temps.

But if you look carefully, the top end can be read accurately, although it requires more effort. The Bird 43 is well marked and readable.

The big fallacy here is that if a meter is specified 5% at full scale (all meter mfrs do this) that it is somehow worthless any where below full scale because it is not officially specified everywhere. This is contrary to the common knowledge of those who are knowledgeable about D'Arsonval meters.

The correct viewpoint is that a 2% full scale spec (very common) is, believe it or not, a measure of the quality of the meter across the rest of the scale. It is not true that the rest of the scale can be "anything".

A meter that is accurate at zero and full scale, but highly inaccurate elsewhere is not a *reliable* meter *anywhere*. It is poorly designed.

The "art" of meter design is to get a movement that is as reproducible as possible. This movement cannot have gross systematic errors because that would make that goal impossible.

Bill W0IYH

4143. FS 7036 (6BE6) tubes ALL spoken for

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: wa9vrh <wa9vrh@ocslink.com>
Message-ID: <01be8798$77dfffa0$067b9ece@larry>
Source record: 71174
Cross-posted to:
rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

HI all all of the 7036 (6BE6) tubes have been spoken for. Thanks Larry
WA9VRH

4144. Re: Yaesu 8100 Mod Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: "Daniel J. Velez" <dvelez@citizen.infi.net>
Message-ID: <7f5td7$ki9$1@nw001t.infi.net>
Source record: 71175
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.ham-radio,alt.ham-radio.vhf-uhf, rec.radio.swap,es.rec.radio.amateur,uk.radio.amateur,alt.ham-radio.marketplace,rec.radio.amateur.misc

It's an Apache server and doesn't like the caps. Try:

www.qrz.com/mods/

73 de Dan

Brad Kellison KA8TOK wrote in message <3711DE98.5D7F4981@four-way.net>...
>you can also get the mod from WWW.QRZ.COM/MODS . I know I put it there
>ehrn your site dropped the last time.
>
>_Mac_ wrote:
>
>> Yaesu FT 8100 R Modification Page
>>
>> The Original 8100R Mod page. New Location
>>
>> http://www.iw.net/~mac24
>>
>> 73's
>> _Mac_
>> Icq: # 3115848
>> mcgyv@hotmail.com
>

4145. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <37167FF6.57B9BC07@lsid.hp.com>
Source record: 71176

One I worked on in the early 70's that had been around a while then (APN-141) transmitted a pulsed signal and used a regenerative receiver to look at the return. It was small and pretty light even with technology available then (and it was old in the early 70's!). The regen receiver was something akin to a super-regen, in that it was gated. The gate was delayed from the transmitted pulse, and the delay time was proportional to the altitude. Feedback let the gate delay track the elevation. I only worked on them in the shop; I never heard what sort of trust they garnered with pilots.

Cheers,
Tom

Reg Edwards wrote:
>
> A 1944-5 radio altimeter used a few milliwatts (from a
> pair of push-pull acorn triodes) Tx power, about 1 GHz if I
> remember correctly, frequency modulated with a sinewaveform

> The receiver simply mixed the the transmitted signal with
> the received signal to give a DC output proportional to
> height above ground. When the phase difference was zero so
> was the height, or very nearly so.

...

Much as Doppler radars work... except there the FM comes from the motion of the target relative to the transmitter. Also similar to another technology developed during WWII...

4146. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Bill Bowden <**76606.611_@_compuserve.com>
Message-ID: <7f608s$4g8$1@bgtnsc02.worldnet.att.net>
Source record: 71177
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Carl Schulz wrote in message <7f43oc$g2q$1@grandprime.binc.net>...
>I had an idea for a car "alarm'. The idea was to hook up a fuel pump cut
>off switch to a reciever. When you transmit the right DTMF code on that
>frequency. it kills the fuel pump and stalls the car.
>
>If anyone actually tries this, I want a 10% cut of the profits. :)
>
>

Why not just hide a switch somewhere that kills the pump?
That way if a thief starts the car, he won't go too far.

-Bill

4147. Swap HC-9 xtals for 30-meter Ft-243 xtals? (with my address!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-15 00:00:00 UTC
From: Art Winterbauer <artwinte@sprynet.com>
Message-ID: <7f60t0$a8$1@juliana.sprynet.com>
Source record: 71178
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

[I've appended my e-mail address to this query. Makes it easier to respond!]

My little homemade 6J5/6L6 transmitter is only happy with crystals in FT-243 holders, so I'd like to trade away, one-for-one, various crystals in HC-9 holders.

Want: 30-meter xtals (10.101 to 10.119 mhz) in FT-243 holders

Trade: Crystals in HC-9 holders (the 3/4-inch by 3/4-inch, sturdy aluminum holders):

40 meters: 7.005, 7.010, 7.030, 7.040
30 meters: 10.105, 10.110, 10.115, 10.120
20 meters: 14.005, 14.020, 14.030, 14.040, 14.050

These little xtals work fine in my various homemade solid-state rigs.

73/Art, WA5OES

artwinte@sprynet.com

4148. Re: Website Upgrade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Michael Masterson <wn2a@qsl.net>
Message-ID: <01be87bf$55ac2180$2d21440c@default>
Source record: 71083

OOPS! Sorry !! The URL IS: http://www.qsl.net/wn2a/index.htm
My Apologies!!

Michael Masterson <wn2a@qsl.net> wrote in article
<01be8790$e5808c80$a51f4f0c@default>...
> Hello All:
> I Have added lots more to my website dedicated to Ham Homebrew.
> The MOSFET transmitters ["Three Fine Mice-MOuSeFET Transmitters for
> 80/40 and 30 Meters"] fully updated schematics and Bill of Material was
> added to the site. Updated the Links page and added better descriptions
> for the Tantalum Caps and Chokes that I have for sale.
> 73's Mike,WN2A
>
> e-mail <wn2a@qsl.net>
> Packet: WN2A@N2QAE.#NNJ.NJ.USA.NOAM.
>

4149. Home Built Airband???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <B8wR2.1694$DX2.346@news-reader.bt.net>
Source record: 71084

Hi,
I love electonics...I got that out of the way!

I'm about to start learning for my NRAE (UK), and I was looking for some help building a homebrew VHF airband Rx...Does anyone have any starting points, tips hints, schematics etc..

I have a case about 15cm (L) x 12(W)x 2.5(D) which should do! Ob., I can't have Valves and it needs to be AA batt powered. Can I do this w/out a PCB? Can I use stipboard?

Cheers

Please post or pref., email me: pickards@zen.coNOSPAM.uk (remove NOSPAM)

(It's more personal)

David

4150. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Scott2@mediaone.net
Message-ID: <lfzR2.4385$JO4.12158754@rmnws01.ce.mediaone.net>
Source record: 71085

Hittite Microwave makes an ASIC to do this, around 4 GHz. FM chirp radar. A duplexer (directional coupler) is used to seperate transmit and recieve.

4151. Re: Ferrite core losses

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7f6gng$99q@nnrp2.farm.idt.net>
Source record: 71086

Mike,

What you are really asking is a way to "model" the losses. Yes it can be done using a resistor. The power loss (per unit volume or sometimes unit weight/mass) in any type of core material is a function of both the frequency and the flux level in the core. I am assuming here that there are no gaps in the core. Gapped cores are much harder to calculate because of the amount of fringing flux you get around the gap(s) which heats up both the core like mad and the coil windings near them if the frequency is high enough. Also the flux level in the core is more difficult to calculate too.

The flux level in the core can be calculated in two ways. The first way you would calculate the ampere-turns you have then look this value up on a graph (B-H curve) to find the flux level (B). The second way is to calculate the flux level (B) based on volts per turn and the core cross sectional area (the equation you use depends on the voltage waveform i.e. sine wave or square wave).

Once you have the flux level you can then look up, on the core loss curves, the point corresponding to the operating frequency and the flux level in the core. The value you get from this type of graph is something like watts/unit volume, milliwatts/unit volume. Sometimes I have seen the loss expressed as watts/unit mass or weight so watch out.

After that it is a simple calculation to find the total loss for a given core volume or weight. And once you have that value then you can use R=(V^2)/P or R=P/(I^2) to find the equivalent resistance. The voltage "V" would be the voltage across the winding on the core and "I" would be the current through this same winding.

Now if you change ANYTHING you have to go through this whole procedure all over again! If you need to experiment with more that one or two operating points you would be better off to "digitize" the relevant core graphs, put the tables in to a spreadsheet of some kind so you can program the spreadsheet to do all of the graph interpolations and calculations for you. I normally use Mathcad to handle this bit of work for me.

Without more data from you such as coil voltage, core geometry, number of turns etc. I don't think anyone here could calculate an equivalent resistance value for you to use.

Leland C. Scott
KC8LDO

AMDX wrote in message <01be8791$2ff5d400$b1864d0c@default>...
>
> Can the loss factor figure for a core be put into ohms?

>As in a FT-240 #61 toroid has a loss factor of 32 x 10-6
>@ 2.5 MHz and a volume of 22.608. If it is wound to have
>350uh can the losses be put into ohms I would prefer to
>know the resistance at 1.6Mhz.
>
>
> Mike
>

4152. Re: Litz wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7f6kug$aag@nnrp2.farm.idt.net>
Source record: 71087

Lawrence,

The explanation from the "Reference Data for Radio Engineers" handbook, which is correct, is not why Litz wire is used in many applications. Normally we are not interested in high frequency currents being induced (eddy-currents) in to Litz wires.

Your "Ham explanation of skin effect" that you gave to the novice is the normal reason Litz wire is used. Specifically at high frequency the current flows on the surface of a wire conductor in a thin shell all around it. Since the current does not flow through the whole cross section of the wire much of the copper conductor is wasted. Additionally you can see that the shell which is conducting current can be considered as an "equivalent" smaller gage wire where the current flows through the complete cross sectional area. This "equivalent" wire has a cross sectional area exactly equal to the cross sectional area of the current conducting shell of the real wire we started with. Since our "equivalent" wire has a smaller cross sectional area we can conclude that the wire resistance is higher for high frequency AC currents as opposed to the same wire conducting DC (and therefore no skin effect). Depending on the frequency the high frequency resistance of a wire can be 10's of times higher than the DC value. Good Litz wire may have a high frequency resistance from only 5 to 10 percent above the DC value!!

Litz wire aims to solve this high resistance problem with wire conducting high frequency current two ways.

The first way uses strands of small gage wire, each of which is completely covered in a very thin layer of insulation. The gage of wire selected is based on the maximum frequency of the current for which the wire will be required to carry. Normally the diameter of the wire is selected to be around the skin depth (or less) of the current in copper. Using a wire diameter of this size ensures that the current flows through the complete cross section of the small wire uniformly.

The second way is an involved bundling schema for the collection of small wires above to make a particular size Litz wire cable. Since the individual wires in a Litz wire cable are connected together in common ONLY at the ends of a cable, it is very possible for the current through each strand to vary from one another. This typically can happen from the influence of magnetic fields generated from the current flow in the cable itself and magnetic fields from outside the cable. The bundling schema forces each individual wire (in the Litz wire cable) to occupy about every position in the cross section of the cable over a short distance. This has the net effect of exposing each individual wire to the same average magnetic field and thus helps to balance the current distribution evenly among the individual wires

in the cable.

I hope this explanation helps to clear up some of the confusion you have with Litz wire.

Leland C. Scott
KC8LDO

Lawrence E. Stoskopf wrote in message <37164B0A.541C22E7@tri.net>...
>Reference Data for Radio Engineers, 1974. p. 12-17
>
>"Rw represents the copper loss in the coil winding. It is made up of the dc
>resistance of the wire and
>the eddy-current losses generated in the winding by stray flux from the core
>cutting the winding. This
>eddy-current loss can be minimized at high frequencies by dividing the wire into
>many small wires.
>This type of wire is called Litz wire."
>
>Someone other than this anesthesiologist might comment, but I suspect that eddy
>currents in larger
>conductor might still a loss rather than skin effect and be the reason that Litz
>wire is still used.
>
>N0UU
>
>
>
>
>

4153. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Danny Hendrickx <hendrida@se.bel.alcatel.be>
Message-ID: <3716DF91.4AB27EC@se.bel.alcatel.be>
Source record: 71088
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
Bill Bowden wrote:
>
> Carl Schulz wrote in message <7f43oc$g2q$1@grandprime.binc.net>...
> >I had an idea for a car "alarm'. The idea was to hook up a fuel pump cut
> >off switch to a reciever. When you transmit the right DTMF code on that
> >frequency. it kills the fuel pump and stalls the car.
> >
> >If anyone actually tries this, I want a 10% cut of the profits. :)
> >

I think Mercedes or BMW already implemented this. Was it your idea ? In
that case, contact them. Both of them are in Germany I believe ;-)

--
Regards,
________________
_____________________________________________\ /_____
\ /
SW-Engineering - Routing - VJ24 Hendrickx Danny
phone : +32-3-240 3916 ALCATEL TELECOM
fax : +32-3-240 9899 Fr.Wellesplein 1
mailto:daniel.dh1.hendrickx@alcatel.be 2018 Antwerp Belgium
_____________________________________________\ /___________
URL: http://www.se.bel.alcatel.be/CH_sector1/SS31/ \/
**********************************************************************
I couldn't repair your brakes, so I made your horn louder.
**********************************************************************
```

4154. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Tim Courtney <tim.courtney@soton.sc.philips.com>
Message-ID: <3716E4FB.4CF2@soton.sc.philips.com>
Source record: 71089
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Danny Hendrickx wrote:
>
> Bill Bowden wrote:
> >
> > Carl Schulz wrote in message <7f43oc$g2q$1@grandprime.binc.net>...
> > >I had an idea for a car "alarm'. The idea was to hook up a fuel pump cut
> > >off switch to a reciever. When you transmit the right DTMF code on that
> > >frequency. it kills the fuel pump and stalls the car.
> > >
> > >If anyone actually tries this, I want a 10% cut of the profits. :)
> > >
>
> I think Mercedes or BMW already implemented this. Was it your idea ? In
> that case, contact them. Both of them are in Germany I believe ;-)
>
> --
> Regards,
> _________________
>
/snip/

This is exactly how my car immobiliser works. it's a Renault and is from
1996 so it is a way old idea.

Tim

4155. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Jeff woonton <jeff.woonton@gecm.com>
Message-ID: <37175A30.2458D70E@gecm.com>
Source record: 71090
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Robin Birch wrote:

> To Jim, Roy, Carl, Richard etc.
>
> Thank you, you have given me all I need plus some interesting ideas.
>
> Regards
>
> Robin
> ---
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU/2E0ARJ Old computers and radios always welcome

Robin,

Good luck with your enterprise, its what amateur radio should be all
about.

A couple of points that may help you:

Firstly decide on how high a performance rx you are trying to design,
especially in terms
of how well it copes with large interfering signals. It is relatively
easy to build a high gain
sensitive rx, but to have one with good large signal performance is a
different matter.
This will probably dictate what sort of mixers you chose.
Passive diode ring mixers usually out perform simple active transistor
mixers, but they are
expensive in comparison.
A diplexer on the mixer output is only necessary if you are looking for
the ultimate in performance.
The choice of single or doudle conversion is again mostly down to large
signal and selectivity
requirements.

If you are trying to build a 'simple' receiver for novices to build them
perhaps it is better
to err on the simple and cheap side. ie single conversion, transistor
mixer etc. (I would
suggest that you consider a crystal filter, especially if you are going
for single conversion,
to try to get reasonable adjacent channel selectivity and a better
rejection further from

channel, with a double conversion rx you may get away with ceramic filters at both IF's)

Final point abouth your suggested line up, agc is not usually necesary on simple FM receivers.
The if strips are desinged to limit, which provides noise rejection, and quieting of the fm noise.

Anyway, good luck, and keep asking questions, that 'real amateur radio'

73

Jeff G8HUL

4156. Re: Where to get Litz wire??? ---> Reg Edwards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be882a$cce95400$LocalHost@default>
Source record: 71091
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Charlie,

A coil of 350 uH at 1.8 MHz has a reactance of about 4000 ohms.

With an RF resistance of 4.5 ohms this gives Q approx 900.

At 1.8 MHz, with 14 gage solid wire on a 4-inch diameter former, this is an improbably high value for Q.

Have you calculated the RF resistance value of 4.5 ohms from the length of wire on the coil ?

When a straight length of solid wire is close-wound into the form of a solenoid its effective RF resistance can increase by three or four times. This increase is known as the "proximity effect". It is due to the current not being uniformly distributed over the surface of the wire as it is when straight (as in an antenna wire).

This factor increases the RF resistance and reduces the Q of your coil to 300 or 350 which is a typical value for a coil of those dimensions at 1.8 MHz.

The New England Electric litz data may have been misunderstood. An increase of coil Q by a factor of 20 times, to around 7000, is impossible without superconductivity. But even if an increase of this order were possible there would be no noticeable improvement in antenna performance because most of the loss, as you say, is in the ground radials system.

Charlie, sorry to be so pessimistic. Have you enquired the price of 100 feet of 165/48 Litz ?
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Charlie T. <xctx@onr.com> wrote in article
<01be87c3$b5a03320$1d33c8cf@ct>...
> Reg,
>

> The HIGHEST frequency Litz I've seen is 2.4 MHz
> and it requires many strands of #48 wire...tiny stuff!
> The coils I'm winding are in the 300-400uH range
> and operate at 1.6-1.8 MHz. My airwound
> 4" diameter coil has an AC resistance of
> about 4-5 ohms using solid copper #14 wire.
>
> According to New England Electric this can be
> reduced by a factor of 20...using a 165/48
> Litz makeup. (i.e. 1/20th the AC resistance of
> solid copper it replaces). To be honest ground
resistance
> dominates but with many radials the ground
> loss can be reduced and then the coil losses
> start to look like bigger percentage of the resistive
> losses.
>
> -Charlie
> W5CDT
>
> Reg Edwards <G4fgq.Regp@btinternet.com> wrote in article
> <01be8768$af416680$5fe5abc3@default>...
> > Hello again Charlie,
> >
> > DC/HF resistance values are not relevant to the
improvement
> > in Q of coils due to the use of Litz.
> >
> > What matters is the ratio of the HF resistance of a
> > Litz-woven wire to the HF resistance of the solid wire
of
> > the same overall diameter it replaces.
> >
> > Above a few MHz the improvement is tiny. At higher
> > frequencies Litz has a higher resistance than solid
wire of
> > the same diameter. It is more economic just to increase
the
> > diameter of the solid wire or convert to copper tube.
> >
> > Litz is at its best at a few hundred kilo-hertz such as
in
> > 110 KHz, 455 KHz and 1.6 MHz IF transformers. Have you
> > ever seen any Litz-wound 9 MHz IF transformers ?
> >
> > Manufacturers will continue to manufacture it for as
long
> > as there are customers to buy it.
> >
> > Yours, Reg.

> >
> >
>

4157. Serial Communications / Video / Transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: gvbale@yahoo.com
Message-ID: <7f779sieq1@nnrp1.dejanews.com>
Source record: 71092

Serial Communications / Video / Transmitter - Does anybody have any details and DIY circuitry or book refs or refs to other URL's to making a remote video camera and interface that is linked to a serial communications modem and radio transmitter, and then a radio reciever and serial port on a PC, and is powered by 12V dc.
http://www.geocities.com/heartland/village/3131/index.html gvbale@yahoo.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4158. Video recorder 12v DC and switching

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: gvbale@yahoo.com
Message-ID: <7f77apifg1@nnrp1.dejanews.com>
Source record: 71093

Video recorder 12v DC and switching - Does anybody have any details and DIY circuitry or book refs or refs to other URL's of how I can setup a video camera and video recorder that is switched on/off via a infrared sensor, (and thus obtain a very extended time period to a 3 hrs tape), and that is powered by 12V dc. Something like a car alternator and a car fan blade??? http://www.geocities.com/heartland/village/3131/index.html gvbale@yahoo.com

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4159. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <371724C8.ED934209@erols.com>
Source record: 71094
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The first time I did this was about 1977. Make sure I get my cut, okay :-)

Tim Courtney wrote:

> Danny Hendrickx wrote:
> >
> > Bill Bowden wrote:
> > >
> > > Carl Schulz wrote in message <7f43oc$g2q$1@grandprime.binc.net>...
> > > >I had an idea for a car "alarm'. The idea was to hook up a fuel pump cut
> > > >off switch to a reciever. When you transmit the right DTMF code on that
> > > >frequency. it kills the fuel pump and stalls the car.
> > > >
> > > >If anyone actually tries this, I want a 10% cut of the profits. :)
> > > >
> >
> > I think Mercedes or BMW already implemented this. Was it your idea ? In
> > that case, contact them. Both of them are in Germany I believe ;-)
> >
> > --
> > Regards,
> > _________________
> >
> /snip/
>
> This is exactly how my car immobiliser works. it's a Renault and is from
> 1996 so it is a way old idea.
>
> Tim

4160. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <371727E7.2253C224@erols.com>
Source record: 71095
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

For liability purposes make sure that there can be no false triggers (use two digits in sequence) and be sure you can see the car when you disable it. If you kill it as the thief is crossing a rail road track or pulling out in front of an 18 wheeler, for example you could be in for some big liability.

Also, opening the primary to the ignition is a faster way - you don't have to wait for the fuel to be pumped from the lines.

4161. Re: Yaesu 8100 Mod Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Brad Kellison KA8TOK <KA8TOK@four-way.net>
Message-ID: <37172D80.917CC958@four-way.net>
Source record: 71096
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.ham-radio,alt.ham-radio.vhf-uhf,rec.radio.swap,es.rec.radio.amateur,uk.radio.amateur,alt.ham-radio.marketplace,rec.radio.amateur.misc
Body handling: Binary attachment payload not displayed: KA8TOK.vcf

Why Shoud I try it there.. I was the one who sent the mod to QRZ to begin with.

"Daniel J. Velez" wrote:

> It's an Apache server and doesn't like the caps. Try:
>
> www.qrz.com/mods/
>
> 73 de Dan
>
> Brad Kellison KA8TOK wrote in message <3711DE98.5D7F4981@four-way.net>...
> >you can also get the mod from WWW.QRZ.COM/MODS . I know I put it there
> >ehrn your site dropped the last time.
> >
> >_Mac_ wrote:
> >
> >> Yaesu FT 8100 R Modification Page
> >>
> >> The Original 8100R Mod page. New Location
> >>
> >> http://www.iw.net/~mac24
> >>
> >> 73's
> >> _Mac_
> >> Icq: # 3115848
> >> mcgyv@hotmail.com
> >

[One or more binary attachments are retained only in the source text.]

4162. Re: TOKO Ceramic Filters - Characteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7f7e34odf1@nnrp1.dejanews.com>
Source record: 71097
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Boy, You gentlemen really impress me! While I am not intending to build up an RX right away, I have been contemplating a homebrew setup for 220mHz. Just following this thread over the last few days has enlightened me immensely. Thanx guys and as Jeff said...."That's real hammin!"
73 de VE6INM

In article <37175A30.2458D70E@gecm.com>,
Jeff woonton <jeff.woonton@gecm.com> wrote:
>
>
> Robin Birch wrote:
>
> > To Jim, Roy, Carl, Richard etc.
> >
> > Thank you, you have given me all I need plus some interesting ideas.
> >
> > Regards
> >
> > Robin
> > ____
> > Robin Birch robin@falstaf.demon.co.uk
> >
> > M1ASU/2E0ARJ Old computers and radios always welcome
>
> Robin,
>
> Good luck with your enterprise, its what amateur radio should be all
> about.
>
> A couple of points that may help you:
>
> Firstly decide on how high a performance rx you are trying to design,
> especially in terms
> of how well it copes with large interfering signals. It is relatively
> easy to build a high gain
> sensitive rx, but to have one with good large signal performance is a
> different matter.
> This will probably dictate what sort of mixers you chose.
> Passive diode ring mixers usually out perform simple active transistor
> mixers, but they are
> expensive in comparison.
> A diplexer on the mixer output is only necessary if you are looking for
> the ultimate in performance.

> The choice of single or doudle conversion is again mostly down to large
> signal and selectivity
> requirements.
>
> If you are trying to build a 'simple' receiver for novices to build them
> perhaps it is better
> to err on the simple and cheap side. ie single conversion, transistor
> mixer etc. (I would
> suggest that you consider a crystal filter, especially if you are going
> for single conversion,
> to try to get reasonable adjacent channel selectivity and a better
> rejection further from
> channel, with a double conversion rx you may get away with ceramic
> filters at both IF's)
>
> Final point abouth your suggested line up, agc is not usually necesary
> on simple FM receivers.
> The if strips are desinged to limit, which provides noise rejection, and
> quieting of the fm noise.
>
> Anyway, good luck, and keep asking questions, that 'real amateur radio'
>
> 73
>
> Jeff G8HUL
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4163. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3717322A.25148D5A@mwci.net>
Source record: 71098
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

I took some data on two 2 inch panel meters that I bought in 1946, 53 years ago. For 10 years they were in a CW transmitter, needles flopping around at 25 WPM. A Beckman 310 with accuracy of 0.75% +/- 1 digit was the reference. Both meters are rated nominal 3% of full scale.

Meter number 1: 0 to 50 mA:
Reading Actual % error
50 48.5 3.0%
40 39.1 2.3%
30 29.1 3.0%
20 19.7 1.5%
10 9.5 5.0%
5 4.0 20%

Meter number 2: 0 to 200 mA:
200 198 1.0%
150 149 0.7%
100 102 2.0%
50 51.5 3.0%
25 26.1 4.2%

So much for the intuition that a panel meter that is specified only at full scale cannot be trusted in regions above, say 20% of full scale.

Bill W0IYH

4164. Re: Where to get Litz wire??? ---> Reg Edwards

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <37174B05.3C57AB@mlecmn.net>
Source record: 71099
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Charlie, I don't know if you have a copy of the Litz Coil Design program LCD.EXE, from the New England Electric Wire Corporation. It may be on their web site but I didn't see it there. The program will calculate the Q of Litz coils, neglecting distributed capacitance effects. In a parallel-tuned circuit the distributed capacitance won't affect the losses because it simply reduces the amount of external capacity needed to tune the circuit to resonance. Your application is apparently for use as a loading coil; in other words a series resonant circuit. Now the distributed capacitance *does* contribute to losses, because more current has to flow through the coil for a given antenna current. I won't attempt to go into more detail about this apparent "Q" paradox because it was beaten to death on the Usenet a couple of months ago. Anyway, LCD.EXE provides a feel for the *best* Q you can expect from a Litz coil. If you don't have the program I can send you a copy.

Brian Beezley's coil analysis program, which was bundled with the ARRL Handbook software for a few years, will calculate the Q (and distributed capacitance effects) of solid-wire coils and allows you to specify the wire material as well as the dielectric used for the form. It may still be available at some ham FTP sites. This would give you a comparison of what to expect with solid wire coils.

73,

Lyle, K0LR

http://www.computerpro.com/~lyle

4165. PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <37174901.623B@snet.net>
Source record: 71100

I read on one of the newsgroups how certain laser printers are
preferable to others for making PC boards. I believe older was a key
word. As far as printers go I am perfectly content with my inkjet
printer, so the acquistion of a laser printer would be for the sole
purpose of making PC boards, rather than general printing.
Any comments appreciated,
Vince,
N1VC

4166. Re: COMPUTER PROGRAM FOR HOMEBREWERS.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37175630.BC39951E@fallschurch.esys.com>
Source record: 71101

I have reviewed the "typical page" of your Homebrewer's Program, and must make a few comments about its utility. The page in question is an aid to calculation for a simple Zener-diode shunt regulator with fixed voltage input and a variable load.

My first point is that there is no help for the more generally useful case where the input voltage and the load current are both variables. If that case is treated separately in your program, it would seem a tad less convenient than covering the whole problem on one page.

The page should indicate that the maximum and minimum current values are in milliamperes, as I suspect is the case.

The resistor (Rs) is clearly a SERIES resistor, not a "shunt" resistor. A simple enough mistake to fix, but one which undermines confidence when it appears on your exhibit page!

The 5-times safety factor for the resistor is appropriate for bridges and structures, but 2-times is usual electronic practice!

The analysis is incomplete without an evaluation of the power dissipation required of the Zener diode. They are available in powers from less than 250 milliwatts to over 50 watts. While 50-watt units are unusual among ham homebrewers, the need to know and allow for diode dissipation is vital.
Just as the range of load currents will affect necessary power rating for the resistor, it matters for the diode as well. Of course, the range of expected input voltage also affects the power rating of both components.

Considering that you want money for your programming efforts, you would do well to secure competent technical review of your product before advertising it to the amateur radio homebrewers newsgroup! Your skill with the graphical interface is admirable, but the program content may not really be ready for release.....
73 de W1AEL

4167. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7f7m6p$md5@news.Hawaii.Edu>
Source record: 71102
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <371727E7.2253C224@erols.com>, Bob Lewis <aa4pb@erols.com> wrote:
>For liability purposes make sure that there can be no false triggers (use two digits
>in sequence) and be sure you can see the car when you disable it. If you kill it as
>the thief is crossing a rail road track or pulling out in front of an 18 wheeler,
>for example you could be in for some big liability.

Has any court ruled in favor of a car thief in either of the above
scenarios?

This would be an ideal 6m radio control application.

Jeff

4168. 160m or 6m VFO for Gonset Commander?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7f7m78$hj4$1@news2.bit-net.com>
Source record: 71103
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have just acquired one of the little passive VFOs
that match the Gonset Commander transmitter
(160-6m AM/CW).

I had forgotten that it didn't cover 160m, though I did
know that it didn't cover 6m.

Anyone aware of a VFO or VFO circuit for 160 and/or
6m for the Commander?

Thanks! & 73,
~~~

\ ~ / .... DavidC K1YP@qsl.net or 603-894-1174
~~~

4169. Re: Ten-tec swl 9 band rec.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: chris@orpheus.in-berlin.de
Message-ID: <3714d924.443903@news.vr.in-berlin.de>
Source record: 71104

>Hello All,
>
>
> Has anyone built the Ten-tec 9 band swl receiver?
>I want to get one, but I would like to hear from others that have built this
>kit before I purchase it.
>
>Thanks,
>
>J. Strunck III
>kc5ngx

I am also interested in this receiver.
In the radio magazine "Funkamateur" (Februar Issue, i think) was a
report about it.
It sounds not bad, for the low price you will get a lot of fun....

Chris

4170. Re: Help me catch a thief

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Lenny <captainvideo46@hotmail.com>
Message-ID: <3717628D.20C9@hotmail.com>
Source record: 71105
Cross-posted to: sci.electronics.repair,sci.electronics.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Jeffrey Herman wrote:
>
> In article <371727E7.2253C224@erols.com>, Bob Lewis <aa4pb@erols.com> wrote:
> >For liability purposes make sure that there can be no false triggers (use two digits
> >in sequence) and be sure you can see the car when you disable it. If you kill it as
> >the thief is crossing a rail road track or pulling out in front of an 18 wheeler,
> >for example you could be in for some big liability.
>
> Has any court ruled in favor of a car thief in either of the above
> scenarios?
>
> This would be an ideal 6m radio control application.
>
> Jeff
There was a case in New York City some years ago that involved an
apartment dweller who was repeatedly being robbed by way of the fire
escape window. He'd just about had it.
He rigged up a shotgun with a trip wire and blew some asshole's arm off
on the next attempt. He was prosecuted and convicted for assault.
Is it fair? I don't know. I have heard that if the intruder was actually
in the room at the time, it might have been viewed as self defense.
It's a very sick world out there. Try to stay healthy. Lenny Stein.

4171. Re: long-play recorders

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Dieter Mayr <d.mayr@salzburg.co.at>
Message-ID: <37176AC2.5CF755D9@salzburg.co.at>
Source record: 71106

Jim wrote:

> i have seen ads for cassett recorders with a conversion done to enable
> them to get 5 times the record time. does anyone know how its done? can
> it be done with common parts? please give all the info you guys have.
> thanks

Jim:
This is mostly done by reducing the tape speed, as it is done in the old tape recorders.
The simplest way is to put an (variable) Resistor in front of the motor.
You can reduce the tape speed 2 -3 times, depending on the torque of your motor.
Maybe you can change the ratio of the driving (normaly done with a rubber-belt, try to change the wheels)
If your motor has to low torque, you can try a pulse-driving unit for the motor to slow it down.
With the lower tape speed the quality of the recording decreases.
But for voice recording it will do with 1/5 speed.

Hope this will help
73, Dieter OE2CDM

4172. RX-320 Free Beta Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: mktg@ix.netcom.com
Message-ID: <37366ae1.13376710@nntp.ix.netcom.com>
Source record: 71107

April 16, 1999

Dear RX-320 User,

Beta version D of the Flexi-Tuner software for operating the Ten-Tec RX-320 is now available.

Many thanks to the many beta testers for their excellent comments, ideas, and suggestions. I have tried to incorporate as many ideas as possible into this beta version.

The biggest change in this version is the addition of a comprehensive logging function (described below).

The major features of the beta version D are as follows:

1. Operates the RX-320 from virtually any desktop or laptop computer, including older 386 machines.
2. Works in either DOS or Windows (this is a DOS program).
3. Implements 34 selectivity filters.
4. All modes: AM, USB, LSB, CW.
5. AGC implemented: Fast, Medium, Slow.
6. Tuning steps down go 1 Hz or up to 1 Mhz.
New! 7. Now includes 3 Khz tuning step for marine channels. Also includes 9 Khz tuning steps for European AM stations.
8. Adjustable squelch.
New! 9. Pause S-meter function on front panel. This eliminates the "chuffing" heard on some RX-320 systems.
10. Bandpass tuning (offset from center freq.)
11. Scanning using scan files. Adjustable parameters.
12. Built-in scan file editor.
New! 13. Built-in logging function with log editor. Easily track, edit, sort, monitor, and export log entries. Items logged include station name (or notation), frequency, mode, filter, date, time, and S-meter reading. Time and date can be adjusted if you want to log in UTC or other time zone.
New! 14. More sensitive S-meter.
15. Almost all parameters adjustable (great for knob twiddlers like me).
New! 16. Tighter code for faster operation.
17. No mouse required (or supported).

Beta version D has been running for a couple of weeks on several computers, including an old B&W Grid laptop (80386 at 25 Mhz), an 80486 machine, and several Pentiums. It works equally well on all the tested computers.

As reported last time, it really is a lot fun to use an old DOS laptop to operate the RX-320 while sitting in an easy chair across the room. By the way, the RX-320 sounds great when played through a good stereo system. Also, I tried Michael Young's idea (April 2 posting on rx320@onelist.com) on how to wire a new serial cable to eliminate the chuffing and crosstalk heard in some systems - this solved my crosstalk problem.

I would be happy to supply free of charge this Beta version to anyone interested who has an RX-320. The software will not function without an RX-320.

The program is supplied along with several scan files in a single zip file. Installation and removal are simple, as the program does not affect any system settings either in DOS or windows (it does not mess with your registry, DLL's, or other system programs).

The program is easy to use - just press various keys to engage the different functions.

Installation, removal, and operating instructions are included.

A final version of the program is expected within a month or so, depending on feedback. It will probably be offered on a shareware basis for a nominal amount (all this work has to be worth something :-) The final version will have greatly expanded scan file and log capacity;and any inconsistencies, cosmetic irregularities, and faults will have been fixed. As always, the final program will be small and easy to install without effects on system files.

If you would like to receive the latest beta version at no charge, send me an e-mail at mktg@ix.netcom.com and I will send you the zip file by return e-mail.

Regards and 73,

David
W7HTJ

4173. SG-8002 programmable oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199904161656.MAA16356@pop.uky.edu>
Source record: 71108

I noticed that Digikey was selling the EPSON SG-8002
programmable frequency crystal oscillators. These can be
ordered with various output options and Frequency stability
over 125 degree range of 50 ppm. From 1 MHz to 125MHz.
They can program them for the frequency you request and
ship in one day.
I ordered some and at about $3 each it took a few to meet
their minimum order.
Well, just as I suspected the one item that was not on their
spec sheet was a problem. Sideband noise (phase noise or jitter).

The 7Mhz one is not absolutely horrible but with a filter bandwidth
of 100Hz the noise 1Kc from the carrier was -49db. and about constant
to 50KHz from carrier. You can check this out with your receiver as
well.
At 50 MHz the sideband noise is only -25db down from the carrier.
Practically useless for as a local oscillator or transmitter frequency
source.

As a comparison a TTL 10 MHz crystal clock and found the sideband noise
to be better than -70dbm 1KHz from the carrier.
By the way you can get custom made crystal oscillators from
JAN crystals for less than $15 each but you may have to wait 3 or
4 weeks. Not nearly as good as 1 day turn around and $3 each but
they are less noisy.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

4174. Re: Need Sanyo LA7673 Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <3717626a.15209921@news.revealed.net>
Source record: 71109

Thanks to all who responded!!
MCM Electronics had the chip, I just missed it in their catalog.
One has been ordered.

Terry

4175. Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: frohro@wwc.edu
Message-ID: <frohro-1604991029480001@csp-frohro.wwc>
Source record: 71110
Cross-posted to:
sci.electronics.misc,sci.electronics.componentssci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi All,

I've been trying in vain to find someone who can weld some solder tabs on about 30 NiMH cells I want to use. Is there anywhere that I could send these batteries to get this service performed at a reasonable cost?

Thanks,

Rob

4176. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: "Al Lorona, Jr." <al_lorona@hp.com>
Message-ID: <37177FD1.45E5@hp.com>
Source record: 71111
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

On Wed, 14 Apr 1999 01:46:13 GMT, b_runner@hotmail.com (runner) wrote:

>Hello,
>
>Am I missing something here? This is the problem:
>
> Example: SSB phase noise of an oscillator in 1Hz of bandwidth,
>relative to carrier:
>
> -30dBc/Hz
>
>[distance from carrier is irrelevant here, it is probably very close
>or it is a crappy oscillator ;-)].
>
> Is then phase noise in 10kHz of bandwidth
>
> +10dBc/10kHz ?
>
>I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
>more phase noise than actual carrier power? This seems
>counterintuitive to me.
>
>Thanks for any insights...
>
>
Hi, Everybody,

I disagree. "Distance from the carrier" is *very* relevant.

I'm not sure if this simple rule-of-thumb has been already stated, but in the phase noise measurement business, the resolution bandwidth used for the measurement should be no more than 1/10 the distance from the carrier.

So, to get in as close as, say, 1 kHz from the carrier to measure the phase noise at that point, you must use a res BW of 100 Hz. To measure at a spot frequency of 100 Hz, your rbw must be 10 Hz. This is why it takes longer and longer to make the measurement the closer you get to the carrier.

Once this is done, then the 10 log BW correction can be applied to normalize to noise power density in a 1 Hz bandwidth.

In the original post, which asked what happens when you go from a 1 Hz bandwidth to a 10 kHz bandwidth, it's important to state the separation

because it's very likely that the wider bandwidth would lead to an
invalid measurement. It wouldn't simply be a crappy oscillator, it would
be something like a wideband-modulated signal at that point.

R,

Al

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost
$USER@$HOST
root@mailloop.com

Chairman William Kennard: wkennard@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
Commissioner Michael Powell: mpowell@fcc.gov
Commissioner Gloria Tristani: gtristan@fcc.gov
US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

4177. Re: Identifying a crystal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3717844A.12DA0B24@fallschurch.esys.com>
Source record: 71112

Looks to me as though you have a HY-Q crystal. This is a good crystal company in the UK with a web site at www.hy-q.co.uk
Their online catalog should tell you what you need to know, but failing that, I bet you could send them the crystal, and ask them to duplicate it.
73 de W1AEL

4178. Re: SG-8002 programmable oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37178501.21250601@fallschurch.esys.com>
Source record: 71113

You might also take a look at www.hy-q.co.uk
They are a British company with an on-line catalog and a good
reputation.
73 de W1AEL

4179. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7f8882$hs2$1@nnrp1.dejanews.com>
Source record: 71114

In article <37174901.623B@snet.net>,
vinyc@snet.net wrote:
> I read on one of the newsgroups how certain laser printers are
> preferable to others for making PC boards. I believe older was a key
> word. As far as printers go I am perfectly content with my inkjet
> printer, so the acquistion of a laser printer would be for the sole
> purpose of making PC boards, rather than general printing.

Most of the laser printer PC board processes I've seen use an intermediate transfer stage -- like printing to clay-coated inkjet paper, and ironing on the toner, or printing on a transparency and using photoresist.

However, if you had a laser-printer with a straight path -- one that springs to mind is the Canon SX engine, used in Apple LaserWriter IIs and some HP IIIs -- you could theoretically print toner directly on the PC board.

You can adjust the toner density AND the roller spacing on the Apple LaserWriter II series, and a lot of macintosh artists report successful results from printing on a wide variety of media. I see no reason why you couldn't sacrifice a used-up LaserWriter or LaserJet for printing to PC boards.

An interesting part of the SX engine -- the imaging drum is in the toner cartridge, so you don't have to replace an expensive and unobtainable part if you ruin a drum. Just get an empty cartridge and refill it with toner from the wrecked cartridge, or get bulk toner and refill your own.

I have an old LaserWriter Plus that I bought for a dollar, and a Qume ScripTEN that I got for free...I'm going to experiment and see if either will talk to any computer I have, and be able to make nice PCBs at home.

Jim N6OTQ

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4180. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: PoppaPump <poppa0pump@aol.com>
Message-ID: <bqQR2.1042$o31.27043@news2.voicenet.com>
Source record: 71115
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

You are also correct I, believe Roy is wrong

--

>
>Within the past month or so, I purchased a *new* Model 43 with a *new* 250H
>element. I compared it with a recently calibrated Boonton Model 92B RF
voltmeter
>and 50 ohm load setup. The readings compared as closely as I could read the
scale at
>all levels from 10 watts to 250 watts. I found this to be impressive. I
found the
>accuracy to be quite a bit better than the "guaranteed 5% of full scale".
>
>The meter scale on the 43 is highly compressed at full scale but spreads
out greatly
>at readings below full scale and is easier to read. For example, midscale
is about
>80 watts. At 40 watts the error is not +/- 12.5 watts for a 250 watt
element. It is
>definitely not off by 31% at 40 watts.
>
>5% of 250 watts does not imply 12.5 watts at "all" meter readings. That is
not what
>the term means. In fact, the term doesn't really say much of anything about
the
>accuracy at lower readings.
>
>The manner in which they mark the meter scale indicates the confidence they
have in
>those markings. The validity of the markings is verified at the factory,
where they
>have made more than 230,000 Model 43s. The skeptical owner should verify
this for
>himself, as I did.
>
>The nonlinearity of the meter scale has to be considered.
>
>I also checked my new 1000H element with the same results.
>
>Bill W0IYH
>
>

>

4181. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: PoppaPump <poppa0pump@aol.com>
Message-ID: <uDQR2.1046$o31.27140@news2.voicenet.com>
Source record: 71116
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

We must also take into consideration the bird meters slug, they vary greatly
from one to another. Take 3 different slugs all of them the same power
rating you will see 3 different readings

William E. Sabin wrote in message <3717322A.25148D5A@mwci.net>...
>I took some data on two 2 inch panel meters that I bought in 1946, 53 years
>ago. For 10 years they were in a CW transmitter, needles flopping around at
>25 WPM. A Beckman 310 with accuracy of 0.75% +/- 1 digit was the reference.
>Both meters are rated nominal 3% of full scale.
>
>Meter number 1: 0 to 50 mA:
>Reading Actual % error
>50 48.5 3.0%
>40 39.1 2.3%
>30 29.1 3.0%
>20 19.7 1.5%
>10 9.5 5.0%
>5 4.0 20%
>
>Meter number 2: 0 to 200 mA:
>200 198 1.0%
>150 149 0.7%
>100 102 2.0%
>50 51.5 3.0%
>25 26.1 4.2%
>
>So much for the intuition that a panel meter that is specified only at full
>scale cannot be trusted in regions above, say 20% of full scale.
>
>Bill W0IYH
>

4182. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: AAAjdc3538@osfmail.isc.rit.eduAAA
Message-ID: <3717d6ed.0@isc-newsserver.isc.rit.edu>
Source record: 71117

Best way to figure it out is to head down to the local computer/office
supply stores and get a "test page" from every laser printer in your
price range. Take them all home, cut out a 1" square piece from each
and iron them on to clean PC board material.

Whichever sticks best wins. There's a wide range between the best and
worst.

73..Jim N2VNO

In article <37174901.623B@snet.net>, Vincent Coppola <vinyc@snet.net> wrote:
>I read on one of the newsgroups how certain laser printers are
>preferable to others for making PC boards. I believe older was a key
>word. As far as printers go I am perfectly content with my inkjet
>printer, so the acquistion of a laser printer would be for the sole
>purpose of making PC boards, rather than general printing.
>Any comments appreciated,
>Vince,
>N1VC

--

When replying, remove the leading and trailing AAA
--

When replying, remove the leading and trailing AAA

4183. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-16 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3717E430.87778339@teleport.com>
Source record: 71118
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

PoppaPump wrote:
>
> You are also correct I, believe Roy is wrong

Which of my statements was wrong?

I hope no one thinks I'm claiming that no individual Bird wattmeter can measure more accurately than its specification. (In fact, I'm quite sure that all of them do. And in many cases, an individual meter with an individual slug might commonly be a great deal better.) All I've said is that the Bird accuracy specification of 5% of full scale means that they guarantee that the reading will be within 5% of full scale. With a 250 watt slug, this means +/- 12.5 watts. They don't have different specifications for different parts of the scale, so it applies to a reading anywhere on the scale. If they stated the spec as "5% of full scale at full scale" with no more information, then the only reading they'd be guaranteeing is full scale, with no guarantee of accuracy anywhere else on the meter. If they specified "5% of reading", the guarantee would be, for a 250 watt slug, 12.5 watts at full scale, 6.25 watts at the 125 watt level, and so forth. But neither of these is what the specification says.

If this is what you disagree with, there's nothing more I can really add to the discussion. Either you take specifications literally, as I do, or interpret them in some other way as Bill does. If I made some other statement that you believe was wrong, I'll be glad to listen to your reasons for thinking so.

Roy Lewallen, W7EL

4184. Re: long-play recorders

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <3718138E.BD0FF659@home.com>
Source record: 71119

From Jack
Interesting - Reading for the Blind adn Dyslexic provides recorders to the sight impaired. The portable ones are the size of a handheld cassette player. They are used to play textbooks etc so the tape speed is very, very slow.

I would venture that the best way to control the speed might be with a pulse-width-modulator chip like the LM3525. I think that this would render more acurate speed control with less battery consumption. The duty cycle is adjusted via a pot, the frequency of the duty cycle is such that their is no apparent interruption of motion.

Jim wrote:

> i have seen ads for cassett recorders with a conversion done to enable
> them to get 5 times the record time. does anyone know how its done? can
> it be done with common parts? please give all the info you guys have.
> thanks

4185. 9 Mhz IF strip- best choice of amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: John Strupat <john.strupat@sympatico.ca>
Message-ID: <37180B44.41C1C592@sympatico.ca>
Source record: 71120

I'm looking at using a modern National Semi. variable gain amp instead
of discrete transistors or the Motorola MC1350.

Anyone have any particular advice on key parameters?

John VE3PCN

4186. Re: Program-oscilloscope for Sound Blaster wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37220116.103709346@news.atl.bellsouth.net>
Source record: 71121

On Fri, 02 Apr 1999 11:08:02 -0500, "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
wrote:
>One of the best FREE oscilloscopes I've found can be downloaded from:
>
> http://polly.phys.msu.su/~zeld/oscill.html
>
>Once you figure out how to kick it into frequency domain, it becomes
>very useful for analyzing audio waveforms such as heterodynes from
>international broadcasters for frequency checks on a rig. It will also
>show sub audible tones on an FM repeater signal.
>
>73, Mike

This is an awesome program.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4187. 8890 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: Zack Miller <kb3cji@home.com>
Message-ID: <37182B05.DA854F6D@home.com>
Source record: 71122

I have a RCA 8890 tube and would like to build a 2m amp. Could anyone tell me anything about it or were i could find schematics.

Zack
kb3cji

4188. Laughing Policemen! you can count on us 5021

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: gnfrykman@aol.com
Message-ID: <wlXR2.70750$Eb.14636@nnrp2.clara.net>
Source record: 71123
Cross-posted to: rec.radio.amateur.homebrew,fr.rec.radio.amateur,aus.radio.amateur.wicen,rec.radio.amateur.policy,rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Laughing Policeman Wireless Society, visit our web site for the best alternative radio amateur club.

http://www.laughingpoliceman.com

Submit articles, new links, and press cuttings to Brian G8ASO g8aso@hotmail.com

Seventy Trees G0GNF

flenvunlggnsvonvjnhblknuzkqljsteggygelwkefjqq

4189. Re: 9 Mhz IF strip- best choice of amps?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990417054136.02341.00001581@ng-cr1.aol.com>
Source record: 71124

>
>I'm looking at using a modern National Semi. variable gain amp instead
>of discrete transistors or the Motorola MC1350.
>
>Anyone have any particular advice on key parameters?
>
>John VE3PCN
>
>Unless you just HAVE to use National, Analog Devices makes some GREAT chips
for the application.

W4ZCB

4190. Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7f9lnq$3sk$1@mendelevium.btinternet.com>
Source record: 71125
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have an old redundant colour computer monitor, which was originally used with a 286 PC. I also have a television tuner module, which was liberated from a scrap VCR, and provides composite video and audio outputs. I am hoping to combine the two, along with a simple audio amplifier, to make a cheap television. The monitor has a 9 pin d-plug on one end, but I am not sure what type of signal it needs. I therefore need to process the composite video signal in such a way that the resulting output signal will drive the monitor. Is this possible? I would appreciate it if anyone could suggest how to do this, or if anyone can tell me what sort of input signal the monitor requires.

Thanks, John Cunningham.

4191. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: barryo@fastlink.com.au
Message-ID: <7fa214$2k$1@nnrp1.dejanews.com>
Source record: 71126
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave

Irv Finkleman <finkirv@cadvision.com> wrote:

:
:--------------4C14893D274E780E4335D96E
:Content-Type: text/plain; charset=us-ascii
:Content-Transfer-Encoding: 7bit
:
:Well Said!
: Irv VE6BP

You win the award for the most wasted space in a news group.
Quoteing a large amount of text TWICE and adding unnecesary
extra code was a master stroke. To top it off by adding only
one line was unbeatable.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4192. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: C Bauman <cbauman@impulse.net>
Message-ID: <37189483$0$202@sienna.impulse.net>
Source record: 71127
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

David Cunningham wrote in message
<7f9lnq$3sk$1@mendelevium.btinternet.com>...
>I have an old redundant colour computer monitor, which was originally used
>with a 286 PC. I also have a television tuner module, which was liberated
>from a scrap VCR, and provides composite video and audio outputs. I am
>hoping to combine the two, along with a simple audio amplifier, to make a
>cheap television. The monitor has a 9 pin d-plug on one end, but I am not
>sure what type of signal it needs. I therefore need to process the
composite
>video signal in such a way that the resulting output signal will drive the
>monitor. Is this possible? I would appreciate it if anyone could suggest
how
>to do this, or if anyone can tell me what sort of input signal the monitor
>requires.

Don't bother. Sell the monitor for what you can get and buy a cheap TV.
You'll have to duplicate _all_ of the functions of the TV, except the high
voltage section, and if the monitor doesn't support interlacing, the result
won't be all that great anyway. (that's NTSC system, PAL or another system
may have better viewing results, but the effort to do the conversion is the
same.) What you essentially need is a TV chassis minus the HV section so
that you can then connect the color gun drivers to the appropriate pins on
the monitor connector. (if the VCR was scrapped because of the tape
mechanism and it had A/V outputs, you probably threw away 80% of the
circuitry you needed, lacking only the color demodulator and gun drivers) If
you still want to do this, I or someone else can get you the pinouts to the
connector.

-CB

4193. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7fabr7$r2v$1@plutonium.btinternet.com>
Source record: 71128
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

C Bauman wrote in message <37189483$0$202@sienna.impulse.net>...
>
>David Cunningham wrote in message
><7f9lnq$3sk$1@mendelevium.btinternet.com>...
>>I have an old redundant colour computer monitor, which was originally used
>>with a 286 PC. I also have a television tuner module, which was liberated
>>from a scrap VCR, and provides composite video and audio outputs. I am
>>hoping to combine the two, along with a simple audio amplifier, to make a
>>cheap television. The monitor has a 9 pin d-plug on one end, but I am not
>>sure what type of signal it needs. I therefore need to process the
>composite
>>video signal in such a way that the resulting output signal will drive the
>>monitor. Is this possible? I would appreciate it if anyone could suggest
>how
>>to do this, or if anyone can tell me what sort of input signal the monitor
>>requires.
>
>
>Don't bother. Sell the monitor for what you can get and buy a cheap TV.
>You'll have to duplicate _all_ of the functions of the TV, except the high
>voltage section, and if the monitor doesn't support interlacing, the result
>won't be all that great anyway. (that's NTSC system, PAL or another system
>may have better viewing results, but the effort to do the conversion is the
>same.) What you essentially need is a TV chassis minus the HV section so
>that you can then connect the color gun drivers to the appropriate pins on
>the monitor connector. (if the VCR was scrapped because of the tape
>mechanism and it had A/V outputs, you probably threw away 80% of the
>circuitry you needed, lacking only the color demodulator and gun drivers)
If
>you still want to do this, I or someone else can get you the pinouts to the
>connector.
>
>-CB
>
>Thanks for your reply. I dont really need an extra television, I want to
convert the monitor just for fun. I think that I have all that I need with
the TV tuner, I tried connecting the comp. video output to the scart socket
of a television, and all was well. I was particularly careful when
dismantling the VCR to save all of the circuitry I needed for this purpose.
What I was thinking of was to make some circuit which would split the
composite video signal into separate R,G,B and horizontal/vertical sync.
pulses. Im not too bothered if the picture isn't perfect. If anyone has the
pinout of the monitor plug, i.e. a 9 pin D type, I would be grateful if they

could send me the info. Perhaps I could obtain an IC which would decode the comp. video signal? I would appreciate any suggestions.
73 de John.
>
>

4194. FS: HP SCSI II CABLES $12 EA.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-1704990903050001@murphy1.cts.com>
Source record: 71179
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew,comp.forsale.computers,misc.computers.forsale,us.forsale.computers

HP SCSI II CABLES PN. C2959A 18"L NEW, PACKAGED. EXELLENT COND. $12 EA.

2 FOR $20 10 FOR $60 100 FOR $450

PICT AND INFO AT:

http://209.239.34.153/murphyjunk/1_SPECIALS_UPDATED_FREQUENTLY

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

4195. Serial Output Camera

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: ROBERT <hikerxx@yahoo.com>
Message-ID: <7fac45$13rc$1@newssvr04-int.news.prodigy.com>
Source record: 71180

I'm looking for a simple camera that continuously (but slowly) outputs
images to a serial port, either RS232 or TTL. Any info would be appreciated!
73's

Bob

4196. Re: Need Sanyo LA7673 Chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: tvrepairs@yahoo.com
Message-ID: <7fajqteeg1@nnrp1.dejanews.com>
Source record: 71181

Electronix also carries it...go to: http://www.electronix.com and click on inventory search.

--daren

In article <3717626a.15209921@news.revealed.net>,
TLNixon@revealed.net wrote:
> Thanks to all who responded!!
> MCM Electronics had the chip, I just missed it in their catalog.
> One has been ordered.
>
> Terry
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4197. TEK 1502 and antenna measurment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <PzU$5EAr5OG3EwWf@g3uda.demon.co.uk>
Source record: 71182

Hello All

First of all this morning I was mulling over the 1999 ARRL Handbook
I alighted on the section relating to transmission lines
etc. Chapter 19.6 and thought I would have a go at making some sense of
the waveform displayed on a Tektronix 1502 cable tester as applied to
antennas.
I had thought that by measuring the height of the reflected
pulse waveform you should be able to get some meaningful ideas about SWR
or loss measurements. Well it is calibrated directly in "p" (rho) or
reflection coefficient) - In fact the "rho" value can only range from 0
through to 1. Simply put, "0" means no reflection or perfect match
whereas p = 1 is max reflection and greatest SWR. That bares out from
the fact that on the 500mp/Div (milli rho) range the rise time value for
open-circuit is 2 divisions [2 x 500mp = 1] which of course is maximum
reflection. Even the initial "step, launch pulse" is 2 division always.
So continuing:

```
1 + |p|
SWR = ------- ...... eqn (1)
1 - |p|
```

The "|" means the magnitude of (its value) and you can soon see that
substituting in eqn (1) for say p = 0 means SWR = 1:1 or p = 1 then SWR
= infinitely high (2/0)!

Now when checking a 2 ele 28Mhz ZL-Special antenna, I can see the
feedpoint (now I have rounded it up to exactly 30m away) and it is a
rising slope (predomimantly Xc) with "p" amplitude of rho = 0.3, so
substituting in (1), SWR at load and discounting resistive cable loss
is:

SWR(load) = 1.3/0.7, = 1.86:1

The Matched Line Loss (ML) for RG8 @ 30Mhz = 0.9dB/100ft x 30m x 3

ML = 0.81dB

Next I find the matched-line ratio, "a" by:

a = 10^(ML/10)

So in this case, a = 10^(0.81/10)

a = 1.205

Now the SWR at the input of the line (SWRin) is always less than
the SWR at the load end (SWRload) because of inherent line losses, thus:

SWRin < SWRload

and a + |P|
SWRin = -------
a - |p|

SWRin = (1.205 + 0.3)/(1.205-0.3)

SWRin = 1.66:1

Its also now possible to calculate the Total Mismatched-Line Loss in
dB's by using:

Tot. Mismatched-Line Loss = 10log x [a^2 - |p|^2 / a(1 - |p|)^2]

So Total loss = 10log[(1.205)^2 - (0.3)^2] / [1.205(1 - 0.3)^2]

Total loss = 10log(1.362/0.59)

Total loss = 10log2.307

Total loss = 3.63dB's

==========

Now all this pre supposes quite a bit!.

* Can the profile of the far-end reflected wave be used for
"rho" for the load?? i.e. the height as measured = "rho"?? The profile
showed a rising profile but then a few other squiggles and a slow decay
away. I can Email anyone a .JPG file of the screen profile if required.

* Can you do this type of test at 28Mhz with a TEK 1502?? or is
it only good at much lower frequencies??

* Am I deluding myself - is antenna tweaking in season? ;-)

Any takers .. please?

73es Ken

... Ken

4198. Re: Designing bandpassfilters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3718f1ec.955518677@news.online.no>
Source record: 71183

On Fri, 2 Apr 1999 10:06:00 +0200, "Peter Bolch"
<nc-bolchpe@netcologne.de> wrote:

>
>J M Noeding schrieb in Nachricht <3703dd2e.28690575@news.online.no>...
>>downloaded an ufb program for lowpassfilters from ARRL, is is
>>available a similiar program for n-orderpassive bandpassfilters?
>
>
>
>Hi,
>
>
>have a look at Faisyn (http://members.aol.com/faisyn/faisyn.htm). This
>shareware program allows the design and simulation of passive lowpass,
>highpass and bandpass filters (top C coupled BP, standard BP) with lumped
>elements and filters with distributed elements (parallel coupled line BP,
>SIR distributed BP). Output format is SPICE, MMICAD and TOUCHSTONE.
>
>
>Peter
>
>
Thanks Peter
I'll look for it, tried to download the program from WWW.AADE.com
site, but something did not work here, it seems only possible to
receive the program via internet, but he did not care to explain
anything

Jan-Martin LA8AK

4199. Re: Serial Output Camera

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <3719007C.E6C2A78B@gate.net>
Source record: 71184

I have a UMAX digital camera. It dumps it's images through the serial port, and a supplied cable. It is 800 x 1000 resolution, so does quite well. The software has a function to allow the camera to run in "continuous" mode. A little slower than the webphone type cameras people are using now, but faster than slowscan. :-)

73, Mike

ROBERT wrote:
>
> I'm looking for a simple camera that continuously (but slowly) outputs
> images to a serial port, either RS232 or TTL. Any info would be appreciated!
> 73's
>
> Bob

--
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| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________
.oooO ( )
( )) /
\ ((_/
_)

4200. Re: TEK 1502 and antenna measurment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37190D22.9B2F5C5@teleport.com>
Source record: 71185

A TDR system can't be used to determine SWR, unless you have special software which can do an FFT and other massaging of the waveform (which isn't common), or in a few special cases noted below.

TDR is a time-domain system which is inherently broadband in nature. Reflection coefficient rho as used in a TDR system is the fraction of the applied step which is reflected. There's no direct way to translate this into the single-frequency reflection coefficient (variously labeled upper-case gamma or lower-case rho) you need in order to calculate the SWR at a given frequency.

The only times you can make a direct association between the TDR response and the frequency-domain characteristics (without FFT software) is if the discontinuities causing the reflection are known to be purely resistive at least over the bandwidth of the TDR. (An example of this would be a series of low-loss transmission lines of different impedances.) In that case only, the reflection coefficient shown for a discontinuity will be the same in the time and frequency domains. But this will be true only at the specific location along the line where the reflection takes place. With a TDR system you may see several discontinuities at various locations, while a frequency-domain system will give a single value for reflection coefficient. Translation from the time-domain measurement to the frequency-domain value is possible without FFT software, but can be tedious, and again only if all discontinuities are known to be purely resistive.

Roy Lewallen, W7EL

Ken Linney wrote:
>
> Hello All
>
> First of all this morning I was mulling over the 1999 ARRL Handbook
> I alighted on the section relating to transmission lines
> etc. Chapter 19.6 and thought I would have a go at making some sense of
> the waveform displayed on a Tektronix 1502 cable tester as applied to
> antennas. . .

4201. Radio Estate Auction for Frank Krantz, Radioman, April 24-25

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: "John Dilks, K2TQN" <oldradio@worldnet.att.net>
Message-ID: <37192D35.5799@worldnet.att.net>
Source record: 71186
Cross-posted to: rec.antiques.radio+phono,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

To all,

Radio Estate Auction for Frank Krantz, Radioman, April 24-25.

I have created an on-line catalog with photos, so you can see what
will be auctioned next Saturday and Sunday. The list is extensive. It
is
split into a Saturday list and a Sunday list. I have included a map and
directions to the auction, which is at Frank Krantz's home in Somerdale,
NJ.

http://www.eht.com/krantz/

Frank Krantz was a Radioman all his life. In the last 25 years he
supplied everyone with tubes, radio parts, radios and you-name-it! He
advertised regularly in Antique Radio Classified and was well-known and
liked among collectors.

He leaves four Daughters who want to sell off everything from his
estate.

--
73' John Dilks, K2TQN

Please visit my OldRadio Museum
http://www.eht.com/oldradio/museum

Webmaster for the Antique Wireless Association
http://www.ggw.org/awa Click on "Page 2"
-=and=-
for the New Jersey Antique Radio Club
http://www.eht.com/oldradio
-

4202. wanted HTX 202

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: whtmtnman@pop.mpls.uswest.net
Message-ID: <371959A0.6607AA79@pop.mpls.uswest.net>
Source record: 71187

Subject line says it all>>>>>

4203. Re: sync detect

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: Chuck Meyer <chuckm@zocalo.com>
Message-ID: <7fbq5j$93j@news.zocalo.net>
Source record: 71188

PGH wrote in message <37153D6A.B74A3590@mail.capital.net>...
>I would like to construct a sync detector to use to replace a diode in
>a simple SW circuit. Is there any thing out there that uses a bal
>mixer/PLL or whatever. The simpler the better.
>
> Thanks PGH
>
Communications Quarterly had an article on a sync detector 1-11/2 yrs. ago.
Good Signals!
-- Chuck

4204. Homemade 5/8 wave antenna problem...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: "Mr. 137" <ac137@iwvisp.com>
Message-ID: <924414441.686.18@news.remarQ.com>
Source record: 71189

Launched a 22.5 foot aluminum homemade antenna this evening with a 36" homemade gamma match clamped to the side of my beams upper masting (about a foot or so above boom). Couldn't even get my SWR's below 3.0:1. What the hell is my problem?

Would it be my gamma match being too small?

Is there a possible grounding problem?

Is my antenna too close to my beam (the possible 18' distance above the beam mounting not done)?

What about ground plane?

What should I use as a ground plane?

Am I seeing a pretty bad Impedance point problem?

>>>Any or all comments will be appreciated.<<<

73's...
Ipo Camacho

4205. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7fc45kcoc2@news.netcologne.de>
Source record: 71190

> I read on one of the newsgroups how certain laser printers are
> preferable to others for making PC boards. I believe older was a key
> word. As far as printers go I am perfectly content with my inkjet
> printer, so the acquistion of a laser printer would be for the sole
> purpose of making PC boards, rather than general printing.
> Any comments appreciated,

Vince,

I use a laser printer and tracing paper and always got good results. 10 mil tracks and large copper areas are no problem at all.

The contrast is a lower compared with photographically reproduced exposure masks, however, and so exposure time may be a bit critical (3 min +/- 10 s with my equipment).

And at least my laser printer (LaserJet 5L) shows some "distortion" but this normally causes no problems. With 64 pin connectors for example the spacing of the pins isn't as it schould be but is still good enough for homebrewers.

Peter

4206. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-17 00:00:00 UTC
From: Mike W <mike@corn2.freeserve.co.uk>
Message-ID: <d$rwnCAS3IG3Ew1Y@corn2.freeserve.co.uk>
Source record: 71191
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <37189483$0$202@sienna.impulse.net>, C Bauman
<cbauman@impulse.net> writes
>
>David Cunningham wrote in message
><7f9lnq$3sk$1@mendelevium.btinternet.com>...
>>I have an old redundant colour computer monitor, which was originally used
>>with a 286 PC. I also have a television tuner module, which was liberated
>>from a scrap VCR, and provides composite video and audio outputs. I am
>>hoping to combine the two, along with a simple audio amplifier, to make a
>>cheap television. The monitor has a 9 pin d-plug on one end, but I am not
>>sure what type of signal it needs. I therefore need to process the
>composite
>>video signal in such a way that the resulting output signal will drive the
>>monitor. Is this possible? I would appreciate it if anyone could suggest
>how
>>to do this, or if anyone can tell me what sort of input signal the monitor
>>requires.
>
>
>Don't bother. Sell the monitor for what you can get and buy a cheap TV.
>You'll have to duplicate _all_ of the functions of the TV, except the high
>voltage section, and if the monitor doesn't support interlacing, the result
>won't be all that great anyway. (that's NTSC system, PAL or another system
>may have better viewing results, but the effort to do the conversion is the
>same.) What you essentially need is a TV chassis minus the HV section so
>that you can then connect the color gun drivers to the appropriate pins on
>the monitor connector. (if the VCR was scrapped because of the tape
>mechanism and it had A/V outputs, you probably threw away 80% of the
>circuitry you needed, lacking only the color demodulator and gun drivers) If
>you still want to do this, I or someone else can get you the pinouts to the
>connector.
>
>-CB
>
>
>
>
Read what he said CB.. he has a tuner ... TUNER.. giving composite video
out.. no need for IF etc as its already there...same for audio.. its a
TV TUNER as in RADIO TUNER as in RECIEVER with no output stages... DUH..

but you are right about not bothering with the vga monitor.. get a
BBC'B' monitor for a few quid at the carboot sale, its composite and af

ready.. cheers... Mike.. using a TV TUNER with a Phillips CM8833 monitor

Mike W mike@corn2.freeserve.co.uk

Never underestimate the power of Human stupidity {;o)>

4207. Mods Yaesu FT-100 TX is here

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: John in Roseville CA <nospam@nospam.net>
Message-ID: <7BaS2.1307$N12.10767884@nnrp2.ni.net>
Source record: 71192

http://www.ns.net/~rtwod2/ft100.htm

73 John

4208. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <0bdS2.1235$Bm3.87354@news20.ispnews.com>
Source record: 71193
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

William E. Sabin wrote in message <3717322A.25148D5A@mwci.net>...
>I took some data on two 2 inch panel meters that I bought in 1946, 53
years
>ago. For 10 years they were in a CW transmitter, needles flopping around
at
>25 WPM. A Beckman 310 with accuracy of 0.75% +/- 1 digit was the
reference.
>Both meters are rated nominal 3% of full scale.
>
>Meter number 1: 0 to 50 mA:
>Reading Actual % error
>50 48.5 3.0%
>40 39.1 2.3%
>30 29.1 3.0%
>20 19.7 1.5%
>10 9.5 5.0%
>5 4.0 20%
>
>Meter number 2: 0 to 200 mA:
>200 198 1.0%
>150 149 0.7%
>100 102 2.0%
>50 51.5 3.0%
>25 26.1 4.2%
>
>So much for the intuition that a panel meter that is specified only at
full
>scale cannot be trusted in regions above, say 20% of full scale.
>
>Bill W0IYH

Thank you for proving my exact point, Bill. The top meter is accurate to 3% of full scale or +/- 1.5 milliamp anywhere over its tested range. It meets this specification perfectly. Yet it is off by 20% [actually by 25% if you more correctly used (Actual - Reading)/Actual as the equation.] So the real accuracy can be quite poor and get worse the lower the reading - and yet remain true to the percent of full scale accuracy statement.

In the case of the second meter, the full scale accuracy is 1%. With only a percent of full scale accuracy statement, this meter must read to within 2 milliamps over its range. Yet at the low end of its scale, the 25 reading, it is off only 1.1 milliamps - much better than its accuracy statement. But again, the true accuracy based on a percent of reading is

over 4 times worse.

I think Bill has misunderstood my point - which is that percent of full scale as the SOLE accuracy statement tells you little about how well the instrument scales at lower readings. He has said that his *NEW* Bird was tested over its range and came out with an excellent report. This is great, and I am pleased for him. But someone else could have an identical model that met the same accuracy statement yet give entirely different results - especially on low readings. I would expect the models would be somewhat reproducible but without additional information, you cannot say for sure. Bill's data illustrates this exactly.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

4209. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com>
Message-ID: <3719666D.137A8481@primenet.com>
Source record: 71194

Jim Weir wrote:
>
> Bob Doyle <doyle@primenet.com>
> shared these priceless pearls of wisdom:
>
> ->The most common modulation type is FMCW. In this type of system the
> ->transmitter is chirped i.e., the frequency is swept lineraly with
> ->time. Therefore the frequency difference between what is transmitted
> ->to the ground and what is being received from the ground reflection
> ->is proportional to altitude. Pretty similar to what was done in
> ->1946 is sounds...
>
> That's interesting. I've never considered the problem, having worked
> mostly with pulse type systems. How do you keep the relatively high-level
> transmitted signal from interfering with the microvolt level return pulse?
> Is the transmitter pulsed as well as swept and the receiver muted during
> the transmit pulse? Or is it a true CW system with physical isolation of
> the transmit and receive antennas?

I've only designed pulsed systems. Having said that, I'm certain that
the
FMCW systems are true CW systems. However, I think they all _must_ have
physical isolation of transmit and receive antennas to work. Think
about
a zero foot reflection....

Bob Doyle
WA3TGF

4210. homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: f6crp <f6crp@wanadoo.fr>
Message-ID: <7fbpqi$s1e$1@wanadoo.fr>
Source record: 71195

Hello all,
if you want to lost 5 minutes and laugh
about my english (hi) visit my site on
http://perso.wanadoo.fr/f6crp/
(devoted to V/UHF homebrew -CW/SSB weak signal)
73 Denis F6CRP

4211. *** Need M57716 UHF Module ****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <371a8e76.1353708@news.interbusiness.it>
Source record: 71196

Or indication for cheapest source in EU .

Thanks de Vanni I8JJB

i8jjb@qsl.net

http://www.qsl.net/i8jjb/index.html

4212. Need Data for Holtek HT9212A DTMF IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: pkent <pkent@online.no>
Message-ID: <3719A09B.DADB3545@online.no>
Source record: 71197

I recently purchased the Holtek HT9212A DTMF IC. I later found that Holtek no longer has this data on their webpage, and I don't have the databook.

Can someone please send me atleast the pinout, and possibly an applications schematic, or even the PDF datasheet.

Thank You!

Parker Kent
pkent@online.no

4213. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Murali <su38320@cyberway.com.sg>
Message-ID: <01be897c$ec708660$217d74cb@default>
Source record: 71198
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dear John,
Your Composite Video Signal (CVBS)is interlaced Signal whereas Mointer accepts Non interlace Signal(Progressive Scanning). Therefore the CVBS has to be scan converted . The 9 pin D-plug has five Signals
R,G,B , Hsync & Vsync.
You can use SCan Conveter IC to establish your setup.

I'll provide more informations if you are intrested.
Regards
Murali

David Cunningham <D.L.C@btinternet.com> wrote in article
<7f9lnq$3sk$1@mendelevium.btinternet.com>...
> I have an old redundant colour computer monitor, which was originally used
> with a 286 PC. I also have a television tuner module, which was liberated
> from a scrap VCR, and provides composite video and audio outputs. I am
> hoping to combine the two, along with a simple audio amplifier, to make a
> cheap television. The monitor has a 9 pin d-plug on one end, but I am not
> sure what type of signal it needs. I therefore need to process the composite
> video signal in such a way that the resulting output signal will drive the
> monitor. Is this possible? I would appreciate it if anyone could suggest how
> to do this, or if anyone can tell me what sort of input signal the monitor
> requires.
>
> Thanks, John Cunningham.
>
>
>

4214. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3719A182.52AE00AE@mwci.net>
Source record: 71199
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Barry L. Ornitz wrote:

> William E. Sabin wrote in message <3717322A.25148D5A@mwci.net>...
> >I took some data on two 2 inch panel meters that I bought in 1946, 53
> years
> >ago. For 10 years they were in a CW transmitter, needles flopping around
> at
> >25 WPM. A Beckman 310 with accuracy of 0.75% +/- 1 digit was the
> reference.
> >Both meters are rated nominal 3% of full scale.
> >
> >Meter number 1: 0 to 50 mA:
> >Reading Actual % error
> >50 48.5 3.0%
> >40 39.1 2.3%
> >30 29.1 3.0%
> >20 19.7 1.5%
> >10 9.5 5.0%
> >5 4.0 20%
> >
> >Meter number 2: 0 to 200 mA:
> >200 198 1.0%
> >150 149 0.7%
> >100 102 2.0%
> >50 51.5 3.0%
> >25 26.1 4.2%
> >
> >So much for the intuition that a panel meter that is specified only at
> full
> >scale cannot be trusted in regions above, say 20% of full scale.
> >
> >Bill W0IYH
>
> Thank you for proving my exact point, Bill. The top meter is accurate to
> 3% of full scale or +/- 1.5 milliamp anywhere over its tested range. It
> meets this specification perfectly. Yet it is off by 20% [actually by 25%
> if you more correctly used (Actual - Reading)/Actual as the equation.] So
> the real accuracy can be quite poor and get worse the lower the reading -
> and yet remain true to the percent of full scale accuracy statement.
>
> In the case of the second meter, the full scale accuracy is 1%. With only
> a percent of full scale accuracy statement, this meter must read to within
> 2 milliamps over its range. Yet at the low end of its scale, the 25

> reading, it is off only 1.1 milliamps - much better than its accuracy
> statement. But again, the true accuracy based on a percent of reading is
> over 4 times worse.
>
> I think Bill has misunderstood my point - which is that percent of full
> scale as the SOLE accuracy statement tells you little about how well the
> instrument scales at lower readings. He has said that his *NEW* Bird was
> tested over its range and came out with an excellent report. This is
> great, and I am pleased for him. But someone else could have an identical
> model that met the same accuracy statement yet give entirely different
> results - especially on low readings. I would expect the models would be
> somewhat reproducible but without additional information, you cannot say
> for sure. Bill's data illustrates this exactly.
>
> 73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

Not so fast!

Look at the first meter. At 10 mA the error is 5% and according to the "rule" it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and it should be 8.0%. For the second meter at 25 mA the error is 4.2% and it should be 8.0% if it is a 1% meter.

The conventional rule is not functioning very well here because it is too simplistic. If it were, the percentages at lower readings would be much worse. The top reading by itself does not tell the whole story about the accuracy of a particular specimen. Because of small system nonlinearities the % accuracy fluctuates across the scale. It can be pessimistic at full scale, for example. The data for meter #1 suggests this.

D'Arsonval Taut Band Meter folks "try" to maintain the best *average % error* over as much of the scale as they can, despite the conventional interpretation of full scale accuracy. The data shows this, and I have seen it many times.

I repeat: these meters don't just become real poor %-wise at lower scale readings.

More about the Bird wattmeter later.

Bill W0IYH

4215. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be89cb$ee2ac7a0$8d3963c3@default>
Source record: 71200

The problem of how to seperate transmitted and received signals in an FM radio altimeter is not so severe as you may imagine.

In principle, the height information is contained in the phase/frequency difference between transmitted and reflected waves. So the 'demodulator' is essentially a phase discriminator (a balanced mixer) - one input being the reflected signal and the other input being the transmitted signal itself.

As with any other FM receiver amplitude limiters are very effective. And the discriminator itself doesn't care very much about amplitude of its inputs provided they are both above some threshold level.

Frequency sweeping need not be linear. As I described in an earlier posting, a sinewave modulation is used which is more simple for the receiver to process.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Bob Doyle <doyle@primenet.com> wrote in article
<3719666D.137A8481@primenet.com>...
> Jim Weir wrote:
> >
> > Bob Doyle <doyle@primenet.com>
> > shared these priceless pearls of wisdom:
> >
> > ->The most common modulation type is FMCW. In this
type of system the
> > ->transmitter is chirped i.e., the frequency is swept
lineraly with
> > ->time. Therefore the frequency difference between
what is transmitted
> > ->to the ground and what is being received from the
ground reflection
> > ->is proportional to altitude. Pretty similar to what
was done in
> > ->1946 is sounds...
> >
> > That's interesting. I've never considered the problem,

having worked
> > mostly with pulse type systems. How do you keep the
relatively high-level
> > transmitted signal from interfering with the microvolt
level return pulse?
> > Is the transmitter pulsed as well as swept and the
receiver muted during
> > the transmit pulse? Or is it a true CW system with
physical isolation of
> > the transmit and receive antennas?
>
> I've only designed pulsed systems. Having said that, I'm
certain that
> the
> FMCW systems are true CW systems. However, I think they
all _must_ have
> physical isolation of transmit and receive antennas to
work. Think
> about
> a zero foot reflection....
>
> Bob Doyle
> WA3TGF
>

4216. Re: TEK 1502 and antenna measurment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <zwQA5BA6EdG3EwBw@g3uda.demon.co.uk>
Source record: 71201

In article <37190D22.9B2F5C5@teleport.com>, Roy Lewallen
<w7el@teleport.com> writes
>A TDR system can't be used to determine SWR, unless you have special
>software which can do an FFT and other massaging of the waveform
>(which isn't common), or in a few special cases noted below.
>
>TDR is a time-domain system which is inherently broadband in nature.
>Reflection coefficient rho as used in a TDR system is the fraction of
>the applied step which is reflected. There's no direct way to
>translate this into the single-frequency reflection coefficient
>(variously labeled upper-case gamma or lower-case rho) you need in
>order to calculate the SWR at a given frequency.
>
>The only times you can make a direct association between the TDR
>response and the frequency-domain characteristics (without FFT
>software) is if the discontinuities causing the reflection are known
>to be purely resistive at least over the bandwidth of the TDR. (An
>example of this would be a series of low-loss transmission lines of
>different impedances.) In that case only, the reflection coefficient
>shown for a discontinuity will be the same in the time and frequency
>domains. But this will be true only at the specific location along the
>line where the reflection takes place. With a TDR system you may see
>several discontinuities at various locations, while a frequency-domain
>system will give a single value for reflection coefficient.
>Translation from the time-domain measurement to the frequency-domain
>value is possible without FFT software, but can be tedious, and again
>only if all discontinuities are known to be purely resistive.
>
>Roy Lewallen, W7EL
>
>Ken Linney wrote:
>>
>> Hello All
>>
>> First of all this morning I was mulling over the 1999 ARRL Handbook
>> I alighted on the section relating to transmission lines
>> etc. Chapter 19.6 and thought I would have a go at making some sense of
>> the waveform displayed on a Tektronix 1502 cable tester as applied to
>> antennas. . .

Hello Roy

Many thanks for the informative reply. I had a hunch that I was
fooling myself.
Certainly the 1502 is a nice instrument. From what you said

above I guess simple accessment of the characteristic impedance of an unknown coax for example could be deduced by terminating the end of the cable under investigation with a variable pure "R" and watch for the reflections to disappear when you aceive "match" conditions. Then read off the "R" value.

Thanks previously for your hints re probes from the TEK site.
Very useful.

Thanks Roy

... Ken

4217. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <3719C70C.1FD@csolve.net>
Source record: 71202

Reg Edwards wrote:

[...]

> Frequency sweeping need not be linear. As I described in
> an earlier posting, a sinewave modulation is used which is
> more simple for the receiver to process.

[...]

Wouldn't sinewave modulation produce a sine-modulated difference
frequency?

That is, the apparent height would be a frequency-modulated signal.

This would make it difficult to determine the actual height, since the
detector would have to find the highest beat frequency and convert it to
altitude.

Best Regards,

Michael R. Monett
mailto:add@csolve.net

4218. ARRL Synchronous detector with TW2000

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: PGH <hubelp@mail.capital.net>
Message-ID: <3719DA33.324587A1@mail.capital.net>
Source record: 71203

I am thinking of constructing the synchronous detector shown in the ARRL handbook and using it with a Hallicrafters TW2000. Has anyone done anything like this? If so how did it work? Any tips?

4219. Tapping IF from a Sharp BSFA75G08 sat.tuner module?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Joakim Gunnarsson <ziggy@astrakan.hig.se>
Message-ID: <3719F691.5E5FEB58@astrakan.hig.se>
Source record: 71204

Hi!

Does anybody know how to tap the IF from the above module. I would like
to use to downconvert a
1.5 GHz signal to a 480 MHz signal that my scanner can handle. The ic
that I *think* is the FM demodulator is a 1X0994 (thatï¿½s "one-x-zero").
Any info would be greatly aprecitated.

/jg

4220. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: William Janssen <billj@calweb.com>
Message-ID: <3719EF93.94728A3C@calweb.com>
Source record: 71205

I agree that a saw tooth shaped modulation would be best. Also
there should be a dead time for retrace as you don't want the end
of the sweep mixing with the start as this would give a higher than
correct reading.

Bill K7NOM

Mike Monett wrote:

> Reg Edwards wrote:
>
> [...]
>
> > Frequency sweeping need not be linear. As I described in
> > an earlier posting, a sinewave modulation is used which is
> > more simple for the receiver to process.
>
> [...]
>
> Wouldn't sinewave modulation produce a sine-modulated difference
> frequency?
>
> That is, the apparent height would be a frequency-modulated signal.
>
> This would make it difficult to determine the actual height, since the
> detector would have to find the highest beat frequency and convert it to
> altitude.
>
> Best Regards,
>
> Michael R. Monett
> mailto:add@csolve.net

4221. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be89f6$d583d720$04e6abc3@default>
Source record: 71206

If the transmitter is frequency modulated with a sawtooth waveform, the number of harmonics of the modulating frequency is very high and are very strong. The transmitted bandwidth is very, very wide and the receiver needs be un-necessarily wideband to handle it. And how does the phase discriminator cope with it ?

Sawtooth modulation allows easier understanding of the basic principle. But sinewave modulation makes for much more simple receiver AND transmitter design.
--
Reg

4222. Wanted SB-300 or SB-301

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: k0IMJ <docky@earthlink.net>
Message-ID: <371A0DDE.6E6C@earthlink.net>
Source record: 71207

I need several SB-300s or SB-301s in a hurry. They need not work but must be able to ship right away I need them now. I also need a DX-60b...(These are for use in a movie) 73 Gary K0IMJ reply only to K0imj@juno.com

4223. Re: altimeter RADAR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be89fc$b6d922c0$04e6abc3@default>
Source record: 71208

The modulating frequency must be low enough to handle the time (or phase) difference between transmitted and received signals. Modulating frequency has to be of the same order as the pulse repetition rate in an ordinary radar. The lower the modulating frequency the greater the range of heights. In the particular altimeter I worked on in 1944-45 one of the sinewave modulating frequencies was 400 hertz.

Yes, direct comparison between transmitted and received signals results in a sinewave-modulated difference frequency. But the phase discriminator works not at VHF but at 400 Hz. Very easy to handle. The received signal is demodulated to produce 400 Hz and compared with the actual 400 Hz modulating voltage which drives the loudspeaker-diaphram/tuning-capacitor.

Bear in mind the TX frequency varies both above and below its nominal centre value. It is the PHASE difference, not frequency difference which matters. This is because phase difference is proportional directly to the time delay.

The phase discriminator output is a DC voltage proportional to height. The height indicator itself is actually a moving coil milliameter.

No doubt, these days, for various reasons such as anti-jamming, all kinds of birdie chirps may be used. Other information about the ground can be obtained by using more complex mudulation. But the essential information can be conveyed by the phase-difference between two audio waveforms of the same frequency.

I've forgotten all the other details. And I seem to have gotten present and past tenses mixed up.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

4224. Jan Crystals web address

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7fd2enrth1@news8.svr.pol.co.uk>
Source record: 71209

Anyone have Jan Crystals URL please ?

4225. Need info, please read

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Zack Miller <kb3cji@home.com>
Message-ID: <371A2279.4E36C480@home.com>
Source record: 71210

I need specs on a RCA 8890 tubes, and a source for socket...
If anyone can help, it would be apretiated.

Thanks
Zack
kb3cji

4226. Re: Jan Crystals web address

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <371A21B1.BFF9F355@gate.net>
Source record: 71211

I don't believe Jan has a web presence. Here is all of their other
information, if this will help.

JAN Crystals
2341 Crystal Drive
Ft. Myers, FL 33906-6017.
Phone (800) JAN-XTAL (526-9825) FAX: (941) 936-3750....

73, Mike in Fort Myers, FL

John Mortlock wrote:
>
> Anyone have Jan Crystals URL please ?

--
__\/__
| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________
.oooO ( )
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\ ((_/
_)

4227. Junking a Compaq Laptop?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: "John Kirk, VE6XT" <jakirk@calcna.ab.ca>
Message-ID: <7fdd66$h0u@ds2.acs.ucalgary.ca>
Source record: 71212

Anybody out there junking a Compaq laptop?
I require the keyboard assembly from a "Centura 486 4/25" to help out a
seriously "budget constrained" foreign student.
Thanks!
John

4228. Re: Info on MFJ HF loop antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: "Bob Walker, N4CU" <n4cu@amsat.org>
Message-ID: <RsrS2.13194$Yq5.134564990@news2.pompano.net>
Source record: 71213
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I have a 1786 and an AEA Isoloop. They are useable antennas. Great field day antennas. Easy to put up. Narrow bandwidth is no fun. Full wave loop works better. I had a temporary full wave on 20 and it beat the AEA by 10 dB. AEA was not as good as MFJ but easier to tune with the microprocessor tuning box. If you need a limited space antenna, the small loop is your best bet. Try to put up a bigger antenna.
zeitler@ibm.net wrote in message <3710de03@news1.us.ibm.net>...
>Does anyone have any experience using the MFJ HI-Q loop antennas models 1786
>or 1782? Feedback welcomed.
>
>Lane
>Ku7i
>San Diego
>
>

4229. Q:FM TRAP=notch filter??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: John Williams <ac6tsXX@n2.net>
Message-ID: <371a5691.0@wagner.n2.net>
Source record: 71214

Tnx for reading.

I am looking for a cheap quick FM broadcast notch filter for a broadbanded FM test receiver. Is a FM TRAP, (the type used for TV's), a 88mhz to 108mhz notch filter? 20-30db attenuation is ok. I know they keep strong FM stations out of WBAM TV. Can I use one to reject these freqs from my wideband FM receiver/scanner? I don't have any test equiptment to build one.

Thanks for any answers
John
--

---/---
---/---
----/----
-----/-----

AC6TS John Williams
LAT. 33.06.15 LON. -117.03.36 7.030Mhz CW
DM13KC 14.030Mhz CW

4230. FA: National National "PW-1" Air Variable Condensor in box.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: "Bruce J. Howes KG2IC" <bhowes@buffnet.net>
Message-ID: <371a5d1c.0@news3.buffnet.net>
Source record: 71215
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

National "PW-1" Air Variable Condensor in box. Unit appears to be new, and is in great shape. Looks like it may be a replacement for the HRO series of receiver. Complete with right angle gear drive. Super for that homebrew project, or HRO that you are servicing. Buyer pays shipping. Terms: Bank or certified check only. Thanks!

Click here -->
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=92871337

--
73,

Bruce KG2IC

****
Bruce J. Howes KG2IC email: kg2ic@arrl.net
East Amherst, NY 14051 web: www.buffnet.net/~bhowes
FISTS #4164 ARMY MARS AAR2AJ
****

4231. Re: Q:FM TRAP=notch filter??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Tony <sa95@creative-net.net>
Message-ID: <371A5A5B.B4BFC229@creative-net.net>
Source record: 71216

a typical fm trap as used in the CATV industry is about 85 to 120 mhz,with a "dish shaped" response, that is more rejection toward the middle of the range. You will see a small insertion loss in the desired freq. also, maybe 1-2 db.

Tony Whobrey KC4JTV

4232. Re: TEK 1502 and antenna measurment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <371A6A54.2CF0CEA5@teleport.com>
Source record: 71217

Ken Linney wrote:

>. . .
> Certainly the 1502 is a nice instrument. From what you said
> above I guess simple accessment of the characteristic impedance of an
> unknown coax for example could be deduced by terminating the end of the
> cable under investigation with a variable pure "R" and watch for the
> reflections to disappear when you aceive "match" conditions. Then read
> off the "R" value.
>. . .

Yes, that's correct, that method works well. It's best to use a small trimpot to minimize the stray inductance.

You'll get interesting results if you try this method with twinlead, though. I sometimes taught a class in TDR use, and began the class with a little demonstration. (I've described it previously on this newsgroup, so skip it if you've heard it before.) I used two conductors from a ribbon cable, still fused together to make twinlead. One conductor was soldered into the center of an SMA connector and the other to the shell. I connected the SMA to the TDR unit and showed the response. Besides the large step from the open end of the cable, there was a smaller reflected step about 3/4 of the way to the end. Well, I explained, ribbon cable isn't controlled for impedance, so there must be a change in the impedance part way along it. So I pinched the cable with my fingers (causing a reflection from their position), and moved them along until I reached the place where the reflection was occurring, about 3/4 of the way out. Then I got out some wire cutters and cut the wires an inch or so shorter than the place where the reflection came from.

The result: a reflection about 3/4 of the way to the end of the shorter cable. At this point I had the class's undivided attention!

The explanation, I gave as the class progressed, is that I was exciting two propagation modes, differential and common mode (or odd and even modes). The earlier reflection was from the common mode. In this mode, one conductor is both wires in parallel, and the other is the chassis of the instrument and, depending on the time interval, the power cable and eventually the ground. (In this case, the return current was all on the instrument chassis during the time being measured.) The dielectric for this mode is primarily air, so it propagates faster than the differential mode, where the field is largely in the PVC insulation. Consequently, the reflection returns sooner.

Incidentally, you can slide a ferrite core over the wires and suppress the common-mode response, giving a good illustration of balun or common-mode choke operation.

With twinlead, the thing to do is to ignore the early reflection and adjust the trimpot to eliminate the later one coming from the slower differential mode.

Roy Lewallen, W7EL

4233. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37376c97.250398828@news.atl.bellsouth.net>
Source record: 71218
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

On Fri, 16 Apr 1999 20:30:55 -0400, "PoppaPump" <poppa0pump@aol.com> wrote:
>We must also take into consideration the bird meters slug, they vary greatly
>from one to another. Take 3 different slugs all of them the same power
>rating you will see 3 different readings

The line section in the meter matters too. It isn't just the meter movement
as Bill apparently thinks. The guaranteed specification covers the entire
instrument. The meters are usually better than the spec, they should *all*
be better than the guaranteed spec, but it is the total instrument being
specified, not just the meter movement or its scale. Bird recomends using
a slug matched to the power level you expect to read. That tells me that they
want you to stay away from the lower end of the scale for best accuracy.
That makes sense because diode non-linearity is typically a bigger issue
at the lower end of the scale. This has nothing to do with the meter movement.

Gary

>William E. Sabin wrote in message <3717322A.25148D5A@mwci.net>...
>>I took some data on two 2 inch panel meters that I bought in 1946, 53 years
>>ago. For 10 years they were in a CW transmitter, needles flopping around at
>>25 WPM. A Beckman 310 with accuracy of 0.75% +/- 1 digit was the reference.
>>Both meters are rated nominal 3% of full scale.
>>
>>Meter number 1: 0 to 50 mA:
>>Reading Actual % error
>>50 48.5 3.0%
>>40 39.1 2.3%
>>30 29.1 3.0%
>>20 19.7 1.5%
>>10 9.5 5.0%
>>5 4.0 20%
>>
>>Meter number 2: 0 to 200 mA:
>>200 198 1.0%
>>150 149 0.7%
>>100 102 2.0%
>>50 51.5 3.0%
>>25 26.1 4.2%
>>
>>So much for the intuition that a panel meter that is specified only at full
>>scale cannot be trusted in regions above, say 20% of full scale.
>>
>>Bill W0IYH

>>
>

Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4234. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <371A801A.214A200A@mwci.net>
Source record: 71219
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Gary Coffman wrote:

> The line section in the meter matters too. It isn't just the meter movement
> as Bill apparently thinks.

No, that is not what Bill apparently thinks, and in the testing of two ancient panel meters I did not suggest that.

The Bird meter looks like a 2% meter, judging by its size and workmanship.

> Bird recomends using
> a slug matched to the power level you expect to read. That tells me that they
> want you to stay away from the lower end of the scale for best accuracy.

In my posts on this subject I have advocated that. I am aware of the diode, but if the 43 is used at strictly 27 degrees or so the calibration should be OK at fairly low levels. Incidentally, there are some "hidden" adjustment pots that they set at the factory.

The Bird 43 has 50 markings. The smallest marking corresponds to 2% of full scale power. This corresponds to 1.33 SWR. They suggest "forget about SWR and just think in terms of forward power and reflected power". If reflected power is "very small" that is usually good enough, they say, except possibly in applications such as TV and certain pulse systems.

If I can't detect "any" reflected power, I don't care what the SWR is. If I really want to know small values of SWR I use a directional coupler (no diodes) and my spectrum analyzer to get the return loss.

The biggest hazards to the 43 are the hammerheads who abuse them.

Bill W0IYH

4235. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: KB9TMP <"kb9tmp<AT>"@qsl.net>
Message-ID: <371A81A5.ED6E70CF@qsl.net>
Source record: 71220
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

David Cunningham wrote:
>
> I have an old redundant colour computer monitor, which was originally used
> with a 286 PC. I also have a television tuner module, which was liberated
> from a scrap VCR, and provides composite video and audio outputs. I am
> hoping to combine the two, along with a simple audio amplifier, to make a
> cheap television. The monitor has a 9 pin d-plug on one end, but I am not
> sure what type of signal it needs. I therefore need to process the composite
> video signal in such a way that the resulting output signal will drive the
> monitor. Is this possible? I would appreciate it if anyone could suggest how
> to do this, or if anyone can tell me what sort of input signal the monitor
> requires.
>
> Thanks, John Cunningham.

John
From what I've read of the responses you would be better off with a used
Apple 11 color computer monitor! I use one on a busted vcr (eats tapes)
with computer speakers for sound. The best thing is the Apple uses a
RCA phono jack for the video input and it has a real sharp picture.
Maybe you can find one at a yard sale or trade yours in at a computer
store for what you need!
--
To reply remove the extra @

"73" from the cornfields of Orange County Indiana!
<'}}}>< <'}}}>< WW - KB9TMP <'}}}>< <'}}}><
E-Mail me at: kb9tmp<AT>@qsl.net
Home Page: http://www.qsl.net/kb9tmp/
Church URL: http://www.angelfire.com/in/orleanschristian/

4236. Confused about tuning circuits: Your insight please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-18 00:00:00 UTC
From: NOSPAMpfriedr@azstarnet.com
Message-ID: <NOSPAMpfriedr.132.021241F4@azstarnet.com>
Source record: 71221

Hi:

I've been playing with simple receivers for over a year now, starting with crystal sets, and now with regenerative sets based on some old tubes (24's, 26's, 27's etc). What continues to puzzle me is the design of the tuner itself.

In the case of the regenerative sets, for example, I measure my variable cap, compute the "L" needed to get me on the broadcast a.m. band, and a wind the coil. I add a tickler coil, breadboard the thing, and generally, it works as expected.

I have two "antennas" that I use when I experiment. One is probably 15-20' long (stretched across the ceiling of the garage), and the other is probably two or more times that length, and was stretched along the spine of the house in the attic. If I connect either antenna to the LC, the signals are very loud, but tuning seems to be much less selective, and the same station may even appear twice as I sweep the cap. Each antenna causes different anomalies. Clearly, the resonant characteristics of the antennas exert considerable influence on the textbook behavior of the radio's LC.

On the other hand, if I loosely couple the antenna to the LC (2-10 turns wound around the L, connected to antenna and ground), then I seem to get most of the signal strength, while at the same time isolating the LC from most of the influence of the antenna. How many turns should be on the coupling coil? What effect will the inductance of the coupling coil have on tuning?

Now, I've seen several designs for crystal receivers that utilize nothing more than a tapped coil and a detector. How in the world do you design these? Given the impact of the antenna itself, how do you compute an inductance for that coil when you don't know for sure what length of antenna will ultimately be connected to it? Is this trial and error proposition? Where is the C? In the antenna? Parastic C in the coil?

I've read about grid dip meters, and have been told that these could be used to find the natural resonant frequency of the coil but that still seems like an after-the-fact correction vs up-front design. And, it still doesn't help me account for the antenna's influence.

The same tapped coil reappears in regenerative circuits from time to time, but there, it's been called a "loading" coil. If a tapped coil like this is installed in the antenna feed to a regen set, how can I predict how this will affect the calibration of the dial on the cap?

I have several books from the mid 20's to 30's with different radio projects. Given a schematic, it seems that I should be able to calculate the values of all the necessary coils, tapped or otherwise, but I cannot. There is something pivotal that I am overlooking here, because this has all the appearance

of voodoo. Anyone care to attempt a clarification?

Pete

****
To email me, remove NOSPAM from my return address.
Anyone sending unwanted advertising e-mail to this address will be charged
$25 for network traffic and computing time. By extracting my address from
this message or its header, you agree to these terms.

4237. Balun

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <371B5461.41C6@eece.maine.edu>
Source record: 71029

Hello, quick question:

For my qrp station, I think it's still putting out about 5W, what considerations do I need to take into acount for a torriod for making a 1:1 balun? I have some torriods already (T-50-2's, T-68 is the biggest I have I think, and some FT-50 and 37, 61 mix) but I don't know if the power rating is up there. I've never looked at power considerations for torriods, so a quick primer on the subject would be helpful also. Thanks.

--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

4238. Re: Balun

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: knox_k_NOBS@nemaine.com
Message-ID: <371b5acb.6435745@news.nemaine.com>
Source record: 71030

Hi Shawn...

Best reference for torroids I've found is at:

http://www.bytemark.com/amidon/index.htm

I use it often.

Ken

(Go Black Bears!!!)

On Mon, 19 Apr 1999 12:05:53 -0400, Shawn Upton
<supton@eece.maine.edu> wrote:

>Hello, quick question:
>
>For my qrp station, I think it's still putting out about 5W, what
>considerations do I need to take into acount for a torriod for making a
>1:1 balun? I have some torriods already (T-50-2's, T-68 is the biggest
>I have I think, and some FT-50 and 37, 61 mix) but I don't know if the
>power rating is up there. I've never looked at power considerations
>for torriods, so a quick primer on the subject would be helpful also.
>Thanks.
>--
>**
>Shawn Upton
>Electrical Engineering Student
>University of Maine at Orono
>webpage: http://www.eece.maine.edu/~supton/
>mail: supton@eece.maine.edu
>KB1CKT Tech Plus
>**

4239. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: tgold@microvest.demon.co.uk
Message-ID: <19990419.1631.9901590snz@microvest.demon.co.uk>
Source record: 71031
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

On Sunday, in article <3719A182.52AE00AE@mwci.net>
sabinw@mwci.net "William E. Sabin" wrote:

> > >Both meters are rated nominal 3% of full scale.
> > >
> > >Meter number 1: 0 to 50 mA:
> > >Reading Actual % error
> > >50 48.5 3.0%
> > >40 39.1 2.3%
> > >30 29.1 3.0%
> > >20 19.7 1.5%
> > >10 9.5 5.0%
> > >5 4.0 20%
> > >
> > >Meter number 2: 0 to 200 mA:
> > >200 198 1.0%
> > >150 149 0.7%
> > >100 102 2.0%
> > >50 51.5 3.0%
> > >25 26.1 4.2%
> > >

> Not so fast!
>
> Look at the first meter. At 10 mA the error is 5% and according to the "rule"
> it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and it
> should be 8.0%. For the second meter at 25 mA the error is 4.2% and it should
> be 8.0% if it is a 1% meter.

Why "should" the error of the first meter at 10mA be 18% or at 20mA
ought the error be 8%, etc.

I think you have totally missed Roy's point. A specification is a
promise of accuracy and not a promise of inaccuracy. If you're
measurements are correct then the observed fact that the meter is
more accurate than the specification at less than FSD is simply proof
that the meter is within its specification and not any sort of proof
that the specification is somehow wrong.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4240. Re: Confused about tuning circuits: Your insight please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <371b661f.0@news.netwalk.com>
Source record: 71032

H. P. Friedrichs wrote in message ...
[snip]

>
>On the other hand, if I loosely couple the antenna to the LC (2-10 turns
wound
>around the L, connected to antenna and ground), then I seem to get most of
the
>signal strength, while at the same time isolating the LC from most of the
>influence of the antenna. How many turns should be on the coupling coil?
What
>effect will the inductance of the coupling coil have on tuning?
>

Congratulations! You have learned something about how tuned circuits work.

>Now, I've seen several designs for crystal receivers that utilize nothing
more
>than a tapped coil and a detector. How in the world do you design these?
>Given the impact of the antenna itself, how do you compute an inductance
for
>that coil when you don't know for sure what length of antenna will
ultimately
>be connected to it? Is this trial and error proposition? Where is the C? In
>the antenna? Parastic C in the coil?
>
>

It is theoretically possible to calculate everything ahead of time. The coupling loop and/or tapped coil basically act like a transformer and the impedance of the antenna gets 'transformed' and appears across the LC circuit. If you are using a 'matched' antenna (such as 50 ohms at the frequency of interest) you could design for this. Since you are using an antenna of essentially unknown characteristics the easiest thing, in my opinion, is to do it by trial and error.

You mentioned that you have read books from the 20's and 30's, so you probably have seen that they often used selectable (or sliding) taps on the main coil, or adjust the coupling by varying the position of the coupling coil. The goal is to have 'just the right amount' of coupling to the antenna without degrading performance.

Jim
N8EE

4241. Re: Balun

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <371B800B.72A8@ixpres.com>
Source record: 71033

Ken Knox (N1JRO) wrote:
> Hi Shawn...
> Best reference for torroids I've found is at:
> http://www.bytemark.com/amidon/index.htm
> I use it often.
> Ken
> (Go Black Bears!!!)
> On Mon, 19 Apr 1999 12:05:53 -0400, Shawn Upton
> <supton@eece.maine.edu> wrote:
> >Hello, quick question:
> >
> >For my qrp station, I think it's still putting out about 5W, what
> >considerations do I need to take into acount for a torriod for making a
> >1:1 balun? I have some torriods already (T-50-2's, T-68 is the biggest
> >I have I think, and some FT-50 and 37, 61 mix) but I don't know if the
> >power rating is up there. I've never looked at power considerations
> >for torriods, so a quick primer on the subject would be helpful also.
> >Thanks.
> >--
> >**********
> >Shawn Upton
> >Electrical Engineering Student
> >University of Maine at Orono
> >webpage: http://www.eece.maine.edu/~supton/
> >mail: supton@eece.maine.edu
> >KB1CKT Tech Plus
> >**********

Also, on the Amidon web page, is the correct spelling of the
word Toroid, which you may want to note.

4242. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <371B9007.CCDF668A@mwci.net>
Source record: 71034
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Anthony R. Gold wrote:

> On Sunday, in article <3719A182.52AE00AE@mwci.net>
> sabinw@mwci.net "William E. Sabin" wrote:
>
> > Not so fast!
> >
> > Look at the first meter. At 10 mA the error is 5% and according to the "rule"
> > it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and it
> > should be 8.0%. For the second meter at 25 mA the error is 4.2% and it should
> > be 8.0% if it is a 1% meter.
>
> Why "should" the error of the first meter at 10mA be 18% or at 20mA
> ought the error be 8%, etc.

If the accuracy is "allowed" to be 3%, then officially it is "allowed" to be 3% of full scale anywhere on the scale.

Example: A 0 to 100 meter is rated at 3% of full scale. This means that at 100 it "can be" 97 to 103, which is 3% of full scale. But that also means that at 20 it "can be" between 17 and 23, which is not 3% but 15%. Or at 10 it "can be" between 7 and 13, which is 30%.

Any worthwhile 3% panel meter that I have ever worked with is a lot better than that.

If a meter *just barely* meets that spec and is no better than that, then as I said, at lower readings the errors "should be" the larger numbers. That statement was correct. The cheaper junk meters do exactly that and no more, so that the meter is not very good except close to full scale.

If you read my writeup more carefully, I am saying that meters in practice are not built that way, and the data that I gave for two old knocked-around meters is a very good example.

> I think you have totally missed Roy's point.

I think you are totally missing my point. The specification is standard practice, but a meter that does nothing more than meet the bare minimum advertised definition of "full scale accuracy" is not one that I would buy if I can find something that goes the extra mile and tries to get a better "average % accuracy" over "most" of the scale. And you may be sure that I can in fact do just that. Read my post again (the part that you deleted from your reply).

The "% of full scale" spec is a tradition, and anyone just barely meeting the spec will not go to jail, but he will not compete with those who do a much better design and test job for the same sell price. I'm not talking about $1000 laboratory things in walnut cases, just ordinary $80 taut band panel meters.

These days an automated test station could take data points (using a computerized optical reader), calculate a linear regression and the standard deviations, min and max errors etc. and possibly tweak the meter mechanism (or reject it) in just 15 seconds. The old traditional "% of full scale" spec is a lousy way to do business since it permits a lousy result.

Bill W0IYH

4243. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: kilroy <kilroy@SPAMTRAPfuse.net>
Message-ID: <924570088.671.20@news.remarQ.com>
Source record: 71035
Cross-posted to:
sci.electronics.misc,sci.electronics.componentssci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Actually, I've had quite a bit of luck using solder and an old 240 W
soldering gun. Just be careful not to overheat the cell as you solder.

--
NOTE: Email address is bogus!
Remove SPAMTRAP for valid address
Rob Frohne wrote in message ...
>Hi All,
>
>I've been trying in vain to find someone who can weld some solder tabs on
>about 30 NiMH cells I want to use. Is there anywhere that I could send
>these batteries to get this service performed at a reasonable cost?
>
>Thanks,
>
>Rob

4244. WANTED: Knobs for HP 339A Distortion meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <YgRS2.1917$1v.2597@ndnws01.ne.mediaone.net>
Source record: 71036
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

This is probably a long shot...but....anyone have the "Distortion Range"
and "Osc Level" knobs for a HP 339A distortion meter?
Thanks!
Chuck...K1KW

4245. CMOS Super Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: Justin and Chelly Bennett <cjb@midrivers.com>
Message-ID: <371BEB9E.6B8AF5B2@midrivers.com>
Source record: 71037

I inherited the CMOS Super Keyer in a bunch of stuff. Does anyone have any information or schematics about this. If so, please e-mail me.

Justin

4246. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <371C034C.52E8@pop.removethistomailme.net>
Source record: 71038
Cross-posted to:
sci.electronics.misc,sci.electronics.componentssci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Rob Frohne wrote:
>
> Hi All,
>
> I've been trying in vain to find someone who can weld some solder tabs on
> about 30 NiMH cells I want to use. Is there anywhere that I could send
> these batteries to get this service performed at a reasonable cost?
>
> Thanks,
>
> Rob

I've found it helpful to abrade the surfaces of battery tabs with a
Dremel tool, using the edge of a cutting wheel or the flat of a scribing
bit. That way, you can solder to things that otherwise won't take
solder at all. Use a very hot iron or gun and work quickly -- you don't
want to soak a lot of heat into a battery. Probably not a good idea to
do this with the older, explosion-prone lithium cells. 8-O

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

4247. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: mohaase@nilenet.com
Message-ID: <mohaase-1904992258500001@slip160.den.nilenet.net>
Source record: 71039
Cross-posted to:
sci.electronics.misc,sci.electronics.componentssci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <frohro-1604991029480001@csp-frohro.wwc>, frohro@wwc.edu (Rob Frohne) wrote:

> Hi All,
>
> I've been trying in vain to find someone who can weld some solder tabs on
> about 30 NiMH cells I want to use. Is there anywhere that I could send
> these batteries to get this service performed at a reasonable cost?
>
> Thanks,
>
> Rob

There is a chain of stores, called "Batteries Plus" around the country.
They might be able to do it for you, since they can rebuild nicad
battery packs in the stores.
There are several stores in Denver, Colorado Springs and Fort Collins
Colorado. They are a nationwide chain, so if you can't find one,
call one of the stores here and ask them where the nearest ont is to you.

Marty

4248. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <371b7e01.254856993@news.atl.bellsouth.net>
Source record: 71222
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sat, 17 Apr 1999 10:50:07 +0100, "David Cunningham" <D.L.C@btinternet.com> wrote:
>I have an old redundant colour computer monitor, which was originally used
>with a 286 PC. I also have a television tuner module, which was liberated
>from a scrap VCR, and provides composite video and audio outputs. I am
>hoping to combine the two, along with a simple audio amplifier, to make a
>cheap television. The monitor has a 9 pin d-plug on one end, but I am not
>sure what type of signal it needs. I therefore need to process the composite
>video signal in such a way that the resulting output signal will drive the
>monitor. Is this possible? I would appreciate it if anyone could suggest how
>to do this, or if anyone can tell me what sort of input signal the monitor
>requires.

Alas, what you have is an EGA monitor. It will not do analog video.
It expects TTL drives. If it were VGA, you'd have a fighting chance
since the analog gun drivers would exist in the monitor (and some
VGA monitors will even accept a composite signal, the Mitsubishi
Diamond Scan does). But EGA monitors don't have any of that.

You could build a color demodulator to separate out the composite
signal into RGB, then build gun drivers to take that and drive the CRT.
But you'd also need to strip out horizontal and vertical sync signals,
convert them to TTL, and apply them to the deflection circuits of
the monitor too. If perchance it is a multisync model (like some NEC
models), you might be Ok. If it isn't, you'll also have to alter the sweep
circuits to handle TV sync and interlace. Basically, you get to build
everything that's in a TV monitor except the HV section.

Sorry the news isn't better. If it were an old CGA monitor, the sweeps
would be compatible, and you'd have an easier time converting it. But
the EGA is neither fish nor fowl, so you're basically screwed.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4249. Re: Homebrew antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: john2pill@aol.com
Message-ID: <19990418223728.08347.00002333@ng-cd1.aol.com>
Source record: 71223

i might can assist you with building gamma matches what frequency is this match designed for and what tpye of antenna

4250. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseFAF2E4.FLx@netcom.com>
Source record: 71224
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <371b7e01.254856993@news.atl.bellsouth.net> ke4zv@bellsouth.net (Gary Coffman) writes:
>Alas, what you have is an EGA monitor. It will not do analog video.
>It expects TTL drives. If it were VGA, you'd have a fighting chance
>since the analog gun drivers would exist in the monitor (and some
>VGA monitors will even accept a composite signal, the Mitsubishi
>Diamond Scan does). But EGA monitors don't have any of that.
>
>You could build a color demodulator to separate out the composite
>signal into RGB, then build gun drivers to take that and drive the CRT.
>But you'd also need to strip out horizontal and vertical sync signals,
>convert them to TTL, and apply them to the deflection circuits of
>the monitor too. If perchance it is a multisync model (like some NEC
>models), you might be Ok. If it isn't, you'll also have to alter the sweep
>circuits to handle TV sync and interlace. Basically, you get to build
>everything that's in a TV monitor except the HV section.
>
>Sorry the news isn't better. If it were an old CGA monitor, the sweeps
>would be compatible, and you'd have an easier time converting it. But
>the EGA is neither fish nor fowl, so you're basically screwed.
>
Gary is right. Unless you want the educational experience of doing the above, I'd just forget about it, and buy a new TV.

4251. Re: AN/PRC-10 and Motorola 25-54MC receiver dated 12/18/56

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: - <w2jc@bve-ent.com>
Message-ID: <7feouq$l95@world1.bellatlantic.net>
Source record: 71225
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

> Found a circuit diagram for a Motorola VHF receiver. It looks very
> much like AN/PRC-10, but covers the larger range. I am not certain
> about how much similar the receivers are. The Motorola receiver uses
> almost the same modules and valves, it is marked ISSUE F Part
> No.63E845727. 'AN/PRC-10' transceiver seems to have been manufactured
> in Sweden (which is a non-NATO country) as Ra105, perhaps the
> technique is not as secret as we were told when I was in the army 32
> years ago....

The AN/PRC-10 range was 38 to 54.9 MHz, with about 1 watt RF output.

The technical manuals for it are:

TM 11-612
TM 11-4065
T.O. 31R2-2PRC-101

I have a 'master copy' of the two TMs in my library.

Jim W2JC w2jc@tech-manuals.com
BVE Enterprises, PO Box 73, Paramus NJ 07653-0073

4252. Re: AN/PRC-10 and Motorola 25-54MC receiver dated 12/18/56

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: - <w2jc@bve-ent.com>
Message-ID: <7feqet$8mf@world1.bellatlantic.net>
Source record: 71226
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

> Found a circuit diagram for a Motorola VHF receiver. It looks very
> much like AN/PRC-10, but covers the larger range. I am not certain
> about how much similar the receivers are. The Motorola receiver uses
> almost the same modules and valves, it is marked ISSUE F Part
> No.63E845727. 'AN/PRC-10' transceiver seems to have been manufactured
> in Sweden (which is a non-NATO country) as Ra105, perhaps the
> technique is not as secret as we were told when I was in the army 32
> years ago....

The AN/PRC-10 range was 38 to 54.9 MHz, with about 1 watt RF output.

The technical manuals for it are:

TM 11-612
TM 11-4065
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I have a 'master copy' of the two TMs in my library.

Jim W2JC w2jc@tech-manuals.com
BVE Enterprises, PO Box 73, Paramus NJ 07653-0073

4253. Re: Jan Crystals web address

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <371b37da.51379591@news.erols.com>
Source record: 71227

They don't even have an e-mail address! Too bad. Nice company. Very helpful. They should get with it!

4254. Ham Radio Resources

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-19 00:00:00 UTC
From: mikrounit@hughes.net
Message-ID: <7ffma9ien1@nnrp1.dejanews.com>
Source record: 71228

Hello All,

This is Mike, KQ6MU.
I have a Ham Radio & Electronic Web Page
with info on: Satellites, Satellite Tracking,
HF/VHF/UHF, HF Rig Reviews, Classifieds, FT-847
Page, FT-50R Page, and TONS of very useful
Ham Radio & Electronic Links.
Please drop by my GuestBook & sign it.

The URL:

http://kq6mu.8m.com

Thanks & 73,

Mike Green KQ6MU DM04

PS. Web Masters: Please add me to your
links section, I can return the favor.

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4255. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <371bc999.187349@news.magiclink.com>
Source record: 71040

I use an HP IIp which falls into the "old" catagory. I'm using "PnP Blue", coated mylar that cost about buck a sheet. It will do surface mount (SOIC), but I'd hate to do .025" QSOP packages with it. Doubt it's possible.

Attempts with plain mylar were not so successful. Ditto on paper...it would stick both traces AND the paper backing, which I couldn't seem to get to come off completely even with long soakings in water. It'd be interesting to hear of other's experiences here....may not have hit on the right backing material and right technique. It would sure be nice to find something less expensive than PnP Blue.

Bill - W7AAZ

On 16 Apr 1999 20:33:49 -0500, AAAjdc3538@osfmail.isc.rit.eduAAA wrote:

>
>Best way to figure it out is to head down to the local computer/office
>supply stores and get a "test page" from every laser printer in your
>price range. Take them all home, cut out a 1" square piece from each
>and iron them on to clean PC board material.
>
>Whichever sticks best wins. There's a wide range between the best and
>worst.
>
>73..Jim N2VNO
>
>
>In article <37174901.623B@snet.net>, Vincent Coppola <vinyc@snet.net> wrote:
>>I read on one of the newsgroups how certain laser printers are
>>preferable to others for making PC boards. I believe older was a key
>>word. As far as printers go I am perfectly content with my inkjet
>>printer, so the acquistion of a laser printer would be for the sole
>>purpose of making PC boards, rather than general printing.
>>Any comments appreciated,
>>Vince,
>>N1VC
>
>
>--
>
>----
>When replying, remove the leading and trailing AAA
>--

>
>----
>When replying, remove the leading and trailing AAA

4256. UK Car Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <9uRS2.6395$Qc2.275@news-reader.bt.net>
Source record: 71041

Hi,
I've just stripped my old Vauxhall Cavalier 1.6litre car, and I have
it's phillips FM/MW/LW radio, can I use this at all for a project...are
there any salvagable parts that anyone knows about? Also, it's "coded".
There is a connection for a data port of some kind does this have to do with
the code?

cheers

David
Pickards@Zen.co.uk

4257. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: James Horn <jimhorn@svn.net>
Message-ID: <371bf35c.0@news1.svn.net>
Source record: 71042
Cross-posted to:
sci.electronics.misc,sci.electronics.componentssci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Another approach I've resorted to is, if replacing tabbed batteries, to remove the tabs from the old cells and weld them onto the new ones. To do the welding I charged a low inductance 30,000 uF 25 VDC electrolytic, connected it to the tab and the battery case, and pressed the tab to the case. It welded firmly with a bang.

Of course, take the standard precautions, and all that. Good luck!

Jim Horn WB9SYN/6

4258. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <I_US2.2858$Bm3.183705@news20.ispnews.com>
Source record: 71043
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

William E. Sabin wrote in message <371B9007.CCDF668A@mwci.net>...
>Anthony R. Gold wrote:
>> On Sunday, in article <3719A182.52AE00AE@mwci.net>
>> sabinw@mwci.net "William E. Sabin" wrote:
>>
>> > Not so fast!
>> >
>> > Look at the first meter. At 10 mA the error is 5% and according to the
"rule"
>> > it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and
it
>> > should be 8.0%. For the second meter at 25 mA the error is 4.2% and it
should
>> > be 8.0% if it is a 1% meter.
>>
>> Why "should" the error of the first meter at 10mA be 18% or at 20mA
>> ought the error be 8%, etc.
>
>If the accuracy is "allowed" to be 3%, then officially it is "allowed" to
be 3% of
>full scale anywhere on the scale.

This is EXACTLY the statement I have been trying to convince Bill of all
along. Change the words in his previous posting and things make much more
sense. [But I still cannot duplicate his numbers exactly.]

>Look at the first meter. At 10 mA the error is 5% and according to the
"rule"
>it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and it
>should be 8.0%. For the second meter at 25 mA the error is 4.2% and it
should
>be 8.0% if it is a 1% meter.

The accuracy statement supplied by the manufacturer does not tell you what
the error is at any point. It just sets bounds on the error. A corrected
wording _might_ be:

At 10 mA the actual error is 5%, and according to the manufacturers
accuracy statement, it could be as high as 15%, if it is a 3% of full-scale
meter. At 20 mA the actual error is 1.5% but it could be as high as 7.5%.
For the second mneter at 25 mA, the error is 4.2% but it could be as high
as 8%
based only on the full scale accuracy of 1%.

>Example: A 0 to 100 meter is rated at 3% of full scale. This means that at
100 it
>"can be" 97 to 103, which is 3% of full scale. But that also means that at
20 it
>"can be" between 17 and 23, which is not 3% but 15%. Or at 10 it "can be"
between
>7 and 13, which is 30%.

Which is the point Roy Lewallen made.

>Any worthwhile 3% panel meter that I have ever worked with is a lot better
than
>that.
>
>If a meter *just barely* meets that spec and is no better than that, then
as I
>said, at lower readings the errors "should be" the larger numbers. That
statement
>was correct. The cheaper junk meters do exactly that and no more, so that
the meter
>is not very good except close to full scale.

No, at lower readings the errors do not _have_ to be larger numbers. But
they _CAN_ be and still meet the full scale specification.

>If you read my writeup more carefully, I am saying that meters in practice
are not
>built that way, and the data that I gave for two old knocked-around meters
is a
>very good example.
>
>> I think you have totally missed Roy's point.
>
>I think you are totally missing my point. The specification is standard
practice,
>but a meter that does nothing more than meet the bare minimum advertised
definition
>of "full scale accuracy" is not one that I would buy if I can find
something that
>goes the extra mile and tries to get a better "average % accuracy" over
"most" of
>the scale. And you may be sure that I can in fact do just that. Read my
post again
>(the part that you deleted from your reply).
>
>The "% of full scale" spec is a tradition, and anyone just barely meeting
the spec
>will not go to jail, but he will not compete with those who do a much
better design
>and test job for the same sell price. I'm not talking about $1000
laboratory things
>in walnut cases, just ordinary $80 taut band panel meters.

>
>These days an automated test station could take data points (using a computerized
>optical reader), calculate a linear regression and the standard deviations, min
>and max errors etc. and possibly tweak the meter mechanism (or reject it) in just
>15 seconds. The old traditional "% of full scale" spec is a lousy way to do
>business since it permits a lousy result.

Which was my contention all along...

>Bill W0IYH

There is a small enough amount of data here that it can be done by hand. Taking the first meter, for example, we can either fit the best straight line though the data points, or if we assume the meter was properly zeroed first, we can force our calibration to go through zero. Doing the latter gives:

Predicted_Value = 0.97213 * (Meter_Reading)

Without forcing the calibration to go through zero gives:

Predicted_Value = 0.98537 * (Meter_Reading) + 0.47205

If you look at the errors between these predicted values and the actual values, you will still find the worst error at the 5 mA reading. On the 10, 20, 30, 40 and 50 mA points on the scale, the above equations come to within 2.5% - an excellent meter. But you cannot read into this data that which is not there. Is the meter nonlinear below 10 mA, or is the 5 mA point just a bad reading? You can say only with further testing, not with this data.

But again, with only the 3% of full scale statement to work with, you would never know this. Bill said he had his meter checked against a calibrated Boonton RF voltmeter. So he can say with certainty that his meter is good over the range he checked. Another meter may not be nearly as accurate as his, yet it still meet Bird's 5% of full scale accuracy.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

4259. w.t.b. yaesu ft736 accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: LeRoy Prosic <ve3lgp@tct.net>
Message-ID: <7fh83h$br6@sabik.tct.net>
Source record: 71044

I would like buy FT736 accessories. I have a Michigan mailing address.
www.ve3lgp@tct.net

4260. See my bolocks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Harry Lythall <a@sm0vpo.8m.com.spam>
Message-ID: <01be8b07$992abf20$8534d693@e0060b0eb282a>
Source record: 71045

Quite a few practical circuits and technical info in my building blocks
section.

http://sm0vpo.8m.com/ Main page
http://www.geocities.com/SiliconValley/3569/ Mirror in the USA
http://hem2.passagen.se/sm0vpo Mirror in Europe
http://members.xoom.com/sm0vpo Mirror in Far-East
http://www.insidetheweb.com/mbs.cgi/mb426630 Message Board

4261. Re: Ferrite core losses

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: JM <jmadlang@ix.netcom.com>
Message-ID: <371C7194.AB9D8EC8@ix.netcom.com>
Source record: 71046

depending on the ferrite type and amount of turns you can figure the
ohms. Not so good when it comes to permeability. The best source is
a ferrite or core manufacturer. Try
Fair-Rite. They should have a web site.

AMDX wrote:

>
> Can the loss factor figure for a core be put into ohms?
> As in a FT-240 #61 toroid has a loss factor of 32 x 10-6
> @ 2.5 MHz and a volume of 22.608. If it is wound to have
> 350uh can the losses be put into ohms I would prefer to
> know the resistance at 1.6Mhz.
>
> Mike

4262. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990420133419704 32@zetnet.co.uk>
Source record: 71047

> I've found it helpful to abrade the surfaces of battery tabs with a
> Dremel tool, using the edge of a cutting wheel or the flat of a scribing
> bit. That way, you can solder to things that otherwise won't take
> solder at all. Use a very hot iron or gun and work quickly -- you don't
> want to soak a lot of heat into a battery. Probably not a good idea to
> do this with the older, explosion-prone lithium cells. 8-O

> -- jm KE5FX

==========
Talking about Lithium batteries ,some time ago I successfully
soldered 2 leads to a pancake type 3V lithium battery , to replace a
memory backup battery with welded tabs in a Packet TNC.

With a 15 W soldering iron ,tinning was fast although the battery
briefly 'sizzled'.
Following installation the battery has performed well for the last 2
years ,eg TNC keeps holding its set parameters.

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

4263. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990420133256704 32@zetnet.co.uk>
Source record: 71048

> Actually, I've had quite a bit of luck using solder and an old 240 W
> soldering gun. Just be careful not to overheat the cell as you solder.

> Rob Frohne wrote in message ...
> >Hi All,
> >I've been trying in vain to find someone who can weld some solder tabs on
> >about 30 NiMH cells I want to use. Is there anywhere that I could send
> >these batteries to get this service performed at a reasonable cost?
> >Thanks, Rob

==========
Recently I successfully soldered leads to a number of Nicad and NiMH
,AA and C size batteries ,this following gentle cleaning with (black)
amaril cloth . The tinning was almost instant with a 15Watts soldering iron.

In order to remove 'chemical debris' from Nicads from a soldering
iron ,bought in 1982, I had to break the welded joint. After
rejoining by soldering these 'oldies' perform well again.
The soldering iron is a US made Wahl Corp. -Isotip (quick charge).
BTW : the 2 Nicads in this soldering iron are charged by AC directly
from a transformer. There is no rectifying diode, just an bare wire
fuse.....I never had seen this before.

I also repaired a Black & Decker hand vacuum cleaner which uses 3 'C'
type Nicads . After soldering the broken weld between 2 batteries ,
the unit is working again as when it was new (8 years ago)

Hope you find the above info useful.

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

4264. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <371C72AE.BB5C43@gate.net>
Source record: 71049
Cross-posted to:
sci.electronics.misc,sci.electronics.componentssci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Bob,

We have a franchise here in Fort Myers called Batteries Plus. They have
a spot welding machine for batteries. They have "rebuilt" several of my
battery packs over the years for far less than a new OEM version. If
you have a franchise near you, I'll bet they'd tack them for you.

73, Mike

> Rob Frohne wrote in message ...
> >Hi All,
> >
> >I've been trying in vain to find someone who can weld some solder tabs on
> >about 30 NiMH cells I want to use. Is there anywhere that I could send
> >these batteries to get this service performed at a reasonable cost?
> >
> >Thanks,
> >
> >Rob

--
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| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________
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_)

4265. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: 10-7 <boygonbad@aol.com>
Message-ID: <74%S2.604$I11.46130@news3.voicenet.com>
Source record: 71050
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

People keep refering to the meter movements accuracy , I question the slugs, check from one to the next . What good does the meters accuracy mean If my slug reads higher than someone elses slug , I guess now there is now 2 things to consider with regards of accuracy, the meter movement and the slug. Again, either you guys dont own more than one slug of the same value or even different values to really see what a differance there really are between the slugs

--

Barry L. Ornitz wrote in message ...
>
>William E. Sabin wrote in message <371B9007.CCDF668A@mwci.net>...
>>Anthony R. Gold wrote:
>>> On Sunday, in article <3719A182.52AE00AE@mwci.net>
>>> sabinw@mwci.net "William E. Sabin" wrote:
>>>
>>> > Not so fast!
>>> >
>>> > Look at the first meter. At 10 mA the error is 5% and according to the
>"rule"
>>> > it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and
>it
>>> > should be 8.0%. For the second meter at 25 mA the error is 4.2% and it
>should
>>> > be 8.0% if it is a 1% meter.
>>>
>>> Why "should" the error of the first meter at 10mA be 18% or at 20mA
>>> ought the error be 8%, etc.
>>
>>If the accuracy is "allowed" to be 3%, then officially it is "allowed" to
>be 3% of
>>full scale anywhere on the scale.
>
>
>This is EXACTLY the statement I have been trying to convince Bill of all
>along. Change the words in his previous posting and things make much more
>sense. [But I still cannot duplicate his numbers exactly.]
>
>>Look at the first meter. At 10 mA the error is 5% and according to the
>"rule"
>>it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and it
>>should be 8.0%. For the second meter at 25 mA the error is 4.2% and it

>should
>>be 8.0% if it is a 1% meter.
>
>The accuracy statement supplied by the manufacturer does not tell you what
>the error is at any point. It just sets bounds on the error. A corrected
>wording _might_ be:
>
>At 10 mA the actual error is 5%, and according to the manufacturers
>accuracy statement, it could be as high as 15%, if it is a 3% of full-scale
>meter. At 20 mA the actual error is 1.5% but it could be as high as 7.5%.
>For the second mneter at 25 mA, the error is 4.2% but it could be as high
>as 8%
>based only on the full scale accuracy of 1%.
>
>>Example: A 0 to 100 meter is rated at 3% of full scale. This means that at
>100 it
>>"can be" 97 to 103, which is 3% of full scale. But that also means that at
>20 it
>>"can be" between 17 and 23, which is not 3% but 15%. Or at 10 it "can be"
>between
>>7 and 13, which is 30%.
>
>Which is the point Roy Lewallen made.
>
>>Any worthwhile 3% panel meter that I have ever worked with is a lot better
>than
>>that.
>>
>>If a meter *just barely* meets that spec and is no better than that, then
>as I
>>said, at lower readings the errors "should be" the larger numbers. That
>statement
>>was correct. The cheaper junk meters do exactly that and no more, so that
>the meter
>>is not very good except close to full scale.
>
>
>No, at lower readings the errors do not _have_ to be larger numbers. But
>they _CAN_ be and still meet the full scale specification.
>
>>If you read my writeup more carefully, I am saying that meters in practice
>are not
>>built that way, and the data that I gave for two old knocked-around meters
>is a
>>very good example.
>>
>>> I think you have totally missed Roy's point.
>>
>>I think you are totally missing my point. The specification is standard
>practice,

>>but a meter that does nothing more than meet the bare minimum advertised
>definition
>>of "full scale accuracy" is not one that I would buy if I can find
>something that
>>goes the extra mile and tries to get a better "average % accuracy" over
>"most" of
>>the scale. And you may be sure that I can in fact do just that. Read my
>post again
>>(the part that you deleted from your reply).
>>
>>The "% of full scale" spec is a tradition, and anyone just barely meeting
>the spec
>>will not go to jail, but he will not compete with those who do a much
>better design
>>and test job for the same sell price. I'm not talking about $1000
>laboratory things
>>in walnut cases, just ordinary $80 taut band panel meters.
>>
>>These days an automated test station could take data points (using a
>computerized
>>optical reader), calculate a linear regression and the standard
>deviations, min
>>and max errors etc. and possibly tweak the meter mechanism (or reject it)
>in just
>>15 seconds. The old traditional "% of full scale" spec is a lousy way to
>do
>>business since it permits a lousy result.
>
>Which was my contention all along...
>
>>Bill W0IYH
>
>
>There is a small enough amount of data here that it can be done by hand.
>Taking the first meter, for example, we can either fit the best straight
>line though the data points, or if we assume the meter was properly zeroed
>first, we can force our calibration to go through zero. Doing the latter
>gives:
>
> Predicted_Value = 0.97213 * (Meter_Reading)
>
>Without forcing the calibration to go through zero gives:
>
> Predicted_Value = 0.98537 * (Meter_Reading) + 0.47205
>
>If you look at the errors between these predicted values and the actual
>values, you will still find the worst error at the 5 mA reading. On the
>10, 20, 30, 40 and 50 mA points on the scale, the above equations come to
>within 2.5% - an excellent meter. But you cannot read into this data that
>which is not there. Is the meter nonlinear below 10 mA, or is the 5 mA

>point just a bad reading? You can say only with further testing, not with
>this data.
>
>But again, with only the 3% of full scale statement to work with, you would
>never know this. Bill said he had his meter checked against a calibrated
>Boonton RF voltmeter. So he can say with certainty that his meter is good
>over the range he checked. Another meter may not be nearly as accurate as
>his, yet it still meet Bird's 5% of full scale accuracy.
>
> 73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net
>
>
>

4266. Re: Balun

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <371C7DFE.FF9D8924@fallschurch.esys.com>
Source record: 71051

BTW, I do not believe you can easily overheat any of your toroids with 5 watts into a reasonably matched load.
73 de W1AEL

4267. Re: CMOS Super Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <371C7E80.8FB2F7D8@fallschurch.esys.com>
Source record: 71052

The CMOS Super Keyer article appeared in QST within the last 5? years.
I shall see if I can locate it for you.
73 de W1AEL

4268. Blower Motor Maintenance

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Doug Snowden <dsnowden@ncdc.noaa.gov>
Message-ID: <371C82BB.3B3BB524@ncdc.noaa.gov>
Source record: 71053

I recently received a blower motor (Dayton) . It was in fair shape,
except the
shaft would not turn freely. After taking it apart, I discovered that
it had not been lubricated for eons. It doesn't have bearings on the
shaft,
just a shaft that is oiled. Even the cotton that is supposed
to retain the lubricating oil had just about dissappeared. What should I

use to replace the deteriorating cotton on each end of the shafts? Just
regular cotton, or what? Maybe some sort of felt?

Doug N4IJ
dsnowden@ncdc.noaa.gov

4269. Data needed for NEC Diode Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: rjburden@BigPond.com
Message-ID: <371e79c0.2174979@news.bigpond.com>
Source record: 71054

Hi,

I'd be grateful if someone can help me locate the specifications for a NEC diode mixer, type 7110Z. Physically the diode mixer is very similar to the Minicircuits SBL style of mixer.

Regards,
Richard VK5OO
"Nothing better than home-brew, except perhaps an absence of Spam"

4270. Re: Balun

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <371C8E95.FF6@eece.maine.edu>
Source record: 71055

Don W6JL wrote:
>
> Also, on the Amidon web page, is the correct spelling of the
> word Toroid, which you may want to note.

My bad. I'll try to remember that in the future. Thanks for the other
responses on the subject.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

4271. Re: Home Built Airband???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Nicholas Geovanis <nickgeo@merle.acns.nwu.edu>
Message-ID: <Pine.HPP.3.93.990420121008.3801A-100000@merle.acns.nwu.edu>
Source record: 71056

On Fri, 16 Apr 1999, Someone! wrote:

> Hi,
> I love electonics...I got that out of the way!
>
> I'm about to start learning for my NRAE (UK), and I was looking for some
> help building a homebrew VHF airband Rx...Does anyone have any starting
> points, tips hints, schematics etc..

I'm not sure if by "airband" you mean the VHF aircraft frequencies? If so, Ramsey Electronics sells a kit for a 118-136MHz receiver which was featured in a Popular Electronics article a few years back. Their kit is called the "AR-1", sells for US$29.95. Sounds like you don't need the case and knob set, but if you do, that's an extra US$19.95. See the "Receivers and Converters" section of their www page at http://www.ramseyelectronics.com.

If you'd rather work from scratch, I do have the article at home.

+--------------------->
| Nick Geovanis
| IT Computing Svcs
| Northwestern Univ
V n-geovanis@nwu.edu

4272. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3728b467.399868377@news.atl.bellsouth.net>
Source record: 71057
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

On Tue, 20 Apr 1999 09:13:21 -0400, "10-7" <boygonbad@aol.com> wrote:

>People keep refering to the meter movements accuracy , I question the slugs,
>check from one to the next . What good does the meters accuracy mean If my
>slug reads higher than someone elses slug , I guess now there is now 2
>things to consider with regards of accuracy, the meter movement and the
>slug. Again, either you guys dont own more than one slug of the same value
>or even different values to really see what a differance there really are
>between the slugs

Right. And the *same* slug can give different readings at different
frequencies within its specified range. The compensation is far
from perfect across the marked range. That same slug will give
different readings again if it is used in a different line section.
The machining of Bird line section castings isn't very tightly
controlled (a small difference in insertion depth of the slug makes
a pretty large difference in the indicated power). Then consider the
nonlinearity of the diode at different power levels, temperature effects,
etc, and you see that there are many potential sources of error. The
meter movement is probably the least of the factors in determining
the instrument's accuracy.

In our shop, we mark slugs to be used with a particular line section
and meter, and make calibration charts for the combination at the
frequencies where they will be used. (We have a Dielectric water
load with flowmeters and temperature probes so we can calculate
actual power and prepare the calibration charts.) That can get us
to about 1% of full scale for the higher power slugs. At low power
levels, uncertainties in flowrate and temperature differential can
lead to a larger percentage error for our calibration setup. So we
try to avoid using the instruments near the low end of a power
range.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4273. Tubes FS - G.E. 6AS7GA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: VE6NAP <ve6nap@oanet.com>
Message-ID: <01be8b55$ee2a8e80$601a99cf@ve6nap1>
Source record: 71058

I have a a number of new old stock General Electric white box tubes

Part # 6AS7GA
Twin Triode
6.3 Volt Filament
2.5 Amp Filament
Plate disapation 13 watts per section
Max plate volts 250 VDC

Price each $3.50 U$ dollars
Quantity discount available on orders over 4 tubes

Only 500 Hundred available so order now to avoid disapointment.

Terms

NO COD
All applicable taxes extra
Shipping charges extra
Postal M.O. or Certified Bank Draft in advance of shipment

Email or snail mail with address and quantity of tubes desired to obtain
firm quote.

Gerald G. Caouette
9116-79 street
Edmonton, Ab. T6C 2R4

de
ve6nap@oanet.com

4274. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <372bbf8b.402720093@news.atl.bellsouth.net>
Source record: 71059

On Tue, 20 Apr 1999 00:33:45 GMT, bcarver@magiclink.com (Bill Carver) wrote:
>I use an HP IIp which falls into the "old" catagory. I'm using "PnP
>Blue", coated mylar that cost about buck a sheet. It will do surface
>mount (SOIC), but I'd hate to do .025" QSOP packages with it. Doubt
>it's possible.
>
>Attempts with plain mylar were not so successful. Ditto on paper...it
>would stick both traces AND the paper backing, which I couldn't seem
>to get to come off completely even with long soakings in water. It'd
>be interesting to hear of other's experiences here....may not have hit
>on the right backing material and right technique. It would sure be
>nice to find something less expensive than PnP Blue.

I have the same printer. Try using the clay coated glossy paper
sold for "photo quality" inkjet printers. The patterns transfer easily
using the hot iron transfer method. (I'm using the Epson branded
paper, but probably any of the "photo quality" inkjet papers will work
for laserjet images.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4275. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Al Lorona <al_lorona@hp.com>
Message-ID: <371CC794.2069@hp.com>
Source record: 71060

William E. Sabin wrote:

> If you read my writeup more carefully, I am saying that meters in
> practice are not built that way, and the data that I gave for two
> old knocked-around meters is a very good example.

Hi, Everyone,

Could Mr. Lewallen and Mr. Sabin both be correct? They could if they were talking about two different things.

The difference between them is that one is talking about "worst case spec" and the other is discussing "typical performance".

Lots of test equipment is specified by a single number, regardless of range, input level, noise floor, and all the other factors that influence the measurement. Like the Bird 43's "5% of full scale" spec.

Persons using these meters know that, if they want to do an error analysis of the measurement, using that "5%" spec takes into account the worst *possible* uncertainty. They can be absolutely sure that the device under test does meet its specs, because they've taken into account the measurement system's worst-case errors and are assured that, no matter what, their measurement includes enough of a safety factor to pass a good unit.

(Some good units will be failed because of this, but no bad units will be passed. It's the tradeoff that needs to be made if you value the integrity of your measurements.)

> The old traditional "% of full scale" spec is a lousy way to do
> business since it permits a lousy result.

Is it a lousy way to do business? Maybe so. If I worked for Bird, and I knew that the typical Model 43 was way better than that "5% of full scale" number at different points on the scale, why wouldn't I want to do a more careful calibration to tighten up the spec? This is a question I'm always asking my customers. The varied answers I get include:

"We like to spec it like that. It's part of our mystique."
"We don't want to spend the money for that test system right now."
"We don't need to spec any more tightly than we do."
"Our customers know that's a very conservative spec."
"We have our own calibration method. We don't want to have to re-train everybody."
"Why should we?"
"Maybe later."

R,

Al

--

While you're passing out the spam, don't forget these guys:

admin@loopback
$LOGIN@localhost
$LOGNAME@localhost
$USER@localhost
$USER@$HOST
root@mailloop.com

Chairman William Kennard: wkennard@fcc.gov
Commissioner Susan Ness: sness@fcc.gov
Commissioner Harold Furchtgott-Roth: hfurchtg@fcc.gov
Commissioner Michael Powell: mpowell@fcc.gov
Commissioner Gloria Tristani: gtristan@fcc.gov
US Postal Service: customer@email.usps.gov
Fraud Watch: fraudinfo@psinet.com
Federal Trade Commission: consumerline@ftc.gov

4276. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <371C808F.8198A1DA@mwci.net>
Source record: 71061
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Barry L. Ornitz wrote:

> William E. Sabin wrote

>If the accuracy is "allowed" to be 3%, then officially it is "allowed" to

> be 3% of
> >full scale anywhere on the scale.
>
> This is EXACTLY the statement I have been trying to convince Bill of all
> along. Change the words in his previous posting and things make much more
> sense. [But I still cannot duplicate his numbers exactly.]

And you still do not understand what I am trying to tell you.

One more (and last) time. I am really sick and tired of this.

I am saying that a meter that just barely meets the full scale % (aka the Roy meter) is "allowed" to be a very poor meter %-wise at below full scale. The meter that I will buy is the one that is 3% of full scale, but designed so that the degradation of % accuracy is smaller than what the Roy meter tolerates. I *know* that I can buy such a 3% meter for the same price. In other words the % error across the scale is the thing that anyone in his right mind is going to shop for and compare.

"How well does the meter track across the scale?" This is the most sensible question that I can think of. When I evaluate a meter it is the FIRST thing that I look for. And if I compare brands X,Y and Z 3%-rated $80 meters, guess which one I will buy.

This preoccupation with the literal interpretation of "% of f.s." that is used in catalogs is not necessary. I think it is a lousy way to do business and vendors do it to make life simpler and less litigious for themselves (who can blame them?). But they can, and do, perform better than that, they just don't commit to it.

If you understand this simple message then you understand my point exactly. I have no interest whatsoever in the strictly legal "Roy meter". A meter that is off by +/- 3 units at a reading of 10% of f.s., or even +/- 3 units at 20% of f.s., is not desirable. I will not buy it and I do not have to. Instead of haggling about numbers to 4 decimal places, let's use some common sense.

The message is clear and simple. Why is there so much trouble with it?

I do not want to argue about this any more. If you nice (and one or two not so nice) folks out there think that I am "mind set", then so be it. I will believe

what I think makes sense and let it go at that.

Bill W0IYH

4277. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <371C9325.6C26EA3E@mwci.net>
Source record: 71062
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

10-7 wrote:

> People keep refering to the meter movements accuracy , I question the slugs,
> check from one to the next . What good does the meters accuracy mean If my
> slug reads higher than someone elses slug , I guess now there is now 2
> things to consider with regards of accuracy, the meter movement and the
> slug. Again, either you guys dont own more than one slug of the same value
> or even different values to really see what a differance there really are
> between the slugs

At this point in time the discussion is centered on the actual 0 to 30 uA DC meter itself and not on the Bird wattmeter. The meter itself has interesting problems of its own.

The Bird 43 is rated at 5% of full scale. The meter itself is probably a 2% meter. The other 3% includes the element and the built-in coaxial assembly. The 43 construction is "precision" as nearly as I can tell by looking.

As for the elements, my *new* 250H and 1000H for the 2-30 MHz range are *very good* (within a couple of tenths of a dB) in my *new* 43.

Bill W0IYH

4278. Ohmite Z28

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990420170337.00140.00000430@ng60.aol.com>
Source record: 71063

Need specs on Ohmite z28 choke. Trying to find sub or wind my own.

4279. Re: Confused about tuning circuits: Your insight please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be8b85$f419df00$LocalHost@default>
Source record: 71064

Hi Pete,
I would first recommend that you get a copy of the ARRL handbook,
(radio amateur handbook)
it is loaded with info that you will find helpful.

>>If I connect either antenna to the LC, the signals are
>> very loud, but tuning seems to be much less selective,

There is characteristic called Q (quality factor), it is expressed a
couple of ways. One is the Q equals reactance of the coil in
ohms divided by the resistance of the coil. Q = Xl / R
Note R of the coil is not as simple as the DC resistance,
it altered by the skin effect, dielectric losses and core losses
(if a core is used)
The other is, the resonant frequency divided by the difference
between the 3db bandwidth points equals Q.
Now, when you put a load on the coil it is like increasing the R
of the coil. The load can come from the input (antenna) or the
circuit the coil is driving (the detector and headset).
If you have a low Q you will have low selectivity and high Q
will give you a good selectivity.
When you loosely couple your antenna to the coil, it loads
the coil less and gives you better selectivity.

H. P. Friedrichs <NOSPAMpfriedr@azstarnet.com> wrote in article
<NOSPAMpfriedr.132.021241F4@azstarnet.com>...
> Hi:
>
> I've been playing with simple receivers for over a year now, starting
with
> crystal sets, and now with regenerative sets based on some old tubes
(24's,
> 26's, 27's etc). What continues to puzzle me is the design of the tuner
itself.
>
> In the case of the regenerative sets, for example, I measure my variable
cap,
> compute the "L" needed to get me on the broadcast a.m. band, and a wind
the
> coil. I add a tickler coil, breadboard the thing, and generally, it works
as
> expected.
>
> I have two "antennas" that I use when I experiment. One is probably
15-20'

> long (stretched across the ceiling of the garage), and the other is
probably
> two or more times that length, and was stretched along the spine of the
> house in the attic. If I connect either antenna to the LC, the signals
are
> very loud, but tuning seems to be much less selective, and the same
> station may even appear twice as I sweep the cap. Each antenna causes
> different anomalies. Clearly, the resonant characteristics of the
antennas
> exert considerable influence on the textbook behavior of the radio's LC.
>
> On the other hand, if I loosely couple the antenna to the LC (2-10 turns
wound
> around the L, connected to antenna and ground), then I seem to get most
of the
> signal strength, while at the same time isolating the LC from most of the

> influence of the antenna. How many turns should be on the coupling coil?
What
> effect will the inductance of the coupling coil have on tuning?
>
> Now, I've seen several designs for crystal receivers that utilize nothing
more
> than a tapped coil and a detector. How in the world do you design these?
> Given the impact of the antenna itself, how do you compute an inductance
for
> that coil when you don't know for sure what length of antenna will
ultimately
> be connected to it? Is this trial and error proposition? Where is the C?
In
> the antenna? Parastic C in the coil?
>
> I've read about grid dip meters, and have been told that these could be
used
> to find the natural resonant frequency of the coil but that still seems
like
> an after-the-fact correction vs up-front design. And, it still doesn't
help me
> account for the antenna's influence.
>
> The same tapped coil reappears in regenerative circuits from time to
time, but
> there, it's been called a "loading" coil. If a tapped coil like this is
> installed in the antenna feed to a regen set, how can I predict how this
will
> affect the calibration of the dial on the cap?
>
> I have several books from the mid 20's to 30's with different radio
projects.
> Given a schematic, it seems that I should be able to calculate the values

of
> all the necessary coils, tapped or otherwise, but I cannot. There is
something
> pivotal that I am overlooking here, because this has all the appearance
> of voodoo. Anyone care to attempt a clarification?
>
> Pete
>
>
> **********
> To email me, remove NOSPAM from my return address.
> Anyone sending unwanted advertising e-mail to this address will be
charged
> $25 for network traffic and computing time. By extracting my address from
> this message or its header, you agree to these terms.
>
>

4280. FA: Collins Mechanical Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Mike Nadeau <mnadeau@gwi.net>
Message-ID: <dN8T2.71$h35.464@newsfeed.slurp.net>
Source record: 71065
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have two Collins mechanical filters for auction on eBay...

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=93469306

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=93472073

Mike - N1ENA

4281. Re: Your Personal Callsign Mug.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Ron Harshbarger <rnharsh@visi.com>
Message-ID: <rf9T2.228$5N3.62200@ptah.visi.com>
Source record: 71066
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

Don't sweat the morons! If they can't figure out that "Your Personal
Callsign Mug" is the subject of the same ad... And they read it more than
once, They probably move their lips when they read it!

Cheers & 73

BD wrote in message <7facu5ptl1@newnews.startext.net>...
>Here's a few 'excerpts' from his reply to my complaint.. ;)
>I sure didn't know that it took 1000's to make a spam a spam...
>
>> I post one message each week on these 6 newsgroups. As for
>> your remark about spamming
>> these newsgroups I find it hard to beleive that what Im doing is
>> called spamming. People that spam send many messages to one > or 1000s
of
>groups each and every day.
>
>
>Dave <root@warez.phantom.com> wrote in message
>news:slrn7haoe7.gi.root@wild.net...
>> On Wed, 14 Apr 1999 22:22:11 -0500, Jaw Jabber <jawjabber@earthlink.net>
>wrote:
>> [drivelsnip]
>>
>> I am getting so sick of your spam/velveeta about the coffee mug thing,
>that
>> it is beginning to sound like a good idea to me to shove one of those
mugs
>> up your anal apeture.
>>
>> Just remember: You can't sell a product to people you have pissed off.
>>
>> Are your sales real low? I'll bet they are.
>
>

4282. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <371D2428.DA71837C@ibm.net>
Source record: 71067
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

I tried to address that a while back. The Bird 43 is a field
instrument, not a lab instrument. It must work over a very large
tempature range. Not only is the meter movement in questiion, but
also the components in the slug and mechanical accuracy of the
sampling line secment. You always have to allow for the worst case,
which migh only show up as 1 in 1000 while the others are much
closer, especially under more controlled enviroments.

10-7 wrote:
>
> People keep refering to the meter movements accuracy , I question the slugs,
> check from one to the next . What good does the meters accuracy mean If my
> slug reads higher than someone elses slug , I guess now there is now 2
> things to consider with regards of accuracy, the meter movement and the
> slug. Again, either you guys dont own more than one slug of the same value
> or even different values to really see what a differance there really are
> between the slugs
>
> --
>
> Barry L. Ornitz wrote in message ...
> >
> >William E. Sabin wrote in message <371B9007.CCDF668A@mwci.net>...
> >>Anthony R. Gold wrote:
> >>> On Sunday, in article <3719A182.52AE00AE@mwci.net>
> >>> sabinw@mwci.net "William E. Sabin" wrote:
> >>>
> >>> > Not so fast!
> >>> >
> >>> > Look at the first meter. At 10 mA the error is 5% and according to the
> >"rule"
> >>> > it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and
> >it
> >>> > should be 8.0%. For the second meter at 25 mA the error is 4.2% and it
> >should
> >>> > be 8.0% if it is a 1% meter.
> >>>
> >>> Why "should" the error of the first meter at 10mA be 18% or at 20mA
> >>> ought the error be 8%, etc.
> >>
> >>If the accuracy is "allowed" to be 3%, then officially it is "allowed" to
> >be 3% of
> >>full scale anywhere on the scale.

> >
> >
> >This is EXACTLY the statement I have been trying to convince Bill of all
> >along. Change the words in his previous posting and things make much more
> >sense. [But I still cannot duplicate his numbers exactly.]
> >
> >>Look at the first meter. At 10 mA the error is 5% and according to the
> >"rule"
> >>it should be 18%, if it is a 3% meter. At 20 mA the error is 1.5% and it
> >>should be 8.0%. For the second meter at 25 mA the error is 4.2% and it
> >should
> >>be 8.0% if it is a 1% meter.
> >
> >The accuracy statement supplied by the manufacturer does not tell you what
> >the error is at any point. It just sets bounds on the error. A corrected
> >wording _might_ be:
> >
> >At 10 mA the actual error is 5%, and according to the manufacturers
> >accuracy statement, it could be as high as 15%, if it is a 3% of full-scale
> >meter. At 20 mA the actual error is 1.5% but it could be as high as 7.5%.
> >For the second mneter at 25 mA, the error is 4.2% but it could be as high
> >as 8%
> >based only on the full scale accuracy of 1%.
> >
> >>Example: A 0 to 100 meter is rated at 3% of full scale. This means that at
> >100 it
> >>"can be" 97 to 103, which is 3% of full scale. But that also means that at
> >20 it
> >>"can be" between 17 and 23, which is not 3% but 15%. Or at 10 it "can be"
> >between
> >>7 and 13, which is 30%.
> >
> >Which is the point Roy Lewallen made.
> >
> >>Any worthwhile 3% panel meter that I have ever worked with is a lot better
> >than
> >>that.
> >>
> >>If a meter *just barely* meets that spec and is no better than that, then
> >as I
> >>said, at lower readings the errors "should be" the larger numbers. That
> >statement
> >>was correct. The cheaper junk meters do exactly that and no more, so that
> >the meter
> >>is not very good except close to full scale.
> >
> >
> >No, at lower readings the errors do not _have_ to be larger numbers. But
> >they _CAN_ be and still meet the full scale specification.
> >

> >>If you read my writeup more carefully, I am saying that meters in practice
> >are not
> >>built that way, and the data that I gave for two old knocked-around meters
> >is a
> >>very good example.
> >>
> >>> I think you have totally missed Roy's point.
> >>
> >>I think you are totally missing my point. The specification is standard
> >practice,
> >>but a meter that does nothing more than meet the bare minimum advertised
> >definition
> >>of "full scale accuracy" is not one that I would buy if I can find
> >something that
> >>goes the extra mile and tries to get a better "average % accuracy" over
> >"most" of
> >>the scale. And you may be sure that I can in fact do just that. Read my
> >post again
> >>(the part that you deleted from your reply).
> >>
> >>The "% of full scale" spec is a tradition, and anyone just barely meeting
> >the spec
> >>will not go to jail, but he will not compete with those who do a much
> >better design
> >>and test job for the same sell price. I'm not talking about $1000
> >laboratory things
> >>in walnut cases, just ordinary $80 taut band panel meters.
> >>
> >>These days an automated test station could take data points (using a
> >computerized
> >>optical reader), calculate a linear regression and the standard
> >deviations, min
> >>and max errors etc. and possibly tweak the meter mechanism (or reject it)
> >in just
> >>15 seconds. The old traditional "% of full scale" spec is a lousy way to
> >do
> >>business since it permits a lousy result.
> >>
> >Which was my contention all along...
> >>
> >>Bill W0IYH
> >>
> >>
> >There is a small enough amount of data here that it can be done by hand.
> >Taking the first meter, for example, we can either fit the best straight
> >line though the data points, or if we assume the meter was properly zeroed
> >first, we can force our calibration to go through zero. Doing the latter
> >gives:
> >>
> > Predicted_Value = 0.97213 * (Meter_Reading)

> >
> >Without forcing the calibration to go through zero gives:
> >
> > Predicted_Value = 0.98537 * (Meter_Reading) + 0.47205
> >
> >If you look at the errors between these predicted values and the actual
> >values, you will still find the worst error at the 5 mA reading. On the
> >10, 20, 30, 40 and 50 mA points on the scale, the above equations come to
> >within 2.5% - an excellent meter. But you cannot read into this data that
> >which is not there. Is the meter nonlinear below 10 mA, or is the 5 mA
> >point just a bad reading? You can say only with further testing, not with
> >this data.
> >
> >But again, with only the 3% of full scale statement to work with, you would
> >never know this. Bill said he had his meter checked against a calibrated
> >Boonton RF voltmeter. So he can say with certainty that his meter is good
> >over the range he checked. Another meter may not be nearly as accurate as
> >his, yet it still meet Bird's 5% of full scale accuracy.
> >
> > 73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net
> >
> >
> >

4283. Re: Ohmite Z28

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904202125280.22162-100000@Stratus.CAM.ORG>
Source record: 71068

On 20 Apr 1999, Hamm4fun wrote:

> Need specs on Ohmite z28 choke. Trying to find sub or wind my own.
>
>
I just did a brief search of some old books and I turned up nothing.
However, Ohmite made a series of RF chokes using that numbering. For
instance the Z-50 was meant for 6meter use, and the Z-144 was intended for
use in 2Meter circuits. So whatever value the Z-28 is, it must be
sufficient inductance for use around 28MHz.

A 1961 Handbook had an Ohmite ad, and a line about the chokes, but no
data. I checked a couple of old VHF books, and nothing there either.
It's the sort of thing that might have turned up in a Hints & Kinks
column, but nothing specific comes to mind other than a vague feeling that
I have seen such information somewhere.

As long as it is being used as an RF choke, the exact value probably isn't
particularly important. A choke is really just an inductor.

The ARRL Radio Amateur's VHF Manual (I have the last two editions and the
piece is in both) had a bit about RF chokes for VHF and UHF use. It gives
some detail about using them, and winding them, and gives a chart with
winding info and inductance:
50MHz 7.8uH to 9.5uH
144MHz 1.4uH to 2.2uH
220MHz 0.5uH to 0.75uH

So one might assume something like 15 to 20uH would be suitable at 28MHz.

Of course, a lot of all band transmitters were built with 1mH or 2.5mH
RF chokes.

Michael VE2BVW

4284. Re: Ohmite Z28

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz+U@dpnet.net>
Message-ID: <nraT2.3268$Bm3.219825@news20.ispnews.com>
Source record: 71069

Hamm4fun wrote in message <19990420170337.00140.00000430@ng60.aol.com>...
>Need specs on Ohmite z28 choke. Trying to find sub or wind my own.

Ohmite Frequency Inductance Core Dimensions
Number Range, MHz Microhenries inches
Z-400 320 - 520 0.20 1/8 long, 5/32 dia
Z-235 160 - 350 0.84 3/4 long, 3/16 dia
Z-144 80 - 200 1.8 3/4 long, 5/16 dia
Z-50 35 - 110 7.0 1 long, 9/32 dia
Z-28 20 - 60 21.0 1-3/4 long, 5/16 dia
Z-14 7 - 35 44.0 2 long, 7/16 dia
Z-7 3 - 20 84.0 6 long, 9/16 dia

The Z-7, Z-14, and Z-28 are wound on a ceramic tube. Those for higher
frequencies are wound on plastic formers.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

4285. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: 10-7 <boygonbad@aol.com>
Message-ID: <YCaT2.43$hU2.3368@news2.voicenet.com>
Source record: 71070
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,alt.ham-radio.mods,rec.radio.amateur.boatanchors

Gary Coffman wrote in message <3728b467.399868377@news.atl.bellsouth.net>...
|>The machining of Bird line section castings isn't very tightly
>controlled (a small difference in insertion depth of the slug makes
>a pretty large difference in the indicated power).

Very true Gary, I have notice this as well with different line sections

4286. Re: Ohmite Z28

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <371D35B3.232376CA@ibm.net>
Source record: 71071

Here is hard to find info on Ohmite Chokes
Ohmite Chokes
Body Color Part # L in Microhenrys MHz Current
? Z-7 84.0 uh 3-20 1.0 A
? Z-14 44.0 uh 7-35 0.6 A
Yellow Z-28 20.0 uH 20-60 0.6 A
Red Z-50 7.0 uH 35-110 1.0 A
Green Z-144 1.8 uH 20-200 1.0 A
Yellow Z-235 0.8 uH 160-350 1.0 A
Blue Z-460 0.2 uH 320-520 1.0 A

Hamm4fun wrote:
>
> Need specs on Ohmite z28 choke. Trying to find sub or wind my own.

4287. Looking for Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: "Gary \"Joe\" Mayfield" <ka0yos@amsat.org>
Message-ID: <7fjic1bpm1@news.dakota.net>
Source record: 71072

I'm fixing a radio for a friend and need to locate a couple of transistors. The 2sc2954 and the 3sk131. The usual generic places (Mouser, JDR, Digikey, MCM) don't carry these RF transistors and there is no SK or ECG cross for them. RF Parts has them, but they also have a $25.00 minimum. Any help for a source would be appreciated!

Thanks and 73,
Joe ka0yos

4288. Re: this is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <924741932.709.90@news.remarQ.com>
Source record: 71073
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Mike Nadeau <mnadeau@gwi.net> wrote in message
news:dN8T2.71$h35.464@newsfeed.slurp.net...
> I have XXX for auction on eBay...
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX>
> Mike - N1ENA

Rec.radio.swap is the proper groups for sale items. Please do not post ebay
stuff in discussion groups.

- 73 Bob W7OV

4289. Re: CMOS Super Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-20 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <924741935.141.9@news.remarQ.com>
Source record: 71074

Justin and Chelly Bennett <cjb@midrivers.com> wrote in message
news:371BEB9E.6B8AF5B2@midrivers.com...
> I inherited the CMOS Super Keyer in a bunch of stuff. Does anyone have
> any information or schematics about this. If so, please e-mail me.

QST had the following articles that may describe what you have:

Oct 81 The CMOS Super Keyer
Nov 90 The Super Keyer II
Aug 95 CMOS Super Keyer 3

- 73 Bob W7OV

4290. Re: To RF gurus: Phase Noise Paradox???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: b_runner@hotmail.com
Message-ID: <371d9fc2.21075725@news.eisa.net.au>
Source record: 70979
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Thank you very much Allan,

this answer saved me some research ;-). The mistake which I made was indeed to try to model noisy oscillator signal as a pure sine wave with linearly superimposed frequency dependent noise. I should have realised, that it is not the case. Now it sounds obvious: If the oscillator is noisy (phase), it cannot be modelled as an infinitely narrow spectrum line with whatever added to it.

On Thu, 15 Apr 1999 04:55:13 GMT,
allan.herriman.hates.spam@fujitsu.com.au (Allan Herriman) wrote:

>Runner,
> The definition of phase noise indicates a measurement relative
>to the total signal power. (IIRC. I used to work on microwave
>synthesisers, but that was a long time ago.)
>
>So no, you can't have phase noise > 0dBc in any bandwidth.
>
>Total signal power is *not* the same as the measured power at the
>carrier frequency. (Although it is an excellent approximation for
>clean signals.) For example, sinusoidal phase or frequency modulation
>with a particular modulation index can cause a deep null at the
>carrier frequency. Total power is still the same, however.
>
>Before anyone flames this and mentions SSB spectra, I should point out
>that this thread is discussing *phase noise*. A carrier phase
>modulated (or frequency modulated) with a real baseband signal will
>always have a symmetric spectrum, as seen on a spectrum analyser.
>
>If the spectrum is asymmetric about the carrier then there is also an
>amplitude modulation component, which plays no part in the measurement
>of phase noise. You must be sure you are not letting AM components
>interfere with your phase measurements. It's impossible to
>distinguish them on a spectrum analyser (as it doesn't measure phase).
>
>As you suggested, you can add up the noise density over a band to get
>the total noise power in that band.
>This is actually an approximation that only works for small values of
>noise. This is called the "small angle approximation".
>If you have large values of noise (from your "crappy oscillator"
>example) then you will get nonsensical results.
>The usual rule of thumb employed by RF engineers is that the total
>phase noise must be < 0.1 radians in the band of interest for the

>approximation to be valid.
>
>This can be explained in two ways:
>
>(1) convert the phase noise density to frequency noise density. Sum
>the frequency noise density over the band of interest to give the
>total frequency noise (called "residual fm" IIRC).
>If the residual fm is not significantly smaller than the noise offset
>frequency, then the small angle approximation doesn't apply.
>In this case, we are trying to measure the phase noise density at an
>offset from the carrier when the carrier is deviating more than the
>offset away from its nominal centre. Thus we get a crappy
>measurement.
>
>(2) View the phasor diagram at
>http://www.wenzel.com/documents/noise.html
>The phase noise phasor component is orthogonal to the carrier phasor.
>Theta is the phase noise due to the phase noise phasor.
>Tan(theta) = noise amplitude / carrier amplitude.
>For small values of theta, we can approximate this by:
>theta = noise amplitude / carrier amplitude.
>This approximation allows us to assume that the phase contribution of
>the noise is a linear function of the noise. Therefore we can simply
>multiply the density by the bandwidth to get the total noise, but only
>if theta ~= tan(theta) is valid. If it's not, we get a crappy
>measurement.
>
>So what do you do if you wish to work with very noisy oscillators?
>I suggest using other metrics, such as frequency noise or Allan
>variance (no relation :)
>
>We should all remember from our lectures (the ones that we shouldn't
>have slept through) that angle modulation is not linear in terms of
>converting baseband spectra to spectra of the modulated signal.
>Amplitude modulation is linear in this sense. Angle modulation is
>approximately linear only for small angles. I think the other posters
>who replied to your post forgot this important snippet of information.
>
>Regards,
>Allan.
>(How many angles fit on the head of a pin? Quite a few if the small
>angle approximation holds.)
>
>On Wed, 14 Apr 1999 01:46:13 GMT, b_runner@hotmail.com (runner) wrote:
>
>>Hello,
>>
>>Am I missing something here? This is the problem:
>>
>> Example: SSB phase noise of an oscillator in 1Hz of bandwidth,

>>relative to carrier:
>>
>> -30dBc/Hz
>>
>>[distance from carrier is irrelevant here, it is probably very close
>>or it is a crappy oscillator ;-)].
>>
>> Is then phase noise in 10kHz of bandwidth
>>
>> +10dBc/10kHz ?
>>
>>I used the usual 'bandwidth noise power' scaling: 10logB. Can there be
>>more phase noise than actual carrier power? This seems
>>counterintuitive to me.
>>
>>Thanks for any insights...
>>
>>
>

4291. U664 (SIL) pinout?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: ppirotte@ulb.ac.be
Message-ID: <ppirotte-2104991434040001@rmnmac5.ulb.ac.be>
Source record: 70980

I'm busy with an home made synthesiser (70 to 100MHz, 10Hz step) for a
future decametric TRX. I need a prescaler for the last PLL loop. Visiting
one of my local dealer I've found a U664 (divider by 64). Unfortunately,
this chip isn't cased in the usual 8 pins DIL case. It uses a 6 pins SIL
case I never saw before (at least for the U664).
Does anybody know the pinout of this U664 (6 pins SIL)?

Thank you in advance.

ON4KPA
Pascal

4292. Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Doug Snowden <dsnowden@ncdc.noaa.gov>
Message-ID: <371DF090.F21CDE6C@ncdc.noaa.gov>
Source record: 70981

What is considered to be the norm lifespan for a cool running
electrolytic?
i.e., a 450v 450uf electrolytic used in a power supply?

Doug N4IJ

4293. Wtd MFJ & Bencher CW Stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Gregg E <Gregg.E@worldnet.att.net>
Message-ID: <7fkv76$h0i$1@bgtnsc01.worldnet.att.net>
Source record: 70982
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I Am Looking For The Following Items Preferably To Trade.
I Have Many Items I Can Trade For Please Let Me Know What You Have & What
You Might Be Interested In.
I Have Items From
Amateur Radio
Shortwave Radio
Metal Detectors
Fishing
Scanners (HandHeld & Desktop)
Automotive
Some Nice 11 Meter SSB Equiptment
And Much More....

MFJ462B Multi-Reader

MFJ 493 Menu Driven Memory Keyer With 32K Memory
MFJ-1315,
MFJ-79, full function Remote Control.
MFJ-551,
MFJ-5409,
MFJ-5425,
MFJ 452 Morse Keyboard With LCD Display
MFJ 451 Morse Keyboard
MFJ 414 Professional Classroom Tutor & Keyer (Maybe)

Only Need One Of The Following
MFJ Pocket Morse Tutor
MFJ 411
MFJ 418

Only Need One Of The Following
Bencher Keyer
BY-1 Black Base (Paddles)
BY-2 Chrome Base (Paddles)

Thanks W5IDX Houston

--
W5IDX@worldnet.att.net

4294. DTC143TK datasheet/specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: pmarkham@newsguy.com
Message-ID: <7fksnt$p2c@news2.newsguy.com>
Source record: 70983

I am looking for a a web source of datasheets, specifications or characteristics of a dtc143tk and related semiconductors. So far, with my searches I have failed to gain any info of relevence about the specific device specs.

Pete/wa4hei

4295. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <371E066A.651A@pop.valley.net>
Source record: 70984

Doug Snowden wrote:
>
> What is considered to be the norm lifespan for a cool running
> electrolytic?
> i.e., a 450v 450uf electrolytic used in a power supply?
>
> Doug N4IJ

Hello--

That's a difficult question to answer-- it depends on ripple current, ambient temperature, and how well the capacitor was manufactured to begin with.

I'd guess at a five- to ten-year lifespan (maybe longer, depending on how often you use the equipmen73,
Brad AA1IP

4296. Re: TEK 1502 and antenna measurment?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <gMqEWTAVTRH3Ewpn@g3uda.demon.co.uk>
Source record: 70985

In article <371A6A54.2CF0CEA5@teleport.com>, Roy Lewallen
<w7el@teleport.com> writes
>Ken Linney wrote:
>
>>. . .
>> Certainly the 1502 is a nice instrument. From what you said
>> above I guess simple accessment of the characteristic impedance of an
>> unknown coax for example could be deduced by terminating the end of the
>> cable under investigation with a variable pure "R" and watch for the
>> reflections to disappear when you aceive "match" conditions. Then read
>> off the "R" value.
>>. . .
>

{Roy W7EL wrote}
>Yes, that's correct, that method works well. It's best to use a small
>trimpot to minimize the stray inductance.
>
>You'll get interesting results if you try this method with twinlead,
>though. I sometimes taught a class in TDR use, and began the class
>with a little demonstration. (I've described it previously on this
>newsgroup, so skip it if you've heard it before.)

[Snipped]

Hello Roy

Now I have learned something there. I have even tried out the
experiment. Yes its fascinating to watch the "magic" of it.

Going back to my earlier wrong notion! of being able to eek out
meaningful antenna measurements, I have found a old TEK application
notes at work (AX-3241-1) which has a section entitled
"Component/Antenna Testing" but really it only suggests that profiles of
original correct antennas setups be printed out on the chart recorder
and then if there is a future problem you can at least compare "faulty"
profile with the original. It does make the statement however in
relation to interpretation of an antenna signature:

" ... may not be a simple one and it may be quite difficult to
evaluate it analytically. That is to say unless one is clever, it is
difficult to look at a "bump" on a TDR signature and state. "Oh yes. The
third dipole of that antenna is 2.7 inches too long" ... It then says:

"NOTE: An expert can make such statements". Must be a strange array
(Koomans! having a 3rd dipole ;-)

So this certainly backs up all you state Roy. Its darned interesting stuff. Probably knowing the step time, amplitude and relating it back to a set of Fourier series tables a bit more could be revealed but its messy and certainly was never intended to be used in this way.

BTW I have used TDR's for checking center-conductor brazes on coax routes as well as locating "split" pairs, diss'es & shunt faults. We always required two TDR types generally for the copper network, one for short-range up to the loading coil and another instrument that could "look" through "loaders"

Anyway - an interesting experiment and thanks for your time and expertise Roy.

73 Ken

4297. REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: "Thomas T. Veldhouse" <veldy@visi.com>
Message-ID: <jApT2.113$WA4.15916@ptah.visi.com>
Source record: 70986
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

Honker's ale is a pale ale made by Goose Island Brewery in Chicago. Has anybody tasted it and does anybody have an all grain recipe that can approximate it? I have not been able to determine what hops were used in particular.

Please answer to my email as well as the newsgroup if possible.

Thanks in advance,

Tom Veldhouse
veldy@visi.com

4298. Re: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: "Thomas T. Veldhouse" <veldy@visi.com>
Message-ID: <DBpT2.114$WA4.15936@ptah.visi.com>
Source record: 70987
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

I apologize, wrong newsgroup.

Tom Veldhouse
veldy@visi.com

Thomas T. Veldhouse wrote in message ...
>Honker's ale is a pale ale made by Goose Island Brewery in Chicago. Has
>anybody tasted it and does anybody have an all grain recipe that can
>approximate it? I have not been able to determine what hops were used in
>particular.
>
>Please answer to my email as well as the newsgroup if possible.
>
>Thanks in advance,
>
>Tom Veldhouse
>veldy@visi.com
>
>

4299. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <371E28D8.6E2E@ixpres.com>
Source record: 70988

Doug Snowden wrote:
>
> What is considered to be the norm lifespan for a cool running
> electrolytic?
> i.e., a 450v 450uf electrolytic used in a power supply?
>
> Doug N4IJ

Doug OM,

I am using several in various rigs, which are 1956 and older manufacture dates. All original caps in two DX-100B'S for example. Also several in various power supplies that I have, 450 V caps, at least 40 years old. I recently fired up an SB-220 Heathkit amp that had sat unused for maybe a decade or more; all electrolytic caps were OK. The lifespan of electrolytic caps is determined by the evaporation rate of the electrolyte. This is calculated using the Ahrrenious (sp?) equation, which is a standard chemical equation used to relate evaporation rates to vapor pressure and temperature (I think). The temperature of the cap is dependent on the environmental temp where it is located in a cabinet, as well as the ripple current and equivalent series resistance (ESR), which causes I^2R losses in the cap. If you want complete info, just contact any of the major capacitor manufacturer's engineers. They can supply you with more complete information. The info may even be on one of their web pages. Have you looked?

73,
Don, W6JL

4300. Looking for info - R-1500 Multiplex Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Dave Heil <dheil@SPAMNOT.iname.com>
Message-ID: <7fl9f0slg1@fir.prod.itd.earthlink.net>
Source record: 70989

-----BEGIN PGP SIGNED MESSAGE-----

Hi,

I am looking for some info on a Browning Labs Multiplex Receiver Model R-1500. If you know anything about this please let me know. I am thinking about gutting the chassis and using the parts. I would hate to do this to something cool.

Thanks,

Dave

- --
Valid Spam Targets:
fraud@ftc.gov
uce@ftc.gov
tosspam@aol.com
dobrobird@aol.com
postmaster@digital.intersponse.com
*****
-----BEGIN PGP SIGNATURE-----
Version: PGP 6.0.2

iQCVAwUBNx4pGU0Jo2u9Iuf9AQG8ogP+JGTe7ciXd9lpfor0eveFtJuWDQIaK5c6
4478KHimZXNQitv1YH2R485iDzlOB+fsjSbVFY/ftxnU7ZO7JYjIWlbeqCiQuPNJ
v3Z7dTPLvsfgrGX1gq/DV2EKB0ZnlLI6xhXSUZ+xsNSxfsIcHrhqX+4zn88qmPWv
1sCrzVz1FGc=
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-----END PGP SIGNATURE-----

4301. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: real.address@bottom.of.message
Message-ID: <real.address-2104991534430001@dyna8.sesp.nwu.edu>
Source record: 70990
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

In article <jApT2.113$WA4.15916@ptah.visi.com>, "Thomas T. Veldhouse"
<veldy@visi.com> wrote:

> Honker's ale is a pale ale made by Goose Island Brewery in Chicago. Has
> anybody tasted it and does anybody have an all grain recipe that can
> approximate it? I have not been able to determine what hops were used in
> particular.

Hops are Styrian Goldings, all the way through.

Grain bill goes something like this (this is a distillation to 5 gallons
from the actual recipe page at the brewery, BTW):

Pale malt, 70%
Crystal 60, 20%
Wheat malt, 7%
roast barley, 3%

OG about 1.044

30 min @ 145F
30 min @ 155F

10 min. mashout

The hop bill I never got scaled dow correctly. For a 50bbl batch, it was
7 lbs. in the kettle, and 44 lbs. in the whirlpool.

Try about an ounce and a half, maybe two in the kettle, 4 or 5 ounces as a
late addition, like 5 minutes before the end of the boil.

Or steep the whole mess while the beer is chilling.

Good Luck!

--
Andrew D. Ager
Chicago, IL
andrew-ager at nwu dot edu

4302. PIC info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Chris Gryffenberg <gryffie@yebo.co.za>
Message-ID: <7fldr6bal1@news3.saix.net>
Source record: 70991

Thank you for reading this message.

I am looking for info on how to use and implement PIC IC's and program them.
Do you have info.
Please direct me so I can learn.

73 de
Chris

4303. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be8c85$ce2f54e0$6be6abc3@default>
Source record: 70992

To predict the reliability of complex electronic equipment
designers refer to tables of the reliability of individual
components. Reliability is measured in terms of MTBF =
Mean Time Between Failures.

For example the reliability of an electrolytic capacitor
might be stated as MTBF = 100,000 hours. A 100-watt
light bulb may have MTBF = 5000 hours. A 100-ohm 0.5
watt resistor MTBF = 500,000 hours, etc.

IEEE and IEE will certainly know where such tables may be
obtained. The likelihood of failure of space missions are
predicted from such tables, the reliability of every
individual component being taken into account. The tables
are kept to date and data amended to into account latest
reports from the field or from laboratory accelerated life
tests.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Doug Snowden <dsnowden@ncdc.noaa.gov> wrote in article
<371DF090.F21CDE6C@ncdc.noaa.gov>...
> What is considered to be the norm lifespan for a cool
running
> electrolytic?
> i.e., a 450v 450uf electrolytic used in a power supply?
>
> Doug N4IJ
>
>
>

4304. Re: Broadband VCOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <371E4788.3774@pop.removethistomailme.net>
Source record: 70993

Jï¿½rgen Kragh wrote:
>
> I am building a spectrum analyzer, so I am looking for a good schematic
> of a VCO tunable from 900 MHz to about 2000 MHz. I have tried some
> schematics from VHF Communications, but the VCO is so noisy, that I only
> have about 40 dB dynamic range. Dose anybody know how to bulid a goos,
> i.e ,low noise VCO ??
>
> (OK I could call Mini-Circuits and buy one, but that is not so funny).
>
> best 73s
>
> Jorgen, OZ7J

It is tough to get good phase-noise performance from a single VCO with such a broad tuning range. You should consider breaking the problem down to use several discrete VCOs. Also look at how commercial analyzers work: typically there is a YIG oscillator running from 2-4 GHz with a correspondingly-high (2 GHz or so) first IF. The YIG is driven by a low-noise op amp (e.g. an OP27 or similar-grade part followed by one or more power transistors and temperature-stable power resistors for V->I conversion), with carefully filtered control lines.

The good news is that once you have a wide-range local oscillator working cleanly, you'll find all the rest of the R&D in your project trivial by comparison. :)

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

4305. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: skablazr@astro.temple.edu
Message-ID: <371e4d92.26465027@netnews.temple.edu>
Source record: 70994
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

On Wed, 21 Apr 1999 15:34:43 -0500, real.address@bottom.of.message
(Andrew D. Ager) wrote:

>The hop bill I never got scaled dow correctly. For a 50bbl batch, it was
>7 lbs. in the kettle, and 44 lbs. in the whirlpool.
>
Honker's comes in at 38 IBU. With the ratio you presented, it's about
14% of the total hop bill for the boil and 86% at the end.

Assuming a five gallon batch size and 5% aa Styrians, that's about 2
ounces for the boil and a whopping 12 ounces at the end. Ouch!

Here's the formula I used (from the article in BT) for the first hop
addition:

Weight of hops= IBU * Batch Size / Alpha Acids * 7490 * Utilization

Wtith these givens:

IBU = 38
Batch Size = 5 gallons
A.A. = 5%
Utilization factor = 26%

Hope this helps.

-Bryan

4306. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: rick@area.com
Message-ID: <7flvek$a91$1@vax.area.com>
Source record: 70995
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7fabr7$r2v$1@plutonium.btinternet.com>,
David Cunningham <D.L.C@btinternet.com> wrote:
>>Thanks for your reply. I dont really need an extra television, I want to
>convert the monitor just for fun. I think that I have all that I need with
>the TV tuner, I tried connecting the comp. video output to the scart socket
>of a television, and all was well. I was particularly careful when
>dismantling the VCR to save all of the circuitry I needed for this purpose.
>What I was thinking of was to make some circuit which would split the
>composite video signal into separate R,G,B and horizontal/vertical sync.
>pulses. Im not too bothered if the picture isn't perfect. If anyone has the
>pinout of the monitor plug, i.e. a 9 pin D type, I would be grateful if they
>could send me the info. Perhaps I could obtain an IC which would decode the
>comp. video signal? I would appreciate any suggestions.
>73 de John.

In case anyone is interested, I have an NTSC to RGB converter board
that I would be willing to let go for a reasonable price. It was
originally written up in Radio Electronics in 1990. I used it to
view TV programs on my 21 inch Conrac monitor.

Rick Karlquist N6RK
rick@area.com

4307. Re: Broadband VCOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: rick@area.com
Message-ID: <7flvkj$ad6$1@vax.area.com>
Source record: 70996

In article <371DAF9C.340C3F18@tst.dk>,
=?iso-8859-1?Q?J=F8rgen?= Kragh <jk@tst.dk> wrote:
>I am building a spectrum analyzer, so I am looking for a good schematic
>of a VCO tunable from 900 MHz to about 2000 MHz. I have tried some
>Jorgen, OZ7J

See the March 1999 RF Design magazine for an excellent article on
VCO design by Koji Harada of Hewlett Packard. The oscillator in
the article is state of the art.

Rick Karlquist N6RK
rick@area.com

4308. Re: Ohmite Z28

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <7fm0s4cnj1@nntp2.atl.mindspring.net>
Source record: 70997

They ALL are RFC's for each intended band. Sparks

Michael Black wrote in message ...
>
>
>On 20 Apr 1999, Hamm4fun wrote:
>
>> Need specs on Ohmite z28 choke. Trying to find sub or wind my own.
>>
>>
>I just did a brief search of some old books and I turned up nothing.
>However, Ohmite made a series of RF chokes using that numbering. For
>instance the Z-50 was meant for 6meter use, and the Z-144 was intended for
>use in 2Meter circuits. So whatever value the Z-28 is, it must be
>sufficient inductance for use around 28MHz.
>
>A 1961 Handbook had an Ohmite ad, and a line about the chokes, but no
>data. I checked a couple of old VHF books, and nothing there either.
>It's the sort of thing that might have turned up in a Hints & Kinks
>column, but nothing specific comes to mind other than a vague feeling that
>I have seen such information somewhere.
>
>As long as it is being used as an RF choke, the exact value probably isn't
>particularly important. A choke is really just an inductor.
>
>The ARRL Radio Amateur's VHF Manual (I have the last two editions and the
>piece is in both) had a bit about RF chokes for VHF and UHF use. It gives
>some detail about using them, and winding them, and gives a chart with
>winding info and inductance:
> 50MHz 7.8uH to 9.5uH
> 144MHz 1.4uH to 2.2uH
> 220MHz 0.5uH to 0.75uH
>
>So one might assume something like 15 to 20uH would be suitable at 28MHz.
>
>Of course, a lot of all band transmitters were built with 1mH or 2.5mH
>RF chokes.
>
>
> Michael VE2BVW
>
>

4309. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <371E857D.2984@northwest.com>
Source record: 70998

just because caps have old date codes and "still work" doesnt mean they won't fail. i replaced the filter caps in my HP-608 sig generator with Xicon units (from Mouser). the old filter caps have dte codes from 1957. i noticed 60 Hz hum on the RF signal, and decided to replace **all** the filter caps. no more hum on the signal.

the newer metal can electrolytics can last some 10+ years. the older monster-sized electrolytics had a much thicker dielectric. to accomodate the thicker dielectric, the caps had to be made bigger. they lasted for decades but now no one manufactures them.

4310. FS;National Vernier Dial

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19990420205401.13855.00003687@ng-fa1.aol.com>
Source record: 71075

For Sale;
New in the original box- National Velvet Vernier Dial model ICN. This looks like a VFO dial with the Blank paper to write your frequencies on for your homebrew transmitter or receiver. It is complete with hardware and dial lights. It looks like the half round type, not rectangular. It is similar in size and looks to a Johnson transmitter VFO dial (ranger, valiant) except it is black.
$50 shipped cont. U.S.
Tnx,
Jim W3ATV

4311. Re: FA: Collins Mechanical Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: crabtreejr@aol.com
Message-ID: <19990421002506.16050.00003447@ng-fr1.aol.com>
Source record: 71076

Mike Nadeau" <mnadeau@gwi.net>, N1ENA, wrote on Tue, Apr 20, 1999:

>I have two Collins mechanical filters for auction on eBay...
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=93469306
>http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=93472073

These are voice multiplex sideband filters, carrier frequencies 76 and 92kHz respectively.

John Crabtree

4312. Broadband VCOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Jørgen Kragh <jk@tst.dk>
Message-ID: <371DAF9C.340C3F18@tst.dk>
Source record: 71077

I am building a spectrum analyzer, so I am looking for a good schematic of a VCO tunable from 900 MHz to about 2000 MHz. I have tried some schematics from VHF Communications, but the VCO is so noisy, that I only have about 40 dB dynamic range. Dose anybody know how to bulid a goos, i.e ,low noise VCO ??

(OK I could call Mini-Circuits and buy one, but that is not so funny).

best 73s

Jorgen, OZ7J

4313. Broadband VCOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-21 00:00:00 UTC
From: Jørgen Kragh <jk@tst.dk>
Message-ID: <371DAFEB.11DD39A8@tst.dk>
Source record: 71078

I am building a spectrum analyzer, so I am looking for a good schematic of a VCO tunable from 900 MHz to about 2000 MHz. I have tried some schematics from VHF Communications, but the VCO is so noisy, that I only have about 40 dB dynamic range. Dose anybody know how to bulid a goos, i.e ,low noise VCO ??

(OK I could call Mini-Circuits and buy one, but that is not so funny).

best 73s

Jorgen, OZ7J

4314. Re: Measuring noise on DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990422164342.14283.00000836@ng-cs1.aol.com>
Source record: 70929

>
>Can someone suggest a method for measuring microvolt level noise
>on DC power supply lines? Is this a direct measurement? or is
>there an indirect method of doing this?
>
>Since the noise on the supply line of a vco will cause additional
>noise in the vco rf output spectrum it would be convenient to be
>able to measure this noise separately before the supply is connected
>to the vco.
>
>Some of the new LDO regulators designed for the "wireless" market
>are claiming very low levels of noise on the output. I'd like to be able
>to measure this noise directly-if possible-or indirectly if that is
>more practical.
>
>Chip, NW0O

I have had some success (And some surprises) measuring it with a selective voltmeter and a good quality high value capacitor to block the DC . A Mylar with several uFarads and suitable voltage rating seems to do pretty well. Set the voltmeter to a narrow bandwidth and measure down close to the limiting bandwidth of the filter in use. In the case of the 3 terminal regulators, even decoupled as recommended, it gets pretty bad. Particularly around 10-15 KHz. A well bypassed 723 is VERY much an improvement, and unfortunately, the old Motorola 1566 (No longer manufactured) was the best of the lot!

W4ZCB

4315. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <pEGpKEA5x1H3Ewp$@ifwtech.demon.co.uk>
Source record: 70930

JohnsonHE wrote:
>Used to be a rule of thumb that you cut
>the life in half for every 10 degree Centigrade rise in operating temperature.

It still is. It's also a function of ripple current, which determines the internal temperature rise above the outside ambient temperature.

These figures are for the Panasonic TS-UP series of capacitors. So-called "long life" capacitors should do better, but the *relative* trends of life vs temperature vs ripple are probably very similar.

Temperature %ripple[1] Expected life (thousands of hours)
deg C

+45 0 45
+45 100 25
+65 0 11
+65 100 7.5
+85 0 3
+85 100 2 [2]

[1] %ripple = (actual ripple current) / (specified max ripple current at 85C)

[2] 2000 hours is the specified minimum expected life at the maximum rated temperature and ripple current.

Comparing 0%-0%-0% or 100%-100%-100%, the expected lifetime decreases to approximately one-quarter for every 20C rise in external temperature, which is pretty close to one-half per 10C.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4316. Yaesu HT PC-serial Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Justin Davis <JustinDD@usa.net>
Message-ID: <371F9233.5E1E4BD@usa.net>
Source record: 70931

Does anyone know how to make the guts on the PC connector end of one of these? The crap is so small I can't even read the part numbers...

4317. Yaesu Radio to PC Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Justin Davis <JustinDD@usa.net>
Message-ID: <371F9383.3A29E4CC@usa.net>
Source record: 70932

Anyone know how to make it...? Please e-mail me and post to group.

4318. Looking for info on STANDARD

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Michael Harbour <mharbour@netdoor.com>
Message-ID: <371F9864.AF5C9A2@netdoor.com>
Source record: 70933

Looking for info on the person or business that handles Standard Radio products. I need a belt clip for the Standard C156A HT with screws, and also looking for tx/rx mods for this radio.

4319. Re: Measuring noise on DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <371F99E8.6B@pop.removethistomailme.net>
Source record: 70934

Chip Owens wrote:
>
> Can someone suggest a method for measuring microvolt level noise
> on DC power supply lines? Is this a direct measurement? or is
> there an indirect method of doing this?
>
> Since the noise on the supply line of a vco will cause additional
> noise in the vco rf output spectrum it would be convenient to be
> able to measure this noise separately before the supply is connected
> to the vco.
>
> Some of the new LDO regulators designed for the "wireless" market
> are claiming very low levels of noise on the output. I'd like to be able
> to measure this noise directly-if possible-or indirectly if that is
> more practical.
>
> Chip, NW0O
>
> --
> Chip Owens (owens@atd.ucar.edu)

An ordinary scope (as someone else suggested) is not really useful for looking at noise voltages at these levels. I've resorted to simply using the power supply in question to drive the tuning line of a VCO, looking at the VCO output in a narrow RBW on a spectrum analyzer. That will give you an idea of the worst-case power supply contribution to phase noise.

You can take the VCO's own phase noise into consideration by temporarily adding a massive RLC filter to the tuning line (choke and resistor feeding a 10 uF/.1uF/100 pF combo...), or by replacing the power supply with a 9V battery. Although on the latter point, I have heard some people claim that batteries are not as "quiet" as you would think. I don't think I've ever noticed any excess noise from batteries, so... YMMV.

In my (limited) experience, the pecking order of power-supply noise looks like this:

- 78xx 3-terminal regulator (worst)

- Bypassed zener diode alone (MUCH better than 78xx any day of the week)

- Bypassed zener diode with OP27 or similar voltage follower

- 723 voltage regulator

- 9V battery (RC filtered for paranoia's sake)

The last three are, or at least can be, about the same. I'd be curious myself to hear any other perspectives or corrections -- this stuff can get weird.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

4320. Re: PIC info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7fo6n6mur1@scotty.tinet.ie>
Source record: 70935

Chris Gryffenberg wrote in message <7fldr6bal1@news3.saix.net>...
>Thank you for reading this message.
>
>I am looking for info on how to use and implement PIC IC's and program
them.
>Do you have info.
>Please direct me so I can learn.
>
>73 de
>Chris
>

Have a look at www.microchip.com

73, Ed. EI9GQ

4321. Variable glass transmitting capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Rob Parker <rparker@sprint.ca>
Message-ID: <lbNT2.112685$Mb.41933704@newscontent-02.sprint.ca>
Source record: 70936

I have 3 glass envelope transmitting capacitors.
Range 5-500PF
5KV at max CAP
10KV at min CAP
Will consider any interesting trades or offers.

Rob
VE3RPF

4322. Re: PIC info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <371FCB89.BF9F5EBE@home.com>
Source record: 70937

From Jack
In addition to www.microchip.com, get a copy of Circuit Cellar Ink and look at the various suppliers of PIC and STAMP variants, with their assorted programmers. You might also want to attend one of their seminars - you get a discounted rate on a programmer, all the software, and a 16C84 (I think) to play with. These people are pretty user friendly.

Chris Gryffenberg wrote:

> Thank you for reading this message.
>
> I am looking for info on how to use and implement PIC IC's and program them.
> Do you have info.
> Please direct me so I can learn.
>
> 73 de
> Chris

4323. Re: Measuring noise on DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <371FCC8A.B9BB0BFF@home.com>
Source record: 70938

They are pretty quiet, though. If I recall, we used a lead-acid battery as a final filter on a power supply in solid-state physics lab many years ago.

John Miles wrote:

> Chip Owens wrote:
> >
> > Can someone suggest a method for measuring microvolt level noise
> > on DC power supply lines? Is this a direct measurement? or is
> > there an indirect method of doing this?
> >
> > Since the noise on the supply line of a vco will cause additional
> > noise in the vco rf output spectrum it would be convenient to be
> > able to measure this noise separately before the supply is connected
> > to the vco.
> >
> > Some of the new LDO regulators designed for the "wireless" market
> > are claiming very low levels of noise on the output. I'd like to be able
> > to measure this noise directly-if possible-or indirectly if that is
> > more practical.
> >
> > Chip, NW0O
> >
> > --
> > Chip Owens (owens@atd.ucar.edu)
>
> An ordinary scope (as someone else suggested) is not really useful for
> looking at noise voltages at these levels. I've resorted to simply
> using the power supply in question to drive the tuning line of a VCO,
> looking at the VCO output in a narrow RBW on a spectrum analyzer. That
> will give you an idea of the worst-case power supply contribution to
> phase noise.
>
> You can take the VCO's own phase noise into consideration by temporarily
> adding a massive RLC filter to the tuning line (choke and resistor
> feeding a 10 uF/.1uF/100 pF combo...), or by replacing the power supply
> with a 9V battery. Although on the latter point, I have heard some
> people claim that batteries are not as "quiet" as you would think. I
> don't think I've ever noticed any excess noise from batteries, so...
> YMMV.
>
> In my (limited) experience, the pecking order of power-supply noise
> looks like this:
>
> - 78xx 3-terminal regulator (worst)

>
> - Bypassed zener diode alone (MUCH better than 78xx any day of the week)
>
> - Bypassed zener diode with OP27 or similar voltage follower
>
> - 723 voltage regulator
>
> - 9V battery (RC filtered for paranoia's sake)
>
> The last three are, or at least can be, about the same. I'd be curious
> myself to hear any other perspectives or corrections -- this stuff can
> get weird.
>
> -- jm KE5FX
>
> ----------
> Note: My E-mail address has been altered to avoid spam
> ----------

4324. Re: this is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7fo8vehmj1@autumn.news.rcn.net>
Source record: 70939
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Sadly, Mike, it is the same clowns who ruined
Rec.Antique.Radio+Phono. After being a contributor
there for three years, I finally gave it up because of
the growing commercialism. Some folks just don't
believe in netiquette, or reading the group charters.

Peter

>rec.radio.amateur.homebrew is not about buying and selling. It's for
>discussion of building your own radio equipment. There's been a tiny bit
>of debate about whether forsale ads should be allowed, but the pivot point
>is over whether on-topic items (ie components and perhaps related test
>equipment) should be allowed, not over whether any ads should be welcome.
>
>rec.radio.amateur.boatanchors was set up to discuss the old stuff. I
>remember the debate when it was created about whether forsale ads should
>be allowed, and eventually it was decided that they would be allowed, but
>only in a secondary fashion. In other words, a few ads would be okay, but
>it wasn't the primary purpose of the newsgroup.
>
>Sadly, ads do tend to dominate the group. I sincerely question what kind
>of hobby it is that people are more interested in buying and selling the
>stuff than talking about it> Michael VE2BVW
>

4325. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <371FAC52.30D31AF@starc.org>
Source record: 70940

Hi All,

E-Bay ad's are fine... so long as they have "FA:" in the subject line... so those who wish may
ignore them, and those who like e-bay and read them... downloading a msg header is NP... pausing to read a message this is an auction and not a for sale/swap is an annoyance .... to
me anyway :)

--Tom
KB1CGA

Lyman K Duggan wrote:

> In article <S0tM2.18$UR6.30@axe.netdoor.com>, "Tom C. Brown, Jr." <mmc@netdoor.com> wrote:
> >I agree.
> >
> >
> >Dave Martindale wrote in message <7dtkqi$3lm@groucho.cs.ubc.ca>...
> >>kf4fdj@amsat.org writes:
> >
> >[Text removed]
> >
> >>
> >>If I wanted to look at equipment that is being auctioned on Ebay, I'd
> >>look on Ebay. But I'm not, so all these Ebay posts are just a waste
> >>of Usenet for me.
> >>
> We are in the Ham Radio Business and have been for several years.
> The ham business has really declined since the internet became popular.
> We are going to clear some stock on ebay.
> The intent is to auction off items on a regular basis ie: each week
> I have placed some announcements on the ham groups like this>
>
> <<Audio Booster for your HT
> We intend to auction off at least one each week on ebay
> www.ebay.com
> search for "audio booster"
> hve fun bidding
> 73>>
>
> So far we have about 15 happy hams and more each week as they
> are getting these at about half price.
>

> Other items are:
>
> 440 whip antennas
> boom mics on a headset
> 35 watt HT linears
> earbud and ptt mike for Icom HT's
>
> The URL of course changes for each new listing so the search is required to
> find each new listing.
>
> Is this inappropriate or a service to the group?
>
> 73,
>
> Lyman K Duggan
> Naval electonics inc
> 6717 Benjamin Road
> Tampa Florida 33634
> --Marine TV Antenna Systems--
> (813) 885 6091 fax 885 3789
> http://www.naval.com

4326. Re: Measuring noise on DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be8d5d$54817dc0$1f3bac3e@default>
Source record: 70941

HF noise on a DC supply is easily got rid of with a few
microhenrys and a 0.01 uF disc-ceramic capacitor.
--
Reg.

4327. MRF 412 Specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7fofl0bkd1@news2.bit-net.com>
Source record: 70942
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am considering the purchase of a "Brute" model
HF amp for conversion to 6 meters. It runs a pair
of MRF 412's.

The MRF 412 does not appear on the Motorola
on-line specifications site.

Is this device suitable for all-mode use to 150 watts
or better (as a pair with 10-15 watts drive) on 6m?

Thanks! & 73,
~~~
���
\ ~ / .... DavidC K1YP@qsl.net
~~~

4328. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <371FC810.6E7683AF@att.net>
Source record: 70943
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

Ah! The art of brewing your own 807s!

Perhaps rec.radio.... is a bit off topic???

Woody

Joel_Plutchak wrote:
>
> In article <_qFT2.243$WA4.46150@ptah.visi.com> "Thomas T. Veldhouse" <veldy@visi.com>
writes:
> >I am personally not 100% comfortable with dry hopping because of the
> >increased chances of infection.
>
> Is there any solid research that indicates how much dry hopping
> increases the chance of infection? My own anecdotal evidence (i.e.,
> not-scientifically rigorous experience) suggests dry hopping has
> no effect on infection rate.
>
> >However, I have tasted a few brews where dry hopping makes a
> >great beer.
> --
> Joel Plutchak
>
> "I believe that some of the best beers being made today are brewed in
> people's homes." - Jim Koch, owner of the Boston Beer Company

--

---------- de Woody, WB4QXE ----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

4329. Wtd: Keys & Keyer & CW Accessories & CW Reader

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <7fosp0pqp1@bgtnsc02.worldnet.att.net>
Source record: 70944
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap

I Am Looking For The Following Items To Purchase Or Trade For.
I Don't Need All Of This.
These Are Some Of The Models I Will Be Interested In.
If You Have Anything Along These Lines Please E-Mail Me.
73's W5IDX Houston

AEA MM-3 MorseMatic Electronic Keyer

Or

MFJ 493 Menu Driven Memory Keyer
MFJ-1315,
MFJ-551,
MFJ-5409,
MFJ-5425,
MFJ-79,

MFJ462B Multi-Reader

MFJ 452 Morse Keyboard With LCD Display
Or
MFJ 451 Morse Keyboard

MFJ 414 Tutor & Keyer

Only Need One Of The Following

Bencher Or Vibroplex Iambic Paddles
BY-1, By-2 etc.
Also 1 Straight Key

I Have Many Items I Can Trade For Please Let Me Know What You Have & What
You Might Be Interested In.

--
W5IDX@worldnet.att.net
Gregg.E@worldnet.att.net

4330. Re: PIC info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <371f54b2.0@news.netwalk.com>
Source record: 70945

Chris Gryffenberg wrote in message <7fldr6bal1@news3.saix.net>...
>Thank you for reading this message.
>
>I am looking for info on how to use and implement PIC IC's and program
them.
>Do you have info.
>Please direct me so I can learn.
>
>73 de
>Chris
>
>

There are many, many web sites that discuss PIC controllers. Here are a few
of them:

http://www.microchip.com/ They make the things

http://www.isc-durant.com/nolan/article.htm How to program the PIC

http://www.picnpoke.com/

Jim
N8EE

4331. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFAnIMD.Lx5@netcom.com>
Source record: 70946
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7flvek$a91$1@vax.area.com>,
Richard Karlquist <rick@area.com> wrote:
>In article <7fabr7$r2v$1@plutonium.btinternet.com>,
>David Cunningham <D.L.C@btinternet.com> wrote:
>>>Thanks for your reply. I dont really need an extra television, I want to
>>convert the monitor just for fun. I think that I have all that I need with
>>the TV tuner, I tried connecting the comp. video output to the scart socket
>>of a television, and all was well. I was particularly careful when
>>dismantling the VCR to save all of the circuitry I needed for this purpose.
>>What I was thinking of was to make some circuit which would split the
>>composite video signal into separate R,G,B and horizontal/vertical sync.
>>pulses. Im not too bothered if the picture isn't perfect. If anyone has the
>>pinout of the monitor plug, i.e. a 9 pin D type, I would be grateful if they
>>could send me the info. Perhaps I could obtain an IC which would decode the
>>comp. video signal? I would appreciate any suggestions.
>>73 de John.
>
>In case anyone is interested, I have an NTSC to RGB converter board
>that I would be willing to let go for a reasonable price. It was
>originally written up in Radio Electronics in 1990. I used it to
>view TV programs on my 21 inch Conrac monitor.

And Harmonic Research is still around, although at a different address.
Their web site is http://www.hrx.com . Boy, the prices have gone up
a lot, though.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

4332. Re: Anyone one have info on BB104 or MV1662 diodes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <371f537b.0@news.netwalk.com>
Source record: 70947

Linda Jarvis wrote in message <371e7c66.4420068@news.mindspring.com>...
>Does anyone have capacitance vs. voltage data for these two varactor
>diodes?
>
>Thanks in advance!
>
>Lee Jarvis - KN4VN
>
>

Many of the semiconductor companies have on-line data books. In fact, the paper data book, that many distributors used to give away, are becoming a thing of the past.

If you know who made them, check on their web site. I am not sure, but the MV1662 sounds like a Motorola number.

Jim
N8EE

4333. Re: Data needed for NEC Diode Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <371f55b4.0@news.netwalk.com>
Source record: 70948

Richard Burden wrote in message <371e79c0.2174979@news.bigpond.com>...
>Hi,
>
>I'd be grateful if someone can help me locate the specifications for a NEC
>diode mixer, type 7110Z. Physically the diode mixer is very similar to the
>Minicircuits SBL style of mixer.
>
>
>----------
>Regards,
>Richard VK5OO
>"Nothing better than home-brew, except perhaps an absence of Spam"

Try looking at the NEC website. Most all of the major semi companies have
on-line catalogs and data sheets.

Jim
N8EE

4334. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be8c9b$8cf2e260$a7ecabc3@default>
Source record: 70999

Further to my last posting.

In tables of reliability of electronic components,
reliabilty may also be stated in terms of Failure Rates.

Because failure rates are very small they may be recorded
as Failures per 10^9 hours.

10^9 hours = 114,000 years.

MTBF = 1 / (Failure Rate)

To combine the effect of many different components, simply
sum the individual component failure rates. Components may
include hand soldered joints or flow-soldered joints in
printed circuit boards, nuts, bolts, screws, etc.

Overall equipment Mean Time Between Failures = MTBF = 1
/ (Sum of all Failure Rates).
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

4335. Amplifiers for sale....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: wizard@eskimo.com
Message-ID: <371e6f4e.168925496@eskinews.eskimo.com>
Source record: 71000

Amplifiers for sale......

Henry S-80 2M mobile amp, 80W out / 5W in - $60

Brute HF mobile amp, preamp, 150W out / 12W in - $60

Homebrew 80-6M base amp, 1.5KW out / 100W in, VSWR; Temp; Overcurrent protection, Thermaly switched cooling, Digital power display, Seperate amp and power supply decks. Requires 220VAC. Uses 8 MRF151G dual power MOSFET's. - $1800

KC7IYU

4336. Anyone one have info on BB104 or MV1662 diodes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: l2jarvis@mindspring.com
Message-ID: <371e7c66.4420068@news.mindspring.com>
Source record: 71001

Does anyone have capacitance vs. voltage data for these two varactor diodes?

Thanks in advance!

Lee Jarvis - KN4VN

4337. need info on RCA 8890 ceramic tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Zack Miller <kb3cji@home.com>
Message-ID: <371E7DFD.F03D9A23@home.com>
Source record: 71002

Have a bunch of these and would like info, and or a sorce for sockets and schematics.. I belive these were spares for a fm broadcast transmitter? was told they will do 2000 or 2500 ssb pep?

Thanks
Zack
kb3cji

4338. J-305 pinout?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: l2jarvis@mindspring.com
Message-ID: <371e7c9c.4474325@news.mindspring.com>
Source record: 71003

I can't find the pinout for a J-305 in a TO-92 case. Is it the same as the MPF-102?

4339. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: lyman@naval.com
Message-ID: <r4vT2.10408$s_5.582694@dfiatx1-snr1>
Source record: 71004

In article <S0tM2.18$UR6.30@axe.netdoor.com>, "Tom C. Brown, Jr." <mmc@netdoor.com> wrote:
>I agree.
>
>
>Dave Martindale wrote in message <7dtkqi$3lm@groucho.cs.ubc.ca>...
>>kf4fdj@amsat.org writes:
>
>[Text removed]
>
>>
>>If I wanted to look at equipment that is being auctioned on Ebay, I'd
>>look on Ebay. But I'm not, so all these Ebay posts are just a waste
>>of Usenet for me.
>>
We are in the Ham Radio Business and have been for several years.
The ham business has really declined since the internet became popular.
We are going to clear some stock on ebay.
The intent is to auction off items on a regular basis ie: each week
I have placed some announcements on the ham groups like this>

<<Audio Booster for your HT
We intend to auction off at least one each week on ebay
www.ebay.com
search for "audio booster"
hve fun bidding
73>>

So far we have about 15 happy hams and more each week as they
are getting these at about half price.

Other items are:

440 whip antennas
boom mics on a headset
35 watt HT linears
earbud and ptt mike for Icom HT's

The URL of course changes for each new listing so the search is required to
find each new listing.

Is this inappropriate or a service to the group?

73,

Lyman K Duggan
Naval electonics inc
6717 Benjamin Road

Tampa Florida 33634
--Marine TV Antenna Systems--
(813) 885 6091 fax 885 3789
http://www.naval.com

4340. Re: Broadband VCOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Tibor Bece <tbece@netspace.net.au>
Message-ID: <371F686C.53C8@netspace.net.au>
Source record: 71005

NEW: Mini Circuits POS-2120W!! Yesss!

73
Tibor

Jørgen Kragh wrote:
>
> I am building a spectrum analyzer, so I am looking for a good schematic
> of a VCO tunable from 900 MHz to about 2000 MHz. I have tried some
> schematics from VHF Communications, but the VCO is so noisy, that I only
> have about 40 dB dynamic range. Dose anybody know how to bulid a goos,
> i.e ,low noise VCO ??
>
> (OK I could call Mini-Circuits and buy one, but that is not so funny).
>
> best 73s
>
> Jorgen, OZ7J

4341. Re: Your Personal Callsign Mug.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: barry123456@my-dejanews.com
Message-ID: <371e87ce.1637362@genenews.acay.com.au>
Source record: 71006
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.swap

There are already lots of mugs with callsigns. I should know. I am one
of them.

Barry
==========
Please send me an email copy if you reply to this post
as my news server is missing a lot of articles.

4342. Re: this is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: JJ <jj@no.net>
Message-ID: <371E8F6D.2547@no.net>
Source record: 71007
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Bob Headrick wrote:
>
> Mike Nadeau <mnadeau@gwi.net> wrote in message
> news:dN8T2.71$h35.464@newsfeed.slurp.net...
> > I have XXX for auction on eBay...
> >
> > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX
> >
> > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX>
> > Mike - N1ENA
>
> Rec.radio.swap is the proper groups for sale items. Please do not post ebay
> stuff in discussion groups.
>
> - 73 Bob W7OV

People who are out to make a buck do not care if they turn a discussion group into a place for ebay ads. Forward all ebay ads along with a complaint to: support@ebay.com and cc safeharbor@ebay.com, founder@ebay.com.

4343. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Vincent Coppola <vinyc@snet.net>
Message-ID: <371EC813.8B7@snet.net>
Source record: 71008

These are the type of answers I was looking for, and much appreciated. A little background on my interests: I am an experimenter/hacker just trying to make my own PC boards for various projects. At first I tried the direct plotting to copper, as described in a recent QST article, using STAEBLER Pens. I designed some microstrip filters in the 2.4 ghz range using PUFF and sending the output to an old HP7475 plotter. With those small boards,and the accuracy of the plotter, the results were excellant. The filters worked very close to design. But in a more recent project, I designed a much larger board using a PIC microcontroller and some digital IC's, and believe me the direct plot method was more trouble than it was worth. By the time I fixed all of the dropouts with solder jumpers, it would have been much more simpler to just wire-wrap the board and be done with it.

So this has prompted me to look for "a better way", and that was the laser route. A walk through the local retailer showed three varieties...the $399, the $499, and the deluxe $699. Which is the right one for making PC boards? Or do I just look for an older unit in the used market? So your answers have helped.

So many thanks for the responses.

4344. VOX-Circuit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Thilo Graupner <thilo.graupner@urz.uni-geidelberg.de>
Message-ID: <01be8c9b$8b9b8fc0$0b755ec2@Blast.urz.uni-heidelberg.de>
Source record: 71009

where can I find a simple (small, cheap, low power-consumption)
circuit-diagram to build my own VOX-Headset using the VX-5R ?? I know there
are some runnig with just a little watch-battery!
Thanks for answer

4345. Re: See my blocks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Harry Lythall <harryvpo@hotmail.com>
Message-ID: <01be8ca3$9af75190$8534d693@e0060b0eb282a>
Source record: 71010

Circuit BUILDING BLOCKS that is!!

4346. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Glen Ross <ross@zetnet.co.uk>
Message-ID: <19990422105913802 94@zetnet.co.uk>
Source record: 71011

The message <371E066A.651A@pop.valley.net>
from Brad Thompson <Brad_Thompson@pop.valley.net> contains these words:

> I'd guess at a five- to ten-year lifespan (maybe longer, depending on
> how often you use the equipmen73,

I have a large collection of Halli, RME etc and the whole lot is
still running on the original capacitors. this looks like a working
life of 60 years<G>

Glen G8MWR

4347. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990422063825.12158.00000010@ng-fy1.aol.com>
Source record: 71012

>So this has prompted me to look for "a better way", and that was the
>laser route. A walk through the local retailer showed three
>varieties...the $399, the $499, and the deluxe $699. Which is the right
>one for making PC boards? Or do I just look for an older unit in the
>used market? So your answers have helped.

I suspect that even the cheapest will do a fine job if you keep the copper clean. I use PnP Blue, used to use the clear equivalent, and a Laserjet 3. Been making VERY complex boards and even the 0.005 inch lands will carry current.

The higher resolution of the newer printers should bode well for the TSSIOP packages although I've been doing the 0.05 inch layouts and no troubles with the 300 DPI.

W4ZCB

4348. Re: PC boards and laser printers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Laszlo Morocz <kf4pv@spammenotlmorocz.com>
Message-ID: <01be8cbd$db9c1720$d3de04d0@p133>
Source record: 71013

Vincent Coppola <vinyc@snet.net> wrote in article
<371EC813.8B7@snet.net>...
<snip>
> So this has prompted me to look for "a better way", and that was the
> laser route. A walk through the local retailer showed three
> varieties...the $399, the $499, and the deluxe $699.
<snip>

If you're going to spend $700 for a printer that'll be used only for PC boards, you might want to seriously consider using a board house such as Alberta Printed Circuits. For $76.00 US they'll make you a 40 square inch, double-sided drilled (with plated-through holes) board. They provide free copies of EasyTrax and GC-Prevue software for laying out the board and checking the results. Turnaround time is 2 days. And the quality of workmanship is awesome. I've used them for both through-hole and surface mount (the latter with 7-mil traces and 8 mil spacing). Their web page is http://www.apcircuits.com .

I realize that the economics of all this is variable - that for the price of 9 board submissions you also end up with a deluxe laser printer. But if you don't need that printer for anything else and only do 1 or 2 boards per year, this could be much more cost effective. For what it's worth, I have a laser printer AND use AP Circuits, mostly for quality reasons (hole positions and plating).

73 de Laszlo, KF4PV

4349. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: "Thomas T. Veldhouse" <veldy@visi.com>
Message-ID: <_qFT2.243$WA4.46150@ptah.visi.com>
Source record: 71014
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

Styrians is what I was after. I can play with the hopping over a couple of batches and try to tweak it to my taste. Does anybody know if dry hopping is an option for this recipe (versus my own taste). I am personally not 100% comfortable with dry hopping because of the increased chances of infection. However, I have tasted a few brews where dry hopping makes a great beer.

Tom Veldhouse
veldy@visi.com

Bryan Selders wrote in message <371e4d92.26465027@netnews.temple.edu>...
>On Wed, 21 Apr 1999 15:34:43 -0500, real.address@bottom.of.message
>(Andrew D. Ager) wrote:
>
>
>>The hop bill I never got scaled dow correctly. For a 50bbl batch, it was
>>7 lbs. in the kettle, and 44 lbs. in the whirlpool.
>>
>Honker's comes in at 38 IBU. With the ratio you presented, it's about
>14% of the total hop bill for the boil and 86% at the end.
>
>Assuming a five gallon batch size and 5% aa Styrians, that's about 2
>ounces for the boil and a whopping 12 ounces at the end. Ouch!
>
>Here's the formula I used (from the article in BT) for the first hop
>addition:
>
>Weight of hops= IBU * Batch Size / Alpha Acids * 7490 * Utilization
>
>
>Wtith these givens:
>
>IBU = 38
>Batch Size = 5 gallons
>A.A. = 5%
>Utilization factor = 26%
>
>Hope this helps.
>
>-Bryan

4350. Re: PIC info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <371F21EB.60E3@eece.maine.edu>
Source record: 71015

Chris Gryffenberg wrote:
>
> Thank you for reading this message.
>
> I am looking for info on how to use and implement PIC IC's and program them.
> Do you have info.
> Please direct me so I can learn.
>
> 73 de
> Chris

There is tons of stuff on the web for them. Check out Microchip's
websight.
http://www.microchip.com

The have the spec sheets on them, and I beleive that they have their
Mplab programmer available for download. The PIC is a great little
processor; I just got down using a small one (16LF84) as a processor for
a AD9830 direct digital synthesizer, with 32 bit add/subtract routines.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

4351. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: joel@uiatma.atmos.uiuc.edu
Message-ID: <7fn9m4$j5o$1@vixen.cso.uiuc.edu>
Source record: 71016
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

In article <_qFT2.243$WA4.46150@ptah.visi.com> "Thomas T. Veldhouse" <veldy@visi.com> writes:
>I am personally not 100% comfortable with dry hopping because of the
>increased chances of infection.

Is there any solid research that indicates how much dry hopping increases the chance of infection? My own anecdotal evidence (i.e., not-scientifically rigorous experience) suggests dry hopping has no effect on infection rate.

>However, I have tasted a few brews where dry hopping makes a
>great beer.
--
Joel Plutchak

"I believe that some of the best beers being made today are brewed in people's homes." - Jim Koch, owner of the Boston Beer Company

4352. Re: this is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: n4lq@iglou.com
Message-ID: <371f1730.0@news.iglou.com>
Source record: 71017
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

This is too a sales group and I want to see all postings including Ebay.
The more the better! If sales were not allowed then there wouldn't be much
to see here anyway. Not many folks want to discuss the color of a certain
knob on a BC458 etc.

JJ (jj@no.net) wrote:
: Bob Headrick wrote:
: >
: > Mike Nadeau <mnadeau@gwi.net> wrote in message
: > news:dN8T2.71$h35.464@newsfeed.slurp.net...
: > > I have XXX for auction on eBay...
: > >
: > > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX
: > >
: > > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX>
: > > Mike - N1ENA
: >
: > Rec.radio.swap is the proper groups for sale items. Please do not post ebay
: > stuff in discussion groups.
: >
: > - 73 Bob W7OV

: People who are out to make a buck do not care if they turn a discussion
: group into a place for ebay ads. Forward all ebay ads along with a
: complaint to: support@ebay.com and cc safeharbor@ebay.com,
: founder@ebay.com.

--
Steve Ellington N4LQ
N4LQ@IGLOU.COM

4353. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <371F201D.3ED7@pop.valley.net>
Source record: 71018

Glen Ross wrote:
>
> The message <371E066A.651A@pop.valley.net>
> from Brad Thompson <Brad_Thompson@pop.valley.net> contains these words:
>
> > I'd guess at a five- to ten-year lifespan (maybe longer, depending on
> > how often you use the equipmen73,
> ----------
>
> I have a large collection of Halli, RME etc and the whole lot is
> still running on the original capacitors. this looks like a working
> life of 60 years<G>
>
> Glen G8MWR

Hello--

OTOH, I've encountered leaky surface-mounted aluminum electrolytics
that are only a couple of years old. That portends ill for future
collectors interested in primitive Pentium-class PCs and accessories<g>.

Older-technology capacitors are physically larger, contain more
electrolyte, and have thicker plate separators and seals. I, too
have seen 60-year-old electrolytics that still maintained capacity
and worked fine.

73,
Brad AA1IP

4354. Radios, newspapers and money, more money.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: i <hacked@mainradio.com>
Message-ID: <7fneni$e8a$1@cnn.cc.biu.ac.il>
Source record: 71019
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.b

Get into the world wide news, go:

http://www.mainradio.com

World wide guide of radio stations and newspapers on the internet. more than 20000 links to all the world.

We Have a new sponsor, that give you free money when you surf the web !!!

We guarantie the veracity of our ads, mail us if you encounter a problem with our sponsors.

4355. Homebrew repeater???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: brian <brian_messman@dell.com>
Message-ID: <7fni7t$iq3$1@galaxy.us.dell.com>
Source record: 71020

I'm looking to make a repeater out of two old Alinco DR130T mobiles I have sitting around. I know it's theoretically possible to do this without any internal mods to the units, but how? I've thought of rigging a VOX circuit to the output on one radio to the mic feed of the other, but need more specifics. I already have two ringo antennas set approx 50 feet apart to eliminate crosstalk probs without a duplexer and installed a tone board on the "receive" radio. Now how do i get this VOX circuit to work with the two radios, or is there some type of controller I can buy pre-configured?

ANY HELP WOULD BE GREATLY APPRECIATED!!!

4356. Re: this is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904221215220.12113-100000@Ocean.CAM.ORG>
Source record: 71021
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On 22 Apr 1999, Steve Ellington wrote:

>
> This is too a sales group and I want to see all postings including Ebay.
> The more the better! If sales were not allowed then there wouldn't be much
> to see here anyway. Not many folks want to discuss the color of a certain
> knob on a BC458 etc.

You'd better take a look at the newsgroups this was posted to. Apart from the issue of whether forsale ads are welcome in a given group, cross-posting greatly increases the problem.

rec.radio.amateur.homebrew is not about buying and selling. It's for discussion of building your own radio equipment. There's been a tiny bit of debate about whether forsale ads should be allowed, but the pivot point is over whether on-topic items (ie components and perhaps related test equipment) should be allowed, not over whether any ads should be welcome.

rec.radio.amateur.boatanchors was set up to discuss the old stuff. I remember the debate when it was created about whether forsale ads should be allowed, and eventually it was decided that they would be allowed, but only in a secondary fashion. In other words, a few ads would be okay, but it wasn't the primary purpose of the newsgroup.

Sadly, ads do tend to dominate the group. I sincerely question what kind of hobby it is that people are more interested in buying and selling the stuff than talking about it, because that old equipment is interesting enough to have plenty to talk about. I'd be less bothered by the forsale ads if people took the time when selling something to say something about the equipment they have for sale, both technical and their own relationship to it, and take the time to look up reviews of the equipment and references to finding the ads for when the equipment was new. But that doesn't happen becuase people seem more interested in selling the stuff, and it appears in a fair number of cases the people don't even know anything much about the equipment they are selling, other than that it's "rare".

rec.radio.amateur.equipment was never intended for the sale of equipment. It was intended to discuss it. I rarely look in there nowadays becuse ads dominate.

The problem with letting any ads in is that more ads will follow. Someone sees an ad from someone else, and they decide it's okay to do so and then they do. What might start off as being a handful of appropriate forsale ads, if you accept forsale ads in the first place, becomes a flood of ads

and then the un-related items start getting forsale ads in that newsgroup.

Nowadays in rec.radio.amateur.homebrew we are seeing a steady increase in forsale ads. Most of the ads are not selling components for us to build with. It's commercially built equipment. Some of it arrives through the wonders of cross-posting, but I've noticed a fair amount of it being posted only in rec.radio.amateur.homebrew (or perhpas the person is posting to other newsgroups but one at a time).

But it doesn't stop there. Once the ads are happening, then people decide to sell off their other stuff. So you see ads for computers in the ham radio newsgroups. Then you see people selling their audio equipment. One of these days someone will try to sell their kitchen sink.

The debate keeps pivoting on ebay, as if ebay is particularly worse than someone selling something here, rather than announcing here that they are selling something elsewhere. In reality, there is very little difference. They are both just as troubling.

An important thing to keep in mind is that readership is not limited to the US. Maybe people there are willing to buy and sell across the country to people they've never met, but once you cross borders the problems increase. I don't think anything would tempt me to order outside the country from an individual. Yet as the ads increase, those of us not in the US have to put up with stuff that is not only not particularly on-topic, but has no relevance to us. If you want to drive the non-US participants away, just keep posting forsale ads and forget about discussion.

Michael VE2BVW

> > > JJ (jj@no.net) wrote: > : Bob Headrick wrote: > : > > : > Mike Nadeau <mnadeau@gwi.net> wrote in message
> : > news:dN8T2.71$h35.464@newsfeed.slurp.net...
> : > > I have XXX for auction on eBay...
> : > >
> : > > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX
> : > >
> : > > http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=XXX>
> : > > Mike - N1ENA
> : >
> : > Rec.radio.swap is the proper groups for sale items. Please do not post ebay
> : > stuff in discussion groups.
> : >
> : > - 73 Bob W7OV
>
> : People who are out to make a buck do not care if they turn a discussion
> : group into a place for ebay ads. Forward all ebay ads along with a
> : complaint to: support@ebay.com and cc safeharbor@ebay.com,
> : founder@ebay.com.
>
> --

> Steve Ellington N4LQ
> N4LQ@IGLOU.COM
>
>

4357. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990422124523.02672.00000097@ng154.aol.com>
Source record: 71022
Body handling: HTML body converted to readable text

```
>
>Older-technology capacitors are physically larger, contain more
>electrolyte, and have thicker plate separators and seals. I, too
>have seen 60-year-old electrolytics that still maintained capacity
>and worked fine.
>
>73,
>Brad AA1IP
>
```

Largely a heat problem, the larger physical size is a help in dissipating that heat. One other consideration, is the heat generated from the ripple current, and this is much greater in the case of a solid state rectifier than it is in a high vacuum rectifier. (Mercury vapor 866's are something else, but they didn't often use electrolytics with those.) Used to be a rule of thumb that you cut the life in half for every 10 degree Centigrade rise in operating temperature.

W4ZCB

4358. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Glen Ross <ross@zetnet.co.uk>
Message-ID: <19990422190050802 94@zetnet.co.uk>
Source record: 71023

The message <371F201D.3ED7@pop.valley.net>
from Brad Thompson <Brad_Thompson@pop.valley.net> contains these words:

> OTOH, I've encountered leaky surface-mounted aluminum electrolytics
> that are only a couple of years old. That portends ill for future
> collectors interested in primitive Pentium-class PCs and accessories<g>.

True, but I reckoned that as the question was being asked in this
group that the person was interested in 40/50 year old gear,

and:-

>> Largely a heat problem, the larger physical size is a help in dissipating that
heat. One other consideration, is the heat generated from the ripple current,
and this is much greater in the case of a solid state rectifier than it is in a
high vacuum rectifier.

one big difference is that voltage rises fairly slowly in a tube
rectifier as the electrons get working. Solid state diodes hit max
virtually straight away. Could this have a bearing on the life??

Glen.

4359. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <371F6696.E2F15B4@teleport.com>
Source record: 71024

One point that hasn't been mentioned here is that the voltage-handling ability of electrolytic capacitors declines if they're stored for long periods without use. So a capacitor might be bad after long storage, but can be brought back to life.

The insulator is a coating which is plated onto one of the electrodes by an electroplating process. This process naturally occurs due to the applied voltage when the capacitor is in use. When stored for long periods, the coating deteriorates and must be re-formed to restore the capacitor to its original voltage rating. (An associated problem is that when in use, the dielectric coating will, over a long period, naturally degrade to match the applied voltage. So if changes are made in the circuit which raise the capacitor voltage, say by replacing an old rectifier tube, the capacitor can leak or explode due to the suddenly increased leakage current.)

An electrolytic capacitor is re-formed by applying a voltage through a current-limiting resistor. The voltage is slowly increased until the leakage current reaches some specified value, then left at that level until the leakage drops to a low value as the dielectric layer forms. Then the voltage is increased until the leakage current again increases to the limit and left at that value for forming, and so forth, until the leakage is adequately low at the rated voltage.

There are various rules of thumb for how large a leakage current can be tolerated during re-forming. One reference I have for modern capacitors gives 5 mA for small PC-board-mount capacitors, and 10 mA for large computer grade capacitors. It seems to me the important thing is to limit the temperature rise, so the tolerable current would really be a function of capacitor size and the voltage across it. A quick look at the _ARRL Handbook_ index didn't reveal anything about this topic, but I know it was in the Handbook many years ago. The folks on the .boatanchors newsgroup should be able to provide a lot more practical information on the topic for those who are interested.

Roy Lewallen, W7EL

4360. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <371F701A.4652@ixpres.com>
Source record: 71025

larryc@northwest.com wrote:
>
> just because caps have old date codes and "still work" doesnt mean they
> won't fail. i replaced the filter caps in my HP-608 sig generator with
> Xicon units (from Mouser). the old filter caps have dte codes from 1957.
> i noticed 60 Hz hum on the RF signal, and decided to replace **all** the
> filter caps. no more hum on the signal.
>
> the newer metal can electrolytics can last some 10+ years. the older
> monster-sized electrolytics had a much thicker dielectric. to accomodate
> the thicker dielectric, the caps had to be made bigger. they lasted for
> decades but now no one manufactures them.

Larry OM,

Please observe, I did not say that the older caps would not fail eventually. I only said that they had not failed YET. New capacitors will certainly fail eventually also, and perhaps sooner than the older ones time-wise, for the reason you mentioned. This is another case where newer is not necessarily better (I observe this to be true in many areas), since in this case the design emphasis has been put on minimizing capacitor volume instead of electrolyte thickness (and long life?).

73,
Don, W6JL

4361. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990422114508.17206B-100000@oso.slonet.org>
Source record: 71026

Not only the points mentioned below but consider that most modern power supplies for computers are switching supplies with ripple currents in the kilohertz range. Older power supplies needed to pass twice power supply frequnecies. Cliff K7RR

On Thu, 22 Apr 1999, Glen Ross wrote:

> The message <371F201D.3ED7@pop.valley.net>
> from Brad Thompson <Brad_Thompson@pop.valley.net> contains these words:
>
> > OTOH, I've encountered leaky surface-mounted aluminum electrolytics
> > that are only a couple of years old. That portends ill for future
> > collectors interested in primitive Pentium-class PCs and accessories<g>.
>
> True, but I reckoned that as the question was being asked in this
> group that the person was interested in 40/50 year old gear,
>
> and:-
>
> >> Largely a heat problem, the larger physical size is a help in dissipating that
> heat. One other consideration, is the heat generated from the ripple current,
> and this is much greater in the case of a solid state rectifier than it is in a
> high vacuum rectifier.
>
> one big difference is that voltage rises fairly slowly in a tube
> rectifier as the electrons get working. Solid state diodes hit max
> virtually straight away. Could this have a bearing on the life??
>
> Glen.
>
>
>
>

4362. Measuring noise on DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: owens@ale.atd.ucar.edu
Message-ID: <7fnstn$5j0$1@ncar.ucar.edu>
Source record: 71027

Can someone suggest a method for measuring microvolt level noise
on DC power supply lines? Is this a direct measurement? or is
there an indirect method of doing this?

Since the noise on the supply line of a vco will cause additional
noise in the vco rf output spectrum it would be convenient to be
able to measure this noise separately before the supply is connected
to the vco.

Some of the new LDO regulators designed for the "wireless" market
are claiming very low levels of noise on the output. I'd like to be able
to measure this noise directly-if possible-or indirectly if that is
more practical.

Chip, NW0O

--
Chip Owens (owens@atd.ucar.edu)

4363. Re: Measuring noise on DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-22 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <371F86AB.7E7CFF05@erols.com>
Source record: 71028

A scope.

Chip Owens wrote:
>
> Can someone suggest a method for measuring microvolt level noise
> on DC power supply lines? Is this a direct measurement? or is
> there an indirect method of doing this?
>
> Since the noise on the supply line of a vco will cause additional
> noise in the vco rf output spectrum it would be convenient to be
> able to measure this noise separately before the supply is connected
> to the vco.
>
> Some of the new LDO regulators designed for the "wireless" market
> are claiming very low levels of noise on the output. I'd like to be able
> to measure this noise directly-if possible-or indirectly if that is
> more practical.
>
> Chip, NW0O
>
> --
> Chip Owens (owens@atd.ucar.edu)

4364. Re: Ohmite Z28

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990423232349704 32@zetnet.co.uk>
Source record: 70780

The message <371D35B3.232376CA@ibm.net>
from Ralph Mowery <rmowery@ibm.net> contains these words:

> Here is hard to find info on Ohmite Chokes
> Ohmite Chokes
> Body Color Part # L in Microhenrys MHz Current
> ? Z-7 84.0 uh 3-20 1.0 A
> ? Z-14 44.0 uh 7-35 0.6 A
> Yellow Z-28 20.0 uH 20-60 0.6 A
> Red Z-50 7.0 uH 35-110 1.0 A
> Green Z-144 1.8 uH 20-200 1.0 A
> Yellow Z-235 0.8 uH 160-350 1.0 A
> Blue Z-460 0.2 uH 320-520 1.0 A

> Hamm4fun wrote:
> >
> > Need specs on Ohmite z28 choke. Trying to find sub or wind my own.

4365. CD SERVICING

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Max Harding <mgh@eisa.net.au>
Message-ID: <7fnc5j$bd8$1@news.eisa.net.au>
Source record: 70949
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.repair

G'day i have just found this address which might be worth looking at if you are interested in CD servicing or want to learn.
http://cdservicing.findhere.com

tell him Max sent you.

4366. Re: MRF 412 Specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19990422230045.29839.00000419@ng100.aol.com>
Source record: 70950

>I am considering the purchase of a "Brute" model
>HF amp for conversion to 6 meters. It runs a pair
>of MRF 412's.
>
>The MRF 412 does not appear on the Motorola
>on-line specifications site.
>
>Is this device suitable for all-mode use to 150 watts
>or better (as a pair with 10-15 watts drive) on 6m?
>
>Thanks! & 73,
>~~~
>ï¿½ï¿½ï¿½
>\ ~ / .... DavidC K1YP@qsl.net

The MRF412 was specified by Motorola to run 70 watts PEP at 30 MHz (each).
There are no performance curves or impedance curves above 30 MHz.

At 30 MHz, they were stated to have a *minimum* gain of 13 dB at the rated 70
watt power output. So, a single one needed about 14 watts drive - two would
have needed at least 28 watts drive, plus the loss of the dividing / combining
network. The gain appears to fall off at 2dB per octave in the rated range.

Given that you are looking to run two of them at nearly twice the rated
frequency (gain will decrease), the answer is no, they will probably not give
you the power output you specify at the frequency you want to run with the
drive you have available, based on the *guaranteed minimum* specs.

73

John...
WB4LNM

4367. Re: Anyone one have info on BB104 or MV1662 diodes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19990422230828.29839.00000423@ng100.aol.com>
Source record: 70951

>Does anyone have capacitance vs. voltage data for these two varactor
>diodes?
>
>Thanks in advance!
>
>Lee Jarvis - KN4VN
>

Yes. I knew there was some reason I'd kept my Motorola parts manuals for 20 years.

For the MV1662, the rated specs are at Vr of 4.0 volts, C is 225pfd minimum, 250 pfd nominal, 275 pfd maximum. Capacitance ratio C2/C15 is 2.3; Q is 150 at Vr 4 volts and 20 MHz. Series inductance is 5 nH. Vr max is 15 volts.

At 10 volts, it looks to have about 150 pfd capacitance, looking at the graph, and maybe 120 at 15V. This is in agreement with the ratio shown above.

I may have the info on the BB104 also, but it is not as easy to recover.

73

John...
WB4LNM

4368. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Don Boekenkruger <ve7cbt@home.com>
Message-ID: <8xVT2.4679$Sl2.6218@news.rdc1.bc.wave.home.com>
Source record: 70952
Cross-posted to:
sci.electronics.misc,sci.electronics.componentssci.electronics.basics,rec.radio.amateur.homebrew,rec.radio.amateur.misc

You might be able to find a local specialty battery shop that can do it for
you, they should be able to do it the right way... Spot welding tabs on...

I get it done at a local place all the time, it only take a few minutes to
do a whack of cells like you've got.

Don.

kilroy <kilroy@SPAMTRAPfuse.net> wrote in message
news:924570088.671.20@news.remarQ.com...
> Actually, I've had quite a bit of luck using solder and an old 240 W
> soldering gun. Just be careful not to overheat the cell as you solder.
>
>
> --
> NOTE: Email address is bogus!
> Remove SPAMTRAP for valid address
> Rob Frohne wrote in message ...
> >Hi All,
> >
> >I've been trying in vain to find someone who can weld some solder tabs on
> >about 30 NiMH cells I want to use. Is there anywhere that I could send
> >these batteries to get this service performed at a reasonable cost?
> >
> >Thanks,
> >
> >Rob
>
>

4369. Re: Homebrew repeater???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <37203866.3B33CDA4@ibm.net>
Source record: 70953

While it is possiable to do this using a VOX circuit, most repeaters
will use the squelch circuit signal. I have seen some VOX stuff
advertised, but never looked at it. Besure you allow for somekind
of identification circuit and control circuits to shut the thing
down if ther is a malfunction also to stay legal. There are several
controllers made that will do this. Probably a beter way to go is
to look for a GE Mastr II comercial radio , mobile unit that can be
found for about $ 50 and recrystal it for about $ 50. Then look at
the CAT-500 controller for about $ 200-300.

www.catauto.com

I have been using this combianion of variation for about 10 years,
started with another controller.

Also look at www.nhrc.net for a simple controller that will plug
in the
Mastr II for about $ 160.

The Alincos probably will not be selective enough to work very well
as a repeater receiver, and the transmitter will probably not be
clean enough either to keep from desenseing the receiver. I doubt
that they are shielded very well either.

I doube that 50 feet will be enough seperation for the ringos
without some cavities for filtering. Besure you use some very good
grade of double shileded coax or hardling. The 9913 type of stuff
may work.
The ringos have a bad habit of not isolating the antenna from the
feedline and that can also cause some problems.

There is a lot more work than it seems like to get a repeater
working very well.. I have been keeping 2 on the air for about the
last 20 years.
They can be lots of fun, but lots of agervation too.

brian wrote:
>
> I'm looking to make a repeater out of two old Alinco DR130T mobiles I have
> sitting around. I know it's theoretically possible to do this without any
> internal mods to the units, but how? I've thought of rigging a VOX circuit
> to the output on one radio to the mic feed of the other, but need more
> specifics. I already have two ringo antennas set approx 50 feet apart to
> eliminate crosstalk probs without a duplexer and installed a tone board on
> the "receive" radio. Now how do i get this VOX circuit to work with the two
> radios, or is there some type of controller I can buy pre-configured?

>
> ANY HELP WOULD BE GREATLY APPRECIATED!!!

4370. Re: Homebrew repeater???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <37204E6F.CC4930EB@gate.net>
Source record: 70954

Brian,

I think Roger, N0YOX has answered this recently. He has a repeater controller based on the Basic Stamp module. Make sure in any installation, you have at minimum, a 10 minute CW ider, and ability to cut transmit remotely, in case things get out of hand.

I'm curious how you have those antennas spaced to avoid having to use a duplexer? Is the 50 foot separation vertical? You might find that separating them on the same mast might be easier than horizontal separation, especially if you limit your output power. The Ringo, (original?) has a null overhead, so even 15 foot separation might work.

Look at Roger's site: http://www.iland.net/~n0yox/n0yox.html

73, Mike

brian wrote:
>
> I'm looking to make a repeater out of two old Alinco DR130T mobiles I have
> sitting around. I know it's theoretically possible to do this without any
> internal mods to the units, but how? I've thought of rigging a VOX circuit
> to the output on one radio to the mic feed of the other, but need more
> specifics. I already have two ringo antennas set approx 50 feet apart to
> eliminate crosstalk probs without a duplexer and installed a tone board on
> the "receive" radio. Now how do i get this VOX circuit to work with the two
> radios, or is there some type of controller I can buy pre-configured?
>
> ANY HELP WOULD BE GREATLY APPRECIATED!!!

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| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------ *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org .... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._________________________

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4371. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: "Thomas T. Veldhouse" <veldy@visi.com>
Message-ID: <gYZT2.423$WA4.91804@ptah.visi.com>
Source record: 70955
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

Yep, that was a mistake on my part, if you notice that my above post in alt.homebrewing, rec.crafts.brewing doesn't include it.

Tom Veldhouse
veldy@visi.com

Woody White wrote in message <371FC810.6E7683AF@att.net>...
>Ah! The art of brewing your own 807s!
>
>Perhaps rec.radio.... is a bit off topic???
>

4372. Modifying the 1340

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Shawn Upton <supton@eece.maine.edu>
Message-ID: <37207DFD.7A5F@eece.maine.edu>
Source record: 70956

Hey, has anyone done any mods on the Ten Tec 1340 40m transciever? No,
I'm not looking for out of band tx mods. Just what others have done to
their radios, or other Ten Tec QRP line of radios. I've heard of
putting in a multi turn pot for the frequency control, and the
instruction manual talks of putting in the keyer module into the radio;
I'm just looking to for details of what others have done. Thanks.
--
****
Shawn Upton
Electrical Engineering Student
University of Maine at Orono
webpage: http://www.eece.maine.edu/~supton/
mail: supton@eece.maine.edu
KB1CKT Tech Plus
****

4373. Re: Looking for info on STANDARD

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <372086E6.5ACB@ix.netcom.com>
Source record: 70957

Michael Harbour wrote:
>
> Looking for info on the person or business that handles Standard Radio
> products. I need a belt clip for the Standard C156A HT with screws, and
> also looking for tx/rx mods for this radio.

Hello Michael -- the Standard home page with a dealer listing is at URL:
http://www.stdradio.com/

For mods -- maybe search the mods listings at URL:
http://www.ac6v.com/pageA.html#MODS

Good Luck
--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 350,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

4374. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <3720899B.4E06@ix.netcom.com>
Source record: 70958

Thomas T. Veldhouse wrote:
>
> Honker's ale is a pale ale made by Goose Island Brewery in Chicago.
SNIP
> Thanks in advance, Tom Veldhouse veldy@visi.com

Hi Tom -- wrong newsgroup -- try the T I L E . N E T page for possible
pertinent beer news groups (12 to choose from) at URL:
http://tile.net/lists/

For Amateur Radio Operators -- we take 2 mellow 807's -- place them on a
BoatAnchor for two days -- stir every 4 hours.

And every Ham's YL or XYL knows what an 807 really is!!!!
--
73 From Rod In San Diego

AC6V INDEX TO DX AND HAM RADIO
FEATURING 88 PAGES, 400 INDEXED TOPICS, AND 3000 LINKS
Over 350,000 visits on the counter
http://www.ac6v.com/pageas.html -- Alphabetical Index
http://www.ac6v.com/ -- Home Page

4375. Re: Homebrew repeater???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: brian <brian_messman@dell.com>
Message-ID: <7fq7d7lma1@galaxy.us.dell.com>
Source record: 70959

I've got those babys perched on the mechanical room atop a 12 story hotel building, about 150ft elevation, horiz. spacing... This is the repeater location for all public safety in the county. I've talked to the police department on my 50 watt mobile from approx. 85 miles from the tower site!!!

One more thing....I must thank everyone for the reponse to this post. I get no less than 10 emails a day with suggestions on this topic. Thanks guys, y'all are great!!!

KF4FDJ (Mike in Ft. Myers, FL) <seven77@gate.net> wrote in message news:37204E6F.CC4930EB@gate.net...
> Brian,
>
> I think Roger, N0YOX has answered this recently. He has a repeater
> controller based on the Basic Stamp module. Make sure in any
> installation, you have at minimum, a 10 minute CW ider, and ability to
> cut transmit remotely, in case things get out of hand.
>
> I'm curious how you have those antennas spaced to avoid having to use a
> duplexer? Is the 50 foot separation vertical? You might find that
> separating them on the same mast might be easier than horizontal
> separation, especially if you limit your output power. The Ringo,
> (original?) has a null overhead, so even 15 foot separation might work.
>
> Look at Roger's site: http://www.iland.net/~n0yox/n0yox.html
>
> 73, Mike
>
>
>
> brian wrote:
> >
> > I'm looking to make a repeater out of two old Alinco DR130T mobiles I
have
> > sitting around. I know it's theoretically possible to do this without
any
> > internal mods to the units, but how? I've thought of rigging a VOX
circuit
> > to the output on one radio to the mic feed of the other, but need more
> > specifics. I already have two ringo antennas set approx 50 feet apart
to
> > eliminate crosstalk probs without a duplexer and installed a tone board
on
> > the "receive" radio. Now how do i get this VOX circuit to work with the
two

> > radios, or is there some type of controller I can buy pre-configured?
> >
> > ANY HELP WOULD BE GREATLY APPRECIATED!!!
>
> --
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> | |\| (o)(o) |/|
> ^ --- * -----------------.OOOo--oo--oOOO.------------------- *
> ||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
> |X| | | * P.O. Box 763 ..... AMSAT member #31884 *
> [X]~~~|k| * Fort Myers, FL 33902 ..... ARRL member #1781549 *
> / \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
> | | |4| * kf4fdj@amsat.org ..... EL96ap *
> | P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
> | 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
> | D | |j| * Bringing Oscar demos to the Lee County Schools. *
> |_____|=| | *
> /*X*\ | | * Black holes were created when God divided by zero. *
> ________|_|_____________________________Oooo._________________________
> .oooO ( )
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4376. Re: PIC info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990423142850704 32@zetnet.co.uk>
Source record: 70960

> Chris Gryffenberg wrote in message <7fldr6bal1@news3.saix.net>...
> >Thank you for reading this message.
> >I am looking for info on how to use and implement PIC IC's and program
> them.
> >Do you have info.
> >Please direct me so I can learn.
> >73 de
> >Chris
> Have a look at www.microchip.com
> 73, Ed. EI9GQ
==========
Have a look at QST-March99 ,pages 49-50-51 : "PIC Development on a Shoestring."

GL , Frank , GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

4377. Comb Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3720ad55.0@news.netwalk.com>
Source record: 70961

Anyone have a good design for a comb generator?

--
Jim
N8EE
jbolinger@Nloisnptaemk.com
Remove the letters 'Nospam' to reply directly

4378. Re: PIC info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Bill Hall <bill@sandiaaerospace.com>
Message-ID: <7fq1jm$3ic$1@news.gstis.net>
Source record: 70962

The book "Design with PIC Microcontrollers" by John B. Peatman worked for me. 1998, Prentice Hall.

Chris Gryffenberg wrote in message <7fldr6bal1@news3.saix.net>...
>Thank you for reading this message.
>
>I am looking for info on how to use and implement PIC IC's and program them.
>Do you have info.
>Please direct me so I can learn.
>
>73 de
>Chris
>
>

4379. Re: Comb Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7fqlk1$i2a$1@nnrp1.dejanews.com>
Source record: 70963

In article <3720ad55.0@news.netwalk.com>,
"Jim" <jbolinger@Nloisnptaemk.com> wrote:

> Anyone have a good design for a comb generator?

What frequency did you have in mind? Even plain garden-
variety CMOS and TTL computer clock oscillators have
useful harmonics above 1 GHz...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4380. AD8307 Log. Power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <371e5c12.273881363@news.online.no>
Source record: 70964

planning to build power meter shown in Elektor 1/99 (pp26-29) using
AD8307, but wonder what is noise power level for 50 ohm in 100MHz BW?

73
Jan-Martin LA8AK

4381. S-parameters and stability circles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Brad Moersfelder <bmoers@NOSPAM.qgraph.com>
Message-ID: <01be8dbe$b14d7a20$2e4831a1@bmoers>
Source record: 70965
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

From a set of two port S-parameters, how does one calculate the position
(the center and radius)
of the stability circles as plotted on a Smith Chart?

Brad

4382. old/broken ham gear wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <IT3U2.11447$Hh5.570@news-reader.bt.net>
Source record: 70966

Hi,
I'm doing a project and I need as much of your electronic junk as possible...it will have to be "Me take off your hands"...As a student I cannot pay you anything, but you will get recognition

David

remove NOSPAM (pickards@zen.co.uk)

4383. FS: MILITAYR SURVIVAL RADIO BATTERY TESTER

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2304991229400001@murphy1.cts.com>
Source record: 70967
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,misc.survivalism,alt.military.collecting,rec.aviation.restoration,rec.aviation.marketplace

MOD. BT-2B BATTERY TESTER FOR
RADIOS, BEACONS AND STROBE BATTERIES

SURVIVAL EQUIPMENT BATTERY TESTER. EXELLENT COND. $125 EA.
2 FOR $180

WITH CAL. CHART FOR TESTING BATTERIES FOR STROBE SDU-5/E
RADIO: PRC-90, PRC-63, URT-21, RT-10, URT-33, 33B, URC-64,
URT-21, URT-27,

MORE INFO AND PIC AT:

http://209.239.34.153/murphyjunk/4_MORE_SURPLUS_STUFF

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

4384. Re: long-play recorders

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: j999w@aol.com
Message-ID: <19990423154817.29119.00000688@ng146.aol.com>
Source record: 70968

How 'bout a VCR with an 8 hour tape?

Stereo even!

jw
WB9UAI

4385. QST March 1999 - Copy of Article Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Heinz Schnait <heinz.schnait@aon.at>
Message-ID: <3720C58E.6488144@qsl.net>
Source record: 70969

I am interested in Mike Kossor's article "A Broadband HF Amplifier Using Low-Cost Power MOSFETs - Part 1", QST, Mar 1999, pp 40-43. I have received the April 1999 QST but the March issue is still missing. Could anyone help me out and scan these three pages and mail them to me?

Thanks + 73
Heinz Schnait, OE5EEP
<oe5eep@qsl.net>

4386. Re: Comb Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904231811270.19945-100000@Ocean.CAM.ORG>
Source record: 70970

On Fri, 23 Apr 1999 marsgal42@hotmail.com wrote:

> In article <3720ad55.0@news.netwalk.com>,
> "Jim" <jbolinger@Nloisnptaemk.com> wrote:
>
> > Anyone have a good design for a comb generator?
>
> What frequency did you have in mind? Even plain garden-
> variety CMOS and TTL computer clock oscillators have
> useful harmonics above 1 GHz...

I was wondering about the application too. If it's for a certain range, one old trick was to put a signal into the middle of the range and modulate it with 100KHz or 10KHz or whatever frequency. On either side of the main signal there will be signals spaced the modulating frequency apart. By starting with the centre frequency you wouldn't have to worry about the harmonics of the low frequency signal dropping off by the time it reaches that frequency, but you'd still get the closely spaced signals that you wouldn't get if you started with a higher frequency.

One specific application comes to mind, wanting markers in the 2Meter band. So you start off with a 146MHz signal (start with a lower frequency and multiply up) and then modulate it with 30KHz to get markers on the FM channels.

Of course, this is less of a useful scheme if someone is looking for markers over a very wide range of frequencies.

Michael VE2BVW

4387. Re: Who will weld on solder tabs on a bunch of cells?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <7fqs53$s20$1@alice.walrus.com>
Source record: 70971

Frank Dinger (frank.dinger@zetnet.co.uk) wrote:
: > Actually, I've had quite a bit of luck using solder and an old 240 W
: > soldering gun. Just be careful not to overheat the cell as you solder.

: > Rob Frohne wrote in message ...
: > >Hi All,
: > >I've been trying in vain to find someone who can weld some solder tabs on
: > >about 30 NiMH cells I want to use. Is there anywhere that I could send
: > >these batteries to get this service performed at a reasonable cost?
: > >Thanks, Rob

: ======================
: Recently I successfully soldered leads to a number of Nicad and NiMH
: ,AA and C size batteries ,this following gentle cleaning with (black)
: amaril cloth . The tinning was almost instant with a 15Watts soldering iron.

: In order to remove 'chemical debris' from Nicads from a soldering
: iron ,bought in 1982, I had to break the welded joint. After
: rejoining by soldering these 'oldies' perform well again.
: The soldering iron is a US made Wahl Corp. -Isotip (quick charge).
: BTW : the 2 Nicads in this soldering iron are charged by AC directly
: from a transformer. There is no rectifying diode, just an bare wire
: fuse.....I never had seen this before.

: I also repaired a Black & Decker hand vacuum cleaner which uses 3 'C'
: type Nicads . After soldering the broken weld between 2 batteries ,
: the unit is working again as when it was new (8 years ago)

: Hope you find the above info useful.
:
: Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
: e-mail : gm0csz.kn6wh@ukrs.org
:
:
:

Trust me, the isotip DOES have at least 1 diode...it's well hidden, as I
remember, but it IS there.

4388. Re: MRF 412 Specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <37211ED1.507D@nbnet.nb.ca>
Source record: 70972
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Howdy Dave.....I too didn't find the MRF412 specs but came up with some ballpark figures based on cross reference to either the NTE317 or ECG317 for the MRF412 and to the ECG334 for a MRF412A

NPN-Si, RF Pwr Output (Po 70W, 30Mhz) BVcbo 36
BVceo 36
BVebo 4
ICmax 15 amps
PDmax 220 watts
Hfe 10 minimum
Case RF-50F

The '334 is a little lighter rated at 60W 14-30Mhz and 175 watts PDmax with same Hfe of 10......Case is a RF-38S

I looked the MRF412 up in my Motorola RF devices manuals (all volumes) and you're right it doesn't show so is likely made by someone else (or is newer than my books).

Hope this helps a little......I'd guess that for 50 Mhz operation you'd likely have to settle for a lot less gain....might not be in the desired power output range you are looking for.

73 - Keep on Tinkering.....THAT....is REAL HAM RADIO!

Gord - VE1AJF

4389. Re: MRF 412 Specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3720ce95.434292363@news.online.no>
Source record: 70973

On Fri, 23 Apr 1999 07:09:30 GMT, ke6alm.loop@nospam.com (Matt
Mendenhall) wrote:

>Maybe David should consider the MRF492, which will work at 6m. I built up a
>class C amp from the Motorola data book circuit which works pretty well. I
>have been able to get 90W out of a single device with 8 watts in, using a 14.5
>volt supply.
>
>The device will run class A if properly biased. Pairing them should not be a
>formidable task.
>
believe I saw it mentioned in QST 15 years ago, but even for 50MHz it
is very hard to drive.
Yesterday's technology, and it wasn't inexpensive....

4390. Re: Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3720cd67.433989840@news.online.no>
Source record: 70974

On Fri, 23 Apr 1999 08:23:47 GMT, maad65@dial.pipex.com (Nick) wrote:

>On Thu, 22 Apr 1999 19:10:10 -0400, Tom Repstad <kb1cga@starc.org> wrote:
>
>>Hi All,
>>
>>E-Bay ad's are fine... so long as they have "FA:" in the subject line... so those who wish may
>>ignore them, and those who like e-bay and read them... downloading a msg header is NP...
>>pausing to read a message this is an auction and not a for sale/swap is an annoyance .... to
>>me anyway :)
>>
>>--Tom
>>KB1CGA
>
>Posting from Europe I would rather EBAY ads were not here at all, they are
>useless to me.
>
>If people consistently put EBAY in the header I can filter them out and not see
>them.
>
believed r.r.a.h is an international newsgroup for experimenting
hams, all those American nuissance posts for appliance operators are
just noise. Although it is better newsgroups for it, somebody never
understand reasonable limit of their activity, have even seen lot of
such nuissance on packet radio

4391. Re: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Bob <rwallis@nfld.com>
Message-ID: <7fr2o4$d03$1@hathaway.nfld.com>
Source record: 70975
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

Tom,
I cannot answer your question directly, however check out www.vineco.com,
they may be able to help you out.
BTW check out our web site at http://www.brewcraft.com. Hope you like it.
BoB

Thomas T. Veldhouse wrote in message ...
>Honker's ale is a pale ale made by Goose Island Brewery in Chicago. Has
>anybody tasted it and does anybody have an all grain recipe that can
>approximate it? I have not been able to determine what hops were used in
>particular.
>
>Please answer to my email as well as the newsgroup if possible.
>
>Thanks in advance,
>
>Tom Veldhouse
>veldy@visi.com
>
>

4392. Re: MRF 412 Specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: ma_locksmith <ma_locksmith@email.msn.com>
Message-ID: <uq1C52ej#GA.118@cpmsnbbsa03>
Source record: 70976
Cross-posted to: alt.ham-radio.vhf-uhf,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

MRF412 from RF parts book:

1.5 to 30 MHz HF/SSB
Power out 70 watts
Power in, 1.6 watts
Gain in db @ 30 MHz, 16
Package 211-11

They also have them available for about $25.

Ed
Gord Skiffington wrote in message <37211ED1.507D@nbnet.nb.ca>...
>Howdy Dave.....I too didn't find the MRF412 specs but came up with some
>ballpark figures based on cross reference to either the NTE317 or ECG317
>for the MRF412 and to the ECG334 for a MRF412A
>
>NPN-Si, RF Pwr Output (Po 70W, 30Mhz) BVcbo 36
> BVceo 36
> BVebo 4
> ICmax 15 amps
> PDmax 220 watts
> Hfe 10 minimum
> Case RF-50F
>
>The '334 is a little lighter rated at 60W 14-30Mhz and 175 watts PDmax
>with same Hfe of 10......Case is a RF-38S
>
>I looked the MRF412 up in my Motorola RF devices manuals (all volumes)
>and you're right it doesn't show so is likely made by someone else (or
>is newer than my books).
>
>Hope this helps a little......I'd guess that for 50 Mhz operation you'd
>likely have to settle for a lot less gain....might not be in the desired
>power output range you are looking for.
>
>73 - Keep on Tinkering.....THAT....is REAL HAM RADIO!
>
>Gord - VE1AJF

4393. Re: Comb Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: &NM7U <&NM7U@pcez.com>
Message-ID: <3720CB9E.5103B58F@pcez.com>
Source record: 70977

Jim wrote:
>
> Anyone have a good design for a comb generator?
>
> --
> Jim
> N8EE
> jbolinger@Nloisnptaemk.com
> Remove the letters 'Nospam' to reply directly

Yes, I do.
I thought about stopping there as the content of the answer matches
the content of the question...none.

People would be able to give you a much more direct answer if you
gave the slightest clue about what characteristics you wanted.

A blind suggestion is to think snap diode and transmission line.

Be careful. A comb generator uses very narrow high amplitude
pulses. Yes, the energy is smeared out over a wide band, but the
peak amplitude is still high. It's possible to do do nasty things
to a receiver or spectrum analyzer even though the amplitude of the
particular harmonic seems to be well within the allowable input range.
miker
--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

4394. Re: this is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-23 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@email.msn.com>
Message-ID: <ujyTyBgj#GA.287@cpmsnbbsa05>
Source record: 70978
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

>>Some folks just don't
>>believe in netiquette, or reading the group charters.
>>

What's a group charter?

(Just kidding)

Actually, I like the idea of individuals selling stuff, as long as it's
boatanchor stuff.

Peter
KB2VTL

4395. Re: this is not a sale group

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37210b59.449850141@news.online.no>
Source record: 70781
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Thu, 22 Apr 1999 18:47, "CommQuart" <commquart@erols.com> wrote:

>Sadly, Mike, it is the same clowns who ruined
>Rec.Antique.Radio+Phono.

rec.radio.amateur.boatanchors is worse! Just request some info on some rig you collect, and a crowd of idiots think everything is for sale, at least it is possible to ask technical questions using Rec.Antique.Radio+Phono and you receive lots of valuable info, but I never subscribe to any of these two groups for more than a week at the time

>After being a contributor
>there for three years, I finally gave it up because of
>the growing commercialism. Some folks just don't
>believe in netiquette, or reading the group charters.
>
>Peter
>
>
jan-martin LA8AK

4396. Re: Broadband VCOs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <372104c4.448165734@news.online.no>
Source record: 70782

On Thu, 22 Apr 1999 11:20:28 -0700, Tibor Bece <tbece@netspace.net.au>
wrote:

>Joergen Kragh OZ7J wrote:
>> =
>
>> I am building a spectrum analyzer, so I am looking for a good schematic=
>
>> of a VCO tunable from 900 MHz to about 2000 MHz. I have tried some
>> schematics from VHF Communications, but the VCO is so noisy, that I onl=
>y
>> have about 40 dB dynamic range. Dose anybody know how to bulid a goos,
>> i.e ,low noise VCO ??
>> =
>
>> (OK I could call Mini-Circuits and buy one, but that is not so funny).

for those of you who still can build their own equipment it is a very
good article by S53MV Matjaz Vidmar "Wideband & Low Noise Microwave
VCO". I listened to him when visiting Weinheim VHF meeting in 1998.
His designs are for 2-4GHz (3 versions: 2013-3829, 2011-4050 and
2388-4593MHz), one might contact him via email and ask if the article
is available, he has an URL. He used only fibreglass PC-boards and
mentioned the quality was just ufb.
Several wideband VCO designs for different frequency ranges have been
described in the Weinheim books since 1988 (Skriptum der Vortr&#65533;ge,
Weinheimer UKW-Tagung), most published articles are written in German,
some foreigners prefer to talk English, while WB5MZJ talked German for
his "100kHz-2.5GHz Signal Generator..."
Believe it is a URL for Weinheim info (...zweiburgenapotheke..?), but
lost it when changing to win98.

73 Jan-Martin LA8AK

4397. Re: AD8307 Log. Power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990423211107.29713.00000714@ng68.aol.com>
Source record: 70783

>
>planning to build power meter shown in Elektor 1/99 (pp26-29) using
>AD8307, but wonder what is noise power level for 50 ohm in 100MHz BW?
>
>73

>
>planning to build power meter shown in Elektor 1/99 (pp26-29) using
>AD8307, but wonder what is noise power level for 50 ohm in 100MHz BW?
>
>73
>
>planning to build power meter shown in Elektor 1/99 (pp26-29) using
>AD8307, but wonder what is noise power level for 50 ohm in 100MHz BW?
>
>73
>Jan-Martin LA8AK
>
A very nice package and unbelievably tame for all the gain involved. As easy to use as an op-amp. You can get the info you're asking for by calling their FAX on Demand service and dumping the data sheets for the device. The FAXCODE is 2098 and the data sheet is 20 pages long.

W4ZCB

4398. *** Looking for M57716 UHF Module source****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <37216d8b.776233@news.interbusiness.it>
Source record: 70784

Or indication for cheaper source in EU (less than 60$) .

Thanks de Vanni I8JJB

i8jjb@qsl.net

http://www.qsl.net/i8jjb/index.html

4399. Re: Electrolytic Capacitor Life? - Electrolytic Tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <37214A04.6B2E@csolve.net>
Source record: 70785

Barry L. Ornitz wrote:

[...]

> I have attached a text file below that gives a brief tutorial on
> electrolytic capacitors. It may help explain things. While most
> electronic components store best when kept dry, electrolytic capacitors
> like humidity!
>
> 73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

[...]

Barry,

Thanks for the helpful info, but you could have saved us all time and
trouble by posting the attachment as a plain text file.

UUEncoding makes a text file 30% larger, and may cause problems trying to
decode it.

Best Regards,

Michael R. Monett
mailto:add@csolve.net

4400. New Fuzzy Digital Modes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Fred <as149@detroit1.freenet2.org3>
Message-ID: <7frvpp$3cr$1@newsource.ihug.co.nz>
Source record: 70786
Cross-posted to: aus.radio.amateur.digital,nl.radio.amateur,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,uk.radio.amateur

Hi - did you know that there are digital modes that are intended to be human readable? Well of course, CW is, but there are also visual human readable modes.

One of these, Hellschreiber, and in particular Feld-Hell, is fast gaining popularity among the digitally enlightened hams, because it offers -
- performance hard to beat in any mode except CW
- slick operation, like RTTY or CW
- it's easy to use, the software is free, and is great fun
- it's uncannily like CW, but not such hard work!

All you need is a PC with a sound card and Win 95. If you run PSK31, then you can operate Hellschreiber!

To find out all about this exciting new mode (invented as recently as 1927), and to download all the software you need, visit the all new FUZZY MODES WEB SITE, at:

http://www.qsl.net/zl1bpu/

SEE you in Hell!

73,

Murray ZL1BPU

4401. Re: AD8307 Log. Power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37217e74.479322044@news.online.no>
Source record: 70787

On 24 Apr 1999 01:11:07 GMT, johnsonhe@aol.com (JohnsonHE) wrote:

>>planning to build power meter shown in Elektor 1/99 (pp26-29) using
>>AD8307, but wonder what is noise power level for 50 ohm in 100MHz BW?
>>
>>73
>>Jan-Martin LA8AK
>>
>A very nice package and unbelievably tame for all the gain involved. As easy
>to use as an op-amp. You can get the info you're asking for by calling their
>FAX on Demand service and dumping the data sheets for the device. The FAXCODE
>is 2098 and the data sheet is 20 pages long.
>
>W4ZCB

my question is: "what is noise power level for 50 ohm in 100MHz BW?"

4402. superhet coil winding

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7fs7fi$8bj$1@uranium.btinternet.com>
Source record: 70788

I have a circuit of a radio receiver which is designed to cover 1.0 to 2.5MHz. The IF is 455kHz, the mixer being a 3N140 dual gate mosfet with a bipolar transistor as local oscillator and an LM373N as IF amplifier and detector. However, I want to make the receiver to cover higher frequencies, perhaps 12 to 30MHz, in several bands if necessary. I am not sure how to alter the coils, though. The article suggests using a 500pF dual gang tuning capacitor, with 140 turns for the aerial coil, which acts as a load for the RF amplifier (a 2N3819 in common gate mode, capacitivley coupled to gate 1 of the mixer) and 105 turns for the local osc. coil (a colpitts type) for tuning 1.0 to 2.5MHz. The article suggests using 60 and 50 turns to cover 2.5 to 6MHz. (6mm dust cored formers, 30 SWG wire). I need the number of turns to use for a higher frequency range, without changing the IF. I have tried to wind coils for superhets before, but have had no sucess due to problems with tracking, etc. Also, does the SWG of the wire used make much difference? I only have a rough estimate of the SWG of the copper wire that took from a scrap induction motor.
If anyone is interested in the circuit, I can scan and email it to you

73 de John

4403. 30 to 60MHz band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7fs7fk$8bj$2@uranium.btinternet.com>
Source record: 70789

I was thinking of making an experimental receiver, a simple superhet type, covering a range of about 30 to 60MHz or higher. I wondered if anyone knows what sort of signals I could receive in this range, besides the 6 metre amateur radio band. Would it be worth while building such a receiver, and will the signals be mostly AM or FM? I was wondering if any low-VHF DX signals would be present in this range.

Thanks, 73 de John

4404. Television reciever front end

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7fs8dh$r09$1@mendelevium.btinternet.com>
Source record: 70790

I have a front end for a british television reciever, which covers bands 1,3 and the UHF television frequencies. Does anyone know what the frequency ranges of bands 1 and 3 are? I am thinking of adding an IF amplifier and FM detector to make a complete receiver. How do I extract the sound from the IF output?

thanks, 73 de John

4405. Re: CD SERVICING

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Max Harding <mgh@eisa.net.au>
Message-ID: <7fs7dopra1@news.eisa.net.au>
Source record: 70791
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.repair

Anybody trying to get to this page using Netscape all you will get is a
blank page please use Explorer and try this address.
http://home.primus.com.au/maxp/home.htm
this works.BUT NOT ON NETSCAPE.

Max Harding wrote in message <7fnc5j$bd8$1@news.eisa.net.au>...
>G'day i have just found this address which might be worth looking at if you
>are interested in CD servicing or want to learn.
>http://cdservicing.findhere.com
>
>
>tell him Max sent you.
>
>

4406. email address

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <1ziU2.15318$Hh5.1223@news-reader.bt.net>
Source record: 70792

Hi, for those who tried to reply to "someone!" and got a user unknown or something...

the proper email address is : Pickards@zen.co .uk Please put the .uk against the co (it stops autospammers)

David

4407. Motorola McMicro

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7fs4h2$9h6$1@lola.ctv.es>
Source record: 70793
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

4408. Motorola RIB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7fs4fg$9ae$1@lola.ctv.es>
Source record: 70794
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

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Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

4409. Standard C510

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7fs4g7$9aq$1@lola.ctv.es>
Source record: 70795
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

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How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

4410. Motorola GP300 & GM300

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7fs4ci$985$1@lola.ctv.es>
Source record: 70796
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

4411. Yaesu FT847

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7fs4dd$98b$1@lola.ctv.es>
Source record: 70797
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
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How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

4412. Kenwood TM732 & TH48

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7fs4ef$99e$1@lola.ctv.es>
Source record: 70798
Cross-posted to:
es.rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On my Webpage you will find Amateur Radio Mods for the following radio's:

Motorola GP300
Motorola GM300
Motorola McMicro
How to make a programming interface (RIB) for your GP300 and GM300.
Yaesu FT847
Kenwood TM732
Kenwood TH48
Standard C510

The URL is:

http://web.jet.es/colinlowe/index.htm

73 de Colin EB/G1IVG
Barcelona Spain.

4413. Mods of FT-50(Only inside Japan version)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Dongho Lee <leehur@unitel.co.kr>
Message-ID: <3721B940.22A5CF6F@unitel.co.kr>
Source record: 70799
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I got a FT-50N while I traveled in Japan, which is only for Japan inside version. It has limited Rx/Tx frequency range. Only 144-146/430-440 rages are available for Tx and Rx. I believe the basic circuits are same and only couple of configuration blocked Rx range.

Is there any way to convert to FT-50R as US version of FT-50 ? Or is it impossible to convert to expand Rx frequency range ?

Thanks.

- Dongho.

4414. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3721c276.55099703@news.buller.se>
Source record: 70800
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

4415. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3721c2ac.55153024@news.buller.se>
Source record: 70801
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

4416. Re: Mods of FT-50(Only inside Japan version)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Max Imo <REMOVE@CAPS.net>
Message-ID: <nZjU2.729$jo3.1749@news.megsinet.net>
Source record: 70802
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Download the FT50 porogramming software from this site
http://vlaski.virtualave.net/ The software should allow you to program the radio for USA, freeband or whatever.

LOL

Dongho Lee <leehur@unitel.co.kr> wrote in message
news:3721B940.22A5CF6F@unitel.co.kr...
> I got a FT-50N while I traveled in Japan, which is only for Japan inside
> version. It has limited Rx/Tx frequency range. Only 144-146/430-440
> rages are available for Tx and Rx. I believe the basic circuits are same
> and only couple of configuration blocked Rx range.
>
> Is there any way to convert to FT-50R as US version of FT-50 ? Or is it
> impossible to convert to expand Rx frequency range ?
>
> Thanks.
>
> - Dongho.
>

4417. Aug / Sept '98 QST (Spectrum Analyser)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: Stephen David Hodgkinson <scotia-technologies@zetnet.co.uk>
Message-ID: <19990424144701859l1@zetnet.co.uk>
Source record: 70803

Does anyone know where i can the above back copies / photocopied
articles, etc, in the UK?

Thanks
Steve H

4418. Re: 30 to 60MHz band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: David Little <dalite01@sprynet.com>
Message-ID: <7fsrc9$6k2$1@juliana.sprynet.com>
Source record: 70804

David,

You may want to condsider looking for one of the old
Lafayette monitor receivers. There was a model
that covered 30 to 50 MHz via VFO with provisions for
up to 3 fixed crystals to be installed. It was the size of a
mid-sized cb mobile with 12 volt operation or from the
built in 110VAC supply. I've seen them go across ebay for
around 25 20 30 dollars.

David
KD4NUE
David Cunningham wrote in message <7fs7fk$8bj$2@uranium.btinternet.com>...
>I was thinking of making an experimental receiver, a simple superhet type,
>covering a range of about 30 to 60MHz or higher. I wondered if anyone knows
>what sort of signals I could receive in this range, besides the
>6 metre amateur radio band. Would it be worth while building such a
>receiver, and will the signals be mostly AM or FM? I was wondering if any
>low-VHF DX signals would be present in this range.
>
>Thanks, 73 de John
>
>

4419. Wanted CW Keyer, Keys & Reader Etc. Etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <7fst2q$727$1@bgtnsc01.worldnet.att.net>
Source record: 70805
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I Am Looking For The Following Items To Purchase Or Trade For.
I Don't Need All Of This.
These Are Some Of The Models I Will Be Interested In.
If You Have Anything Along These Lines Please E-Mail Me.
73's W5IDX Houston

AEA MM-3 MorseMatic Electronic Keyer

Or

MFJ 493 Menu Driven Memory Keyer
MFJ-1315,
MFJ-551,
MFJ-5409,
MFJ-5425,
MFJ-79,

MFJ462B Multi-Reader

MFJ 452 Morse Keyboard With LCD Display
Or
MFJ 451 Morse Keyboard

MFJ 414 Tutor & Keyer

Only Need One Of The Following

Bencher Or Vibroplex Iambic Paddles
BY-1, By-2 etc.
Also 1 Straight Key

I Have Many Items I Can Trade For Please Let Me Know What You Have & What
You Might Be Interested In.

W5IDX@qsl.net
W5IDX@worldnet.att.net
Gregg.E@worldnet.att.net

--
W5IDX@worldnet.att.net

4420. Info on B&W LPA-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: John Strunck III <1jhs9867@unixstew.tstc.edu>
Message-ID: <37221c75.0@news>
Source record: 70806

Hello All,

Looking for info on a B&W LPA-1 Amp. Also need 12v or 120v Dow Key relay.

Thanks,

John Strunck III
KC5NGX

4421. NW 80/20 QRP Comments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: David Kritzberg <dkritz@mindspring.com>
Message-ID: <372242B3.2891@mindspring.com>
Source record: 70807

Im thinking of building the NW 80/20 40 or 20m version. any comments on this rig would be greatly appreciated.
TNX De KF4UOD
David

4422. OHR100 and unknown signal

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-24 00:00:00 UTC
From: bshna <bshna@prodigy.net>
Message-ID: <37228977.30E70A4C@prodigy.net>
Source record: 70808

Hello!

I just finished building an OHR100 40 meter kit, aligned it as per the instructions with the help of a fellow ham, and have noticed something unusual (I think). With a 50ohm dummy load connected directly to the back of the set I tune through it's range and hear the normal white noise (hiss). However, at 7.0903 a signal starts fading in starting at a high pitch and gradually lowering. It nulls at 7.0912, and goes from there , low pitch to high, until it fades at 7.0920. This is not too strong, but it is noticable. Then at 7.1222 the same thing starts again, but with a *much* stronger signal. It nulls at 7.1262, and fades out at 7.1303. Now this set is a superhet and recieved signals fade one way or the other as you tune past them. These signals are acting like it's a DC receiver, starting at a high pitch, nulling, then fading out at a high pitch. I have a feeling that something inside the set is causing this. This is my first and only HF rig and I am just getting started with it. Has anyone out there had any experience with this kind of problem on this (or any other) radio? Any help appreciated. 73's!

Brian
KB7SIV

4423. Synchro's 60 Hz/115Volt

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: neal hudson <neal.hudson@gte.net>
Message-ID: <iWsU2.1516$pg4.107204@paloalto-snr1>
Source record: 70809

I have for FREE 8 each 115V/60 Hz Synchros to anyone who will pick them up. Located in South Bay area of Los Angeles. They were taken out of a radar test set in 1966. Have decided that I will never use them. They weigh perhaps 3 lbs each.
Neal, N6NW

4424. Re: New Fuzzy Digital Modes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <374d5d5b.727945283@news.atl.bellsouth.net>
Source record: 70810
Cross-posted to: aus.radio.amateur.digital,nl.radio.amateur,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.homebrew,uk.radio.amateur

On Sat, 24 Apr 1999 15:33:16 GMT, richm@ucesucks.rochester.rr.com (Rich Mulvey) wrote:
>On Sat, 24 Apr 1999 20:31:30 +1200, Fred <as149@detroit1.freenet2.org3> wrote:
>>One of these, Hellschreiber, and in particular Feld-Hell, is fast gaining
>>popularity among the digitally enlightened hams, because it offers -
>>- performance hard to beat in any mode except CW
>
> Ah, just a quick point - if CW is a higher-performance mode than
>Hellschrieber, then that really doesn't constitute a great selling
>point when you consider the number of digital modes that have *much*
>better performance than CW...
>
>- Rich

True, but it is neat, and it is also faster than most CW ops can copy.
I also like the fact that it is "fuzzy". There's enough redundancy in each
character that a noise hit usually doesn't corrupt it so bad you can't
figure out what it was. It isn't the equal of PSK31 most of the time,
but when auroral flutter phase scatters PSK31, you can still make
out many of the dot matrix characters of S/MT-Hell (IMHO S/MT-Hell
works better than Feld-Hell). You can also copy *several* Hell QSOs
at the same time (provided they're fairly close in frequency to each
other). None of the other digital methods let you do that. That's one
of the advantages CW ops have had to themselves up until now.

I like Gram42 so much that I leave a copy of it running nearly all
the time. Being able to *see* what's going on in the passband is
really useful. I keep it up on a second computer so I can also
be running a different sound card program on the main machine,
usually PSK31. I think I could run two sound cards in the same
machine, but I haven't quite figured out how to do that under
Windoze yet. (Windoze isn't my operating system of choice,
but Linux versions of some of these neat programs aren't yet
available as far as I know.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4425. KB1H contest station website...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: "Mark A. Johnsen" <jammin@aol.com>
Message-ID: <01be8eb4$8d6645a0$6cd4d49b@default>
Source record: 70811
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Please stop by and say hello...Photos of ops. and antennas
along with contest story.

http://users.ids.net/~mjohnsen/kb1h/KB1H.htm

73' Mark, NB1U

4426. Data needed for NEC Diode Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: rjburden@BigPond.com
Message-ID: <37235f6f.1377271@news.bigpond.com>
Source record: 70812

Hi,

I'd be grateful if someone can help me locate the specifications for a NEC diode mixer, type 7110Z. Physically the diode mixer is very similar to the Minicircuits SBL style of mixer.

It appears, unfortunately, that the NEC website carries no information on this component.

Regards,
Richard VK5OO
"Nothing better than home-brew, except perhaps an absence of Spam"

4427. Increasing audio in Pixie II and KnightSmitE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Bill Tyner <styner@budget.net>
Message-ID: <01be8eb8$dc377060$35899dce@default>
Source record: 70813

I have put these two kits together and the audio is quite faint. Has anyone found a mod that boosted theirs up a notch or two above the noise level?
Bill

4428. Re: AD8307 Log. Power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <3722ACB4.4204BCDC@berlin.snafu.de>
Source record: 70814

J M Noeding wrote:

> my question is: "what is noise power level for 50 ohm in 100MHz BW?"

Nyquist's equation:

Vnoise = sqrt (4 * K * T0 * R * delta f)

K T0 = 4.2e-21 at room temperature (300 Kelvin)

Vnoise = sqrt (4 * 4.2e-21 * 50 * 100e6) =

ooops, xcalc doesn't seem to like negative exponents :-(
and I cannot find my hp41...

Gerhard

--
on the air: DK4XP
in the air: D-8551

4429. FS: Russian 6C4C (=6B4G)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <3722bac2.376236@news1.telia.com>
Source record: 70815
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

I have found some of these excellent 6B4G valves. 6C4C in Russia is
equivalent to 6B4G and it looks identical to the old Sylvania 6B4G
with double anode stapped together by a metal plate, not the type with
two separate anodes. This 6C4C valves is very well built and is of
high quality. It is unlike the new Sovtek 6B4G which looks more like a
scaled down Sovtek 300B with a single anode.
I don't have many 6C4C left, so e-mail me if you are interested

Best regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

4430. Re: AD8307 Log. Power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990425072705.21245.00001248@ng-cd1.aol.com>
Source record: 70816

```
>
> Vnoise = sqrt ( 4 * 4.2e-21 * 50 * 100e6) =
>
>
>ooops, xcalc doesn't seem to like negative exponents :-(
>and I cannot find my hp41...
>
>Gerhard
>
0.9165 uVolts

W4ZCB
```

4431. Re: CD SERVICING

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: tmacinty@highlander.cbnet.ns.ca
Message-ID: <37230b41.121546975@news.wolf>
Source record: 70817
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.repair

"Max Harding" <mgh@eisa.net.au> wrote:

>Anybody trying to get to this page using Netscape all you will get is a
>blank page please use Explorer and try this address.
>http://home.primus.com.au/maxp/home.htm
>this works.BUT NOT ON NETSCAPE.

At least some of the other pages on this site work with
Netscape...since I refuse to use IE, I guess I'll never know why that
one page won't work. Poor me...

Tom

>
>Max Harding wrote in message <7fnc5j$bd8$1@news.eisa.net.au>...
>>G'day i have just found this address which might be worth looking at if you
>>are interested in CD servicing or want to learn.
>>http://cdservicing.findhere.com
>>
>>
>>tell him Max sent you.
>>
>>
>
>

4432. Re: CD SERVICING

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: sam@stdavids.picker.com
Message-ID: <SAM.99Apr25095601@colossus.stdavids.picker.com>
Source record: 70818
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.repair

Pardon me if this is incorrect, but all I found at that site were basically ads for his book and seminar with "tips coming in the future". Oh, yes, a fabulous out-of-focus photo of Max! :)

--- sam | Sci.Electronics.Repair FAQ Home Page: http://www.repairfaq.org/
Repair | Main Table of Contents: http://www.repairfaq.org/REPAIR/
+Lasers | Mirror Info: http://www.repairfaq.org/REPAIR/F_mirror.html
| Sam's Laser FAQ: http://plop.phys.cwru.edu/repairfaq/sam/lasersam.htm

In article <37230b41.121546975@news.wolf> tmacinty@highlander.cbnet.ns.ca (Tom MacIntyre) writes:

"Max Harding" <mgh@eisa.net.au> wrote:

>Anybody trying to get to this page using Netscape all you will get is a
>blank page please use Explorer and try this address.
>http://home.primus.com.au/maxp/home.htm
>this works.BUT NOT ON NETSCAPE.

At least some of the other pages on this site work with Netscape...since I refuse to use IE, I guess I'll never know why that one page won't work. Poor me...

Tom

>Max Harding wrote in message <7fnc5j$bd8$1@news.eisa.net.au>...
>>G'day i have just found this address which might be worth looking at if you
>>are interested in CD servicing or want to learn.
>>http://cdservicing.findhere.com

>>tell him Max sent you.

4433. 75 Ohm Hard line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Michael Smith <mjs@nolnet.net>
Message-ID: <0rFU2.10057$5E.168585@news7.ispnews.com>
Source record: 70819
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I may be getting some 3/4 or7/8 inch hard line that is 75 ohms. I remember reading a article about using 75 ohm line. The author only did test up to 2 meters. I want to use this line on 70 cm. Will cotangent transformers work for this band? I have heard if everything else is good you would only get a 1.5 to 1 match any how. Also do I have to mess with the antenna? I would like to use this at a 440 repeater site and the antenna is a 4 dipole array. Is there any one that sells matching transformers?

Any help?

Mike

mjs@nolnet.net

4434. Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Michael Smith <mjs@nolnet.net>
Message-ID: <3wFU2.10076$5E.168699@news7.ispnews.com>
Source record: 70820
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Does any one have info on building notch filters to be used as a low power notch duplexer. I have heard you can make a notch out of shorted coax stubs. Are the stubs 1/4 waves at the notch frequency? Anyone have plans for these types of filters.

Mike

mjs@nolnet.net

4435. Cushman CE-23A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Michael Smith <mjs@nolnet.net>
Message-ID: <DxFU2.10077$5E.168691@news7.ispnews.com>
Source record: 70821
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Does any one have any info or know were it can be found about a Cushman CE-23A?

Mike

mjs@nolnet.net

4436. WTB: Homebrew, Tube CW TX and RX or XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: n3bj@hotmail.com
Message-ID: <7fvd6makk1@nnrp1.dejanews.com>
Source record: 70822
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Looking for an old project that may be sitting in your attic from years past. Especially interested in projects out of the magazines in years past for low power tube transmitters (xtal or VFO), receivers (superhet or regenerative FB) or ideally a tranceiver employing these technologies. Completed, not completed, working, non-working OK. Trying to help a older, local fellow's wish to put something from this era on the air to keep him busy.

Will pay shipping and whatever additional value we can agree on...

Thanks,

Alan, N3BJ

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4437. Freq counter/VFO stabilizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be8f2a$81015860$50193bcb@default>
Source record: 70823

--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardh@iinet.net.au
QRP/Amateur Radio/Microcontrollers

Soon Available

Counter 0-40 MHz 10 Hz resolution
LCD display (board mounts on back of display)

16 user selectable offsets via 4 I/O pins
Each offset can be user set to within 10 Hz with positive or negative
offset using two Pushbutton switches connected temporarily to the board

PLL VFO stabilizer as part of board (just connect a varicap
to your VFO circuit to give a swing of +/- 5 KHz for 0.5-4.5 V)

Uses AVR AT90S1200 controller

Supply 7-12 V @ 22 mA

Size approx 3.5 by 2 inches

Board plus controller AUS$40

E mail me if interested

4438. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: ma_locksmith <ma_locksmith@email.msn.com>
Message-ID: <#pFxGGzj#GA.241@cpmsnbbsa05>
Source record: 70824
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Shorted stubs are 1/2 wave, open stubs are 1/4 wave. Both reflect a short
at the driving end.

Michael Smith wrote in message <3wFU2.10076$5E.168699@news7.ispnews.com>...
>Does any one have info on building notch filters to be used as a low power
>notch duplexer. I have heard you can make a notch out of shorted coax
>stubs. Are the stubs 1/4 waves at the notch frequency? Anyone have plans
>for these types of filters.
>
>Mike
>
>mjs@nolnet.net
>
>

4439. Re: 75 Ohm Hard line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <375137c5.770170140@news.atl.bellsouth.net>
Source record: 70825
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 25 Apr 1999 10:13:58 -0400, "Michael Smith" <mjs@nolnet.net> wrote:
>I may be getting some 3/4 or7/8 inch hard line that is 75 ohms. I remember
>reading a article about using 75 ohm line. The author only did test up to 2
>meters. I want to use this line on 70 cm. Will cotangent transformers work
>for this band? I have heard if everything else is good you would only get a
>1.5 to 1 match any how. Also do I have to mess with the antenna? I would
>like to use this at a 440 repeater site and the antenna is a 4 dipole
>array. Is there any one that sells matching transformers?

ZD Engineering sells transformers for most types of CATV hardline.
They work fine, and also serve as substitutes for the often expensive
hardline connectors. The address I have is 605 Balsley Avenue,
Findlay Ohio, 45840. The phone number is 419-424-8765. ZD
Engineering is owned by Paul Darwactor W8ZD. I've used these
transformers and can recomend them.

(It has been some years since I've bought any. I can't guarantee
that the address and phone number are still good, but it is the
best info I have.)

Since the SWR isn't really that high, and excess SWR loss is
relatively low, the question of why should we care is relevant.
The reason is that the reactive termination can *detune your
duplexer*. This leads to desense problems.

You can work around that in a couple of ways (absorb the reactance
into the tuning of the duplexer, or cut the line to a multiple of a halfwave,
remembering velocity factor), but it is generally better to match the
system up as best you can so you can freely interchange parts without
having to retune the entire system. A pair of these transformers are
useful for doing that. (You still have to get your antenna tuned correctly,
or you'll have SWR on the line anyway.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4440. Re: CD SERVICING

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Jon Garver <jongar@netusa1.net>
Message-ID: <37233E01.A4287506@netusa1.net>
Source record: 70826
Cross-posted to: aus.electronics,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.repair

Sam Goldwasser wrote:

> Pardon me if this is incorrect, but all I found at that site were basically
> ads for his book and seminar with "tips coming in the future". Oh, yes, a
> fabulous out-of-focus photo of Max! :)
>
> --- sam |
>
> In article <37230b41.121546975@news.wolf> tmacinty@highlander.cbnet.ns.ca (Tom
MacIntyre) writes:
>
> "Max Harding" <mgh@eisa.net.au> wrote:
>
> >Anybody trying to get to this page using Netscape all you will get is a
> >blank page please use Explorer and try this address.
> >http://home.primus.com.au/maxp/home.htm
> >this works.BUT NOT ON NETSCAPE.
> >Max Harding wrote in message <7fnc5j$bd8$1@news.eisa.net.au>...
> >>G'day i have just found this address which might be worth looking at if you
> >>are interested in CD servicing or want to learn.
> >>http://cdservicing.findhere.com
>
> >>tell him Max sent you.

I sure didn't find this site worth bookmarking! Just another attempt at selling something.

Maybe they are in cohouts with Microsoft, that is why Netscape won't read their page. :-)
Just think
of all the business they lost because of browser incompatibility. Hmmm

--
Jon Garver
mailto:HeritageTV@hotmail.com

4441. FS: johnson 4 pin ceramic tube socket

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7fvhjsedc1@nnrp1.dejanews.com>
Source record: 70827

johnson 4 pin ceramic tube socket. mounted on recessed metal plate right now. will leave on metal plate and allow buyer to decide how he wants to use. hard to get item. used for 4 pin large tubes like some early triodes and rectifiers. $15 SHPD to lower 48 states. pics available. thanks robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4442. FS: rca senior voltohmyst VTVM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7fvhrdehi1@nnrp1.dejanews.com>
Source record: 70828

rca senior voltohmyst, dirty but all there. lens is ok. no probe. as is, sitting on shelf for over ten years so may or may not work. $20 shpd to lower 48 states. thanks robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4443. FS: rf amp deck for s-band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: dcat4955@bellsouth.net
Message-ID: <7fvi6aetg1@nnrp1.dejanews.com>
Source record: 70829

rf amp deck from s-band sig gen. tunable high quality assembly. power out unknown but can furnish pics so you can see how beefy this unit is. has various adjustments on the front of the assembly. you figure out how to power up the tube. i'm not into microwave so kind of useless to me. tube is good. unit was working. bought it for tubes. can provide pics. came from university of miami radar lab. $20 plus shpng from 33165 thanks robert

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4444. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: kovar <kovar@ia.net>
Message-ID: <01be8f3b$64c61c60$8dd0a0cd@k0var>
Source record: 70830
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I think you forgot to figure in the electrical propagation charteristics of
the feedline.
It is likley you will find a 1/4 wave times .66 to get a closer value.
Thats if I remember correctly and you use a feedline with .66 VF.
--
Jack Kovar
k0var
Iowa

ma_locksmith <ma_locksmith@email.msn.com> wrote in article
<#pFxGGzj#GA.241@cpmsnbbsa05>...
> Shorted stubs are 1/2 wave, open stubs are 1/4 wave. Both reflect a
short
> at the driving end.
>
>
> Michael Smith wrote in message
<3wFU2.10076$5E.168699@news7.ispnews.com>...
> >Does any one have info on building notch filters to be used as a low
power
> >notch duplexer. I have heard you can make a notch out of shorted coax
> >stubs. Are the stubs 1/4 waves at the notch frequency? Anyone have
plans
> >for these types of filters.
> >
> >Mike
> >
> >mjs@nolnet.net
> >
> >
>
>
>

4445. Re: Comb Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: rick@area.com
Message-ID: <7fvj4cmfk1@vax.area.com>
Source record: 70831

In article <3720CB9E.5103B58F@pcez.com>,
&NM7U <DontHitReplyUseTheHotLinkInTheSignature> wrote:
>Jim wrote:
>>
>> Anyone have a good design for a comb generator?
>>
>> --
>> Jim
>> N8EE

With all the high speed logic devices around these days, you
can get harmonics up to several GHz by just clocking a flip
flop and using its own output to reset it, resulting in a narrow
pulse. Motorola Eclinps logic (e.g. 10E131) is great for this.

Above that, you have to use a step recovery diode module to
make a comb generator. The SRD's are difficult to get and information
on applications is mostly out of print. A really good comb
generator requires construction techniques beyond most ham
radio operator capabilities. If you really want to build
a SRD comb generator, count on spending a lot of time getting it
working right and even then, lower your expectations of performance.

Rick Karlquist N6RK
rick@area.com

4446. WTB: Autek RF-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: ny1e@server.nlbbs.com
Message-ID: <FArAEF.4LD@server.nlbbs.com>
Source record: 70832

I am looking for an Autek RF-1 in perfect working order. Please reply with price, shipped to Maine. Thanks, Dick NY1E

4447. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: ma_locksmith <ma_locksmith@email.msn.com>
Message-ID: <OTNe4S0j#GA.254@cpmsnbbsa05>
Source record: 70833
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Absolutely correct.... but I was not commenting on electrical Vs mechanical
length. Only on 1/4 vs 1/2 wave. You must take into consideration the
propagation factor (typically 0.66 for lots of cable) to go from electrical
to mechanical size. Good comment.

Ed
kovar wrote in message <01be8f3b$64c61c60$8dd0a0cd@k0var>...
>I think you forgot to figure in the electrical propagation charteristics of
>the feedline.
>It is likley you will find a 1/4 wave times .66 to get a closer value.
>Thats if I remember correctly and you use a feedline with .66 VF.
>--
>Jack Kovar
>k0var
>Iowa
>
>ma_locksmith <ma_locksmith@email.msn.com> wrote in article
><#pFxGGzj#GA.241@cpmsnbbsa05>...
>> Shorted stubs are 1/2 wave, open stubs are 1/4 wave. Both reflect a
>short
>> at the driving end.

4448. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be8f8a$3f01e460$d0e2abc3@default>
Source record: 70834
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

0.66 applies only to solid polyethylthene lines of any
impedance.

If foam-filled or expanded, or disk-supported, with air
space, then a higher VF will apply. Could be as high as
0.94.
--
Reg

4449. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <K59x1CAqT4I3EwH$@ifwtech.demon.co.uk>
Source record: 70835

Nick wrote:
>On Sun, 25 Apr 1999 10:19:18 -0400, "Michael Smith" <mjs@nolnet.net> wrote:
>
>>Does any one have info on building notch filters to be used as a low power
>>notch duplexer. I have heard you can make a notch out of shorted coax
>>stubs. Are the stubs 1/4 waves at the notch frequency? Anyone have plans
>>for these types of filters.
>>
>>Mike
>>
>>mjs@nolnet.net
>
>Hi
>
>I think you will find the Q too low on a coax stub to make a duplexer.
>
>Duplexers are normally made from 1/4 cavities end tuned in some way but if you
>are thinking about making the stubs from cable it is just too lossy.

That's true, unless you use large, low-loss hardline for the "cavities"
- for details, see:
http://www.dallas.net/~jvpoll/techidx.html

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4450. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: oap1@my-dejanews.com
Message-ID: <7g0682$vc7$1@nnrp1.dejanews.com>
Source record: 70836
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

HI. I am looking for a board to do the same with some old monitors I have. How about the Radio Electronics/ Harmony Research converter that was mentioned earlier?, 1.would this work with a CGA, EGA or a VGA monitor? 2. Are some CGA monitors TTL and others Analog 3. Could such a circuit work on a SUN /Sony fixed sync (lowest res 1024 x 768) workstation monitor (I have used this on a PC by just modifying the cable and adding a capacitor to combine the sync wires.) 4. What is the resolution of a regular 19" colour TV vs a CGA monitor with composite input or a VGA monitor with an adapter? 5. How much improvement would you get by feeding say a satellite receiver composite video output to the TV with a composite input vs going through a vcr input then via the antenna connection to the TV? 6. Finally has anyone seen another converter other than the Harmony one.

Thanks.
Orville.

KB9TMP <"kb9tmp<AT>"@qsl.net> wrote:
>
>
> David Cunningham wrote:
> >
> > I have an old redundant colour computer monitor, which was originally used
> > with a 286 PC. I also have a television tuner module, which was liberated
> > from a scrap VCR, and provides composite video and audio outputs. I am
> > hoping to combine the two, along with a simple audio amplifier, to make a
> > cheap television. The monitor has a 9 pin d-plug on one end, but I am not
> > sure what type of signal it needs. I therefore need to process the composite
> > video signal in such a way that the resulting output signal will drive the
> > monitor. Is this possible? I would appreciate it if anyone could suggest how
> > to do this, or if anyone can tell me what sort of input signal the monitor
> > requires.
> >
> > Thanks, John Cunningham.
>
> John
> From what I've read of the responses you would be better off with a used
> Apple 11 color computer monitor! I use one on a busted vcr (eats tapes)
> with computer speakers for sound. The best thing is the Apple uses a
> RCA phono jack for the video input and it has a real sharp picture.
> Maybe you can find one at a yard sale or trade yours in at a computer
> store for what you need!
> --
> To reply remove the extra @
> _____

>
> "73" from the cornfields of Orange County Indiana!
> <'}}}>< <'}}}>< WW - KB9TMP <'}}}>< <'}}}><
> E-Mail me at: kb9tmp<AT>@qsl.net
> Home Page: http://www.qsl.net/kb9tmp/
> Church URL: http://www.angelfire.com/in/orleanschristian/
> _____
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4451. Re: *** Looking for M57716 UHF Module source****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990425150628704 32@zetnet.co.uk>
Source record: 70837

The message <37216d8b.776233@news.interbusiness.it>
from grainone@caserta.peoples.it (Vanni) contains these words:

> Or indication for cheaper source in EU (less than 60$) .

> Thanks de Vanni I8JJB

> i8jjb@qsl.net

> http://www.qsl.net/i8jjb/index.html
==========
Mailine Electronics , PO Box 235 ,Leicester LE2 9SH UK
tel: +44 116 277 7648 or +44 116 278 0891
fax: +44 116 247 7551

Internet : www. mainlinegroup.co.uk

Mitsubishi RF Power module 57716 Price : GBP 58.60 approx US$ 94.00

Definitely above US$60.-

If someone advises you on cheaper alternative supplier ,please let me know.

73 Frank GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail :gm0csz.kn6wh@ukrs.org

4452. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: la8ak@online.no
Message-ID: <372385c0.612281934@news.online.no>
Source record: 70838
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 25 Apr 1999 11:36:52 -0400, "ma_locksmith"
<ma_locksmith@email.msn.com> wrote:

>Shorted stubs are 1/2 wave, open stubs are 1/4 wave. Both reflect a short
>at the driving end.
>
>
>Michael Smith wrote in message <3wFU2.10076$5E.168699@news7.ispnews.com>...
>>Does any one have info on building notch filters to be used as a low power
>>notch duplexer. I have heard you can make a notch out of shorted coax
>>stubs. Are the stubs 1/4 waves at the notch frequency? Anyone have plans
>>for these types of filters.
>>
>>Mike
>>
I tried 1/4, 1/2, 3/4-wave notch filters - what you choose depends on
the prupose. Second harmonic filter is 1/2-wave on the undesired
frequency

Tried some 2m repeater filter improvement, 600kHz between RX and TX,
3/4 wave configuration with 2.2pF series capacitors. Result 12-15dB
notch, but you must use some extra stubs to optimize impedance for
minimum loss. 12-15dB is not much, it is low, and result of the small
coupling capacitor or 2.2pF.

In an ordinary quarterwave band notch filter you achieve easily 40dB
with a single tuned circuit, and possibly 90-100dB with two tuned
circuits. It is very wide, the series capacitor is used to build a
narrower filter, but has not so much attenuation, the larger capacitor
the deeper notch, but also broader. The coax-stub is inductive on the
frequency you operate, and it is tuned with a tapped trimming
capacitor 1/3-1/5 from the shorted side.

believe the velocity factor for 7/8" heliax(hardline) is 0.82,
cellflex is somewhat higher, possibly 0.9

73
Jan-Martin LA8AK

reduced x-post to 3 most valid groups

4453. TWIN FEEDER DUAL BAND SLIM JIM ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Alec Jefford <alec@g8gon.demon.co.uk>
Message-ID: <925079361.19027.0.nnrp-09.c1ed74c1@news.demon.co.uk>
Source record: 70839

ANYONE HAVE ANY DETAILS OF A TWIN FEEDER 2M/70CMS SLIM JIM..???
IS THE DEAL BAND ONE JUST A FEED POINT COMPROMISE??
ANY INFO PLEASE...
THANKS ALEC..

4454. Want: Hufco TWS-6 Freq. Counter Schmatic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <3723A7AB.92CD3610@seidata.com>
Source record: 70840
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap,rec.radio.amateur.swap

The subject line says it all. A photo copy will do. PLEASE
NO $20.00 manuals!
The counter is probably not worth $20.00 when working! (:'>

Thanks for your kind attention.
Randy KB8ASO Milan, IN.

4455. PLL/VCO FMing

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Doug Snowden <snowden@primeline.com>
Message-ID: <3723BE4E.64877EE0@primeline.com>
Source record: 70841

I have an old Cubic Astro 102 that exhibits FMing on all bands. With the vcos adjusted to cause the correct error voltage from the comparator/loop filter all bands still have fm. Is there a way to troubleshoot this? Or should I just shotgun it and start replacing components in the loop filter? I am guessing that one of the caps in the loop filter have gone bad?

Doug N4IJ

4456. Re: NO Commercialism on the newsgroups - shotgun posts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <925091199.663.74@news.remarQ.com>
Source record: 70842

Tom Repeated <kb1cga@starc.org> wrote in message
news:371FAC52.30D31AF@starc.org...
> Hi All,
>
> E-Bay ad's are fine... so long as they have "FA:" in the subject line...
so those who wish may
> ignore them, and those who like e-bay and read them... downloading a MSG
header is NP...
> pausing to read a message this is an auction and not a for sale/swap is an
annoyance .... to
> me anyway :)

Not in rec.radio.amateur.homebrew. This is a discussion group. If ebay ads
must be posted it should be in rec.radio.swap only.

-73 Bob W7OV

4457. Re: PLL/VCO FMing

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <3723EDCA.7224@nbnet.nb.ca>
Source record: 70843

Howdy Doug....Always interesting to troubleshoot any feedback system as you never know what is cause and what is effect.....so my way of thinking always is to break the loop and try to duplicate control to see what is failing (your loop filter suspicion sounds not bad...just beware of this cause/effect prob). You might lift the output from the loop filter to the varicap (guessing this is the control device) and see if, in unlocked condition, the vco still FM's. Monitor the filter output independantly to see if it's noisy etc. If the VCO still FM's, with the loop broken then look for a problem with its own stability or the control device. If the loop output looks noisy then backtrack to see what is dirty (hetrodyne oscillator maybe....whatever else is in this loop). How does the problem manifest itself....is it instantly upon startup or occur over time? (thinking maybe heat related in the latter case). I'd be more inclined to think an active device the problem more than a capacitor, mostly due to the usually low level voltages on cap's in these stages. I've never even seen the 102 but seem to remember 2 large tuning knobs...you mentioned vcos (more than 1)....do they all exhibit the same problem and are they all in the same loop? If they are all in the same loop then you're back to cause and effect....if not, see what is common with the problem....likelyhood of 2 loops having bad cap's would be suspect in my book.....look maybe for something common injecting noise such as power supply filtering. Just a couple of thoughts on it...best of luck to ya!

73 - Keep on Tinkering.....THAT....is REAL HAM RADIO

Gord VE1AJF

4458. Info for PL172/8295 Amp Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Dudley Hurry <bhurry@wt.net>
Message-ID: <7g0imk$fa2$1@sys14.hou.wt.net>
Source record: 70844

I'm looking for diagrams and info for a HF amp using a PL172 tube.. I do have a commercial amp with this tube, but no powersupply.. Any info helpful..

73,
Dudley
WA5QPZ
jdhurry@wt.net

4459. Re: FS:(=6B4G)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-25 00:00:00 UTC
From: Danny <dbelectrons@accesshub.net>
Message-ID: <3722A2F9.F3073C98@accesshub.net>
Source record: 70845
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

Hi I have about twenty new old stock 6B4G in original boxes.

Danny

"DEMOSTENES A. Goksoyr" wrote:

> I have found some of these excellent 6B4G valves. 6C4C in Russia is
> equivalent to 6B4G and it looks identical to the old Sylvania 6B4G
> with double anode stapped together by a metal plate, not the type with
> two separate anodes. This 6C4C valves is very well built and is of
> high quality. It is unlike the new Sovtek 6B4G which looks more like a
> scaled down Sovtek 300B with a single anode.
> I don't have many 6C4C left, so e-mail me if you are interested
>
> Best regards,
>
> Arnold Goksoyr
>
> DEMOSTENES A. Goksoyr
> N5850 Balestrand
> NORWAY
> Phone +47 5769 1340
> Fax +47 5769 1267
> e-mail arnoldg@sf.telia.no
>
> More than 1800 different valves in stock. Plus: sockets,
> transformers, caps, resistors and books about valves and
> valve equipment. Many rare European valve types.
> You will find it at my homepage: http://demostenes.vestdata.no

4460. Re: PLL/VCO FMing

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be8fcb$d690cee0$2be2abc3@default>
Source record: 70846

As its on all bands, first check the master crystal
oscillator for instability. Then any other crystal/LC
local oscillators. You may be able to do these checks
using another receiver in the CW receive mode.

Also check regulated DC supply voltages for instability.

Does the FM consist of random walks, just noisy, or does it
appear to have a regular modulation of some sort.

If the FM modulation frequency is several tens of kHz then
it indicates a severe misadjustment somewhere inside the
phase-lock loop. ie., it is no longer locked but is
wobbling about some centre frequency due to
over-compensation. Symptoms depend very much on type of
PLL.

Try tapping components with your finger nail or something
while listening to a station on the receiver.

Very difficult to locate a fault because the PLL is very
self-compensating for errors. Check DC voltages around
transistors and IC's within the loop. If you have to
change capacitors try electrolytics first.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Doug Snowden <snowden@primeline.com> wrote in article
<3723BE4E.64877EE0@primeline.com>...
> I have an old Cubic Astro 102 that exhibits FMing on all
> bands. With the vcos adjusted to cause the correct error
> voltage from the comparator/loop filter all bands still
> have fm. Is there a way to troubleshoot this? Or should
> I just shotgun it and start replacing components in the
> loop filter? I am guessing that one of the caps in the
loop
> filter have gone bad?
>
> Doug N4IJ
>

4461. Re: Want: Hufco TWS-6 Freq. Counter Schmatic

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904252338520.17370-100000@Stratus.CAM.ORG>
Source record: 70847
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.cb,rec.radio.swap,rec.radio.amateur.swap

On Sun, 25 Apr 1999, Randy and Cara Randall wrote:

>
> The subject line says it all. A photo copy will do. PLEASE
> NO $20.00 manuals!
> The counter is probably not worth $20.00 when working! (:'>
>
> Thanks for your kind attention.
> Randy KB8ASO Milan, IN.
>
Do you just want a schematic for interest sake, or are you trying to
repair it?

Those date from 1976 and there isn't anything special about the circuitry.
I found an ad for them in the February 1976 issue of 73, but it doesn't
give much detail. There was a review of a Hufco counter some time later
in 73, but mine are not organized well enough to be able to find the
article easily.

It's going to use a chain og 7490's to divide down the timebase, and a
7490 BCD counter/(maybe a latch, a 7475)/decoder per digit. There is
nothing magical about that, and there really is only a set way to connect
them up so you can easily get the details from all kinds of articles zbout
building frequency counters. The only unique circuitry would be the input
circuit and the rewet circuits.

The January 1976 issue of 73 has an article by Jim Huffman titled "A $50
Self-Powered Counter". It's an almost pocket size unit. It has three
digits and a switch to see the rest of the decimal places. It shows the
input circuitry, which is a 40673 MOSFET feeding a 7413 Schmitt trigger.
I'm not looiing it up, but that's what was used in the K2OAW frequency
counter which appeared in a multi-part article in 73 in 1972. I suppose
there might be slight component variations. It gives some more details,
but it's pretty much some stringing together of some module like circuit
boards that the company made.

The February 1976 issue of 73 has another article by Jim Huffman, "What do
You Want to Count?" It sort of goes into the explanation of those
"modules". There's a three digit counting board, and on it each digit has
a 7490 counter, a 7447 decoder and a 7-segment LED readout. It doesn't
bother with a latch. There's another IC at the bottom of the board which
I can't read, but a schematic for the board shows a 7400.

So if nobody comes up with the schematic, the question becomes: "What's inside?". Is it one whole board, or "modules"? What IC's are on the board? Unless the reference frequency comes from the AC line (it's been done!), there will be a crystal oscillator and a chain of 7490's to divide it down, and they will all be wired up the same way, since they are all dividing by ten.

The display units are going to be something like the
above and layout itself will show a pattern. If it's a bad readout, you look up the decoder IC and see whether it's meant for common anode or common cathode, and then buy a new one. The pinout may be the same, but you can verify by the wiring on the circuit board, since the decoder is a known absolute.

The input circuitry may require some tracing, but if it's
got a MOSFET and a 7413, chances are he used the K2OAW input circuitry, and you jast have to verify the match.

Another popular input circuitry came from a commercial frequency counter and when QST reviewed it, must have been 1972, they showed the circuitry. From there, it showed up in plenty of the frequency counter articles of the time. It was an FET and bipolar transistor buffer capacitor coupled to a 7404 with the first or the first two stages set for linear operation via a feedback resistor. I mention the circuit since it was popular and it might have possibly shown up in the Hufco counter.

If the reference chain is not working (you can check it by figuring
out the dividing ratio and hooking an audio amplifier to a low frequency output (the 7490 data sheet will give you the proper pin) for a tone. Try a different crystal (anything in the same range will give you an indication, and if there's still no tone, then inject another oscillator into the input of the first 7490 (such as from one of those crystal oscillators in a metal can that fit a 14pin dip socket). You'll have to figure your other schemes if still nothing comes out; but since they are digital IC's they will either be working or not.

The reset circuitry may be the most difficult since there are all kinds of ways of doing it. On the other hand, if there are no latches the circuit will be even simpler than most that were published.

The counter may look complicated, because of the number of IC's, but most of the wiring is repetitive. Once you've figure out one digit, the rest will be the same.

Of course, if you've got a blank board this may not be too helpful, unless the IC numbers are silk screened on the board. If it's just a blank board, you'd do well to forget it. Not because it's too much trouble to build a frequency counter with such small scale integration IC's, but becuase it used straight 74xx series TTL that used a lot of current and didn't have very high frequency range and you could do it simpler today with better integrated logic, and more likely CMOS or Schottky.

Michael VE2BVW

4462. Source for second osc. crystals 10.245 etc ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: jay@west.net
Message-ID: <slrn7i7tg4.etb.jay@slowpoke.sb.west.net>
Source record: 70848
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Hello! I'm in the process of building some VHF receivers using the Motorola MC13135 chip, and am looking for a source for 10.245MHz second oscillator crystals. 11.155 would work as well. I know that I can order them from International, wait for them to be custom made, and pay for a custom crystal.

But! These crystals have got to be mass-produced by the thousands, as they're in every scanner, cordless phone, and cheap 49 MHz walkie talkie on the planet. I've resorted to cannibalizing these items in the past.

The usual sources for parts such as Mouser and Digi-Key have many, many crystals in stock for under a buck, but seem to avoid the typical second oscillator rocks of 10.7 +/- 0.455 and 21.4 +/- 0.455. Strange as Digi-Key sells both the 10.7 crystal filters and .455 ceramic filters for these common projects.

Anyone know of a place to buy these in reasonable quantities for experimenters (10 at a time or so) at reasonable prices?

--
-- Jay Hennigan jay@west.net 805-884-6323 --
WestNet: Internet service to Santa Barbara, Ventura and the world.

4463. Re: S-parameters and stability circles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: Langue Rodriguez <languer@earthlink.net>
Message-ID: <372413D1.21375DA8@earthlink.net>
Source record: 70849
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Brad,

The following is from Gonzalez book (Microwave Transistor Amplifiers),
excellent source. Define delta as:
delta= (S11 * S22) - (S12 * S21) ;note that '*' signifies
multiplication here

then the output stability circle (where abs(Gamma In) = 1):
rL (radius) = abs[(S12 * S21) / (sqr(abs(S22)) - sqr(abs(delta)))]
CL (center) = conj(S22 - (delta*conj(S11))) / (sqr(abs(S22)) -
sqr(abs(delta)))

the input stability circle (where abs(Gamma Out) = 1):
rs (radius) = abs[(S12 * S21) / (sqr(abs(S11)) - sqr(abs(delta)))]
Cs (center) = conj(S11 - (delta*conj(S22))) / (sqr(abs(S11)) -
sqr(abs(delta)))

There are also equations for the gain circles in case you don't want
simultaneos conjugate matching on both input and output (say you need
something different from the maximum available - or stable - gain, or
you need broader operating bandwidth). And equations for Noise matching
(or mismatching I should say).

Hope this helps,

Langue

Brad Moersfelder wrote:
>
> From a set of two port S-parameters, how does one calculate the position
> (the center and radius)
> of the stability circles as plotted on a Smith Chart?
>
> Brad

4464. Wanted - 4CX250K Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: brigode@ibm.net
Message-ID: <7g1m8j$7et$1@nnrp1.dejanews.com>
Source record: 70850

I am looking for sockets for 4CX250Ks
73
wb8dbf

------------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4465. Re: 75 Ohm Hard line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: Brad Kellison KA8TOK <KA8TOK@four-way.net>
Message-ID: <37246575.BF27BF9A@four-way.net>
Source record: 70851
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc
Body handling: Binary attachment payload not displayed: KA8TOK.vcf

I can .. I live in the same town as Paul and YES the Info is correct.. you can
also go to he web site at the following address.

http://www.kuggie.com/rbtip/ZDEngineering.html

Gary Coffman wrote:

> On Sun, 25 Apr 1999 10:13:58 -0400, "Michael Smith" <mjs@nolnet.net> wrote:
> >I may be getting some 3/4 or7/8 inch hard line that is 75 ohms. I remember
> >reading a article about using 75 ohm line. The author only did test up to 2
> >meters. I want to use this line on 70 cm. Will cotangent transformers work
> >for this band? I have heard if everything else is good you would only get a
> >1.5 to 1 match any how. Also do I have to mess with the antenna? I would
> >like to use this at a 440 repeater site and the antenna is a 4 dipole
> >array. Is there any one that sells matching transformers?
>
> ZD Engineering sells transformers for most types of CATV hardline.
> They work fine, and also serve as substitutes for the often expensive
> hardline connectors. The address I have is 605 Balsley Avenue,
> Findlay Ohio, 45840. The phone number is 419-424-8765. ZD
> Engineering is owned by Paul Darwactor W8ZD. I've used these
> transformers and can recomend them.
>
> (It has been some years since I've bought any. I can't guarantee
> that the address and phone number are still good, but it is the
> best info I have.)
>
> Since the SWR isn't really that high, and excess SWR loss is
> relatively low, the question of why should we care is relevant.
> The reason is that the reactive termination can *detune your
> duplexer*. This leads to desense problems.
>
> You can work around that in a couple of ways (absorb the reactance
> into the tuning of the duplexer, or cut the line to a multiple of a halfwave,
> remembering velocity factor), but it is generally better to match the
> system up as best you can so you can freely interchange parts without
> having to retune the entire system. A pair of these transformers are
> useful for doing that. (You still have to get your antenna tuned correctly,
> or you'll have SWR on the line anyway.)
>
> Gary
> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net

> 534 Shannon Way | We break it |
> Lawrenceville, GA | Guaranteed |

[One or more binary attachments are retained only in the source text.]

4466. FS 16.384MHZ reference oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <IXMJzEAzsGJ3EwM+@ddwyer.demon.co.uk>
Source record: 70852

I still have some of these SC cut crystal oscillators, similar
stability to the HP10811 and approach the the best that you can get from
quartz
/small rubidium in long term stability and do better in
short term stability.
This is the only frequncy I have as Im an oscillator designer and
purchased these on the surplus market, they are approximately 10% of the
list price.
Email for price , circuit to lock to any other freq around 10MHZ in 1kHz
steps and fuller spec.
--
douglas dwyer

4467. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990426101105.09810.00002106@ng-fv1.aol.com>
Source record: 70853

God believes in Reincarnation because He is going to send Jesus Christ back to earth to judge the wicked. Get right. Get saved. Get Jesus into your life.

4468. Geiger tube wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990426101212.09810.00002107@ng-fv1.aol.com>
Source record: 70854

I am looking for a geiger tube (with pinouts) if you know where to get one, please let me know.

KD6KOS
James

4469. Re: Freq counter/VFO stabilizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01be8ff2$8baed120$6d1e3bcb@default>
Source record: 70855

> Richard Hosking
> VK6BRO
> http://www.iinet.net.au/~richardh/VK6BRO.htm
> richardh@iinet.net.au
> QRP/Amateur Radio/Microcontrollers
>
> Soon Available
>
> Counter 0-40 MHz 10 Hz resolution
> LCD display (board mounts on back of display)
>
> 16 user selectable offsets via 4 I/O pins
> Each offset can be user set to within 10 Hz with positive or negative
> offset using two Pushbutton switches connected temporarily to the board
>
> PLL VFO stabilizer as part of board (just connect a varicap
> to your VFO circuit to give a swing of +/- 5 KHz for 0.5-4.5 V)
>
> Uses AVR AT90S1200 controller
>
> Supply 7-12 V @ 22 mA
>
> Size approx 3.5 by 2 inches
>
> Board plus controller AUS$40
>
> E mail me if interested

or at http://www.iinet.net.au/~richardh/vfostab.htm

4470. Re: FS 16.384MHZ reference oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: ralph <crlane@erols.com>
Message-ID: <3724811C.CA8C5482@erols.com>
Source record: 70856

more info ?.....Ralph

douglas dwyer wrote:

> I still have some of these SC cut crystal oscillators, similar
> stability to the HP10811 and approach the the best that you can get from
> quartz
> /small rubidium in long term stability and do better in
> short term stability.
> This is the only frequncy I have as Im an oscillator designer and
> purchased these on the surplus market, they are approximately 10% of the
> list price.
> Email for price , circuit to lock to any other freq around 10MHZ in 1kHz
> steps and fuller spec.
> --
> douglas dwyer

4471. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: rust1d@usa.net
Message-ID: <MPG.118e4cd7e29096e99896ff@netnews.netaxs.com>
Source record: 70857
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

skablazr@astro.temple.edu says...
> On Wed, 21 Apr 1999 15:34:43 -0500, real.address@bottom.of.message
> (Andrew D. Ager) wrote:
>
>
> >The hop bill I never got scaled dow correctly. For a 50bbl batch, it was
> >7 lbs. in the kettle, and 44 lbs. in the whirlpool.
> >
> Honker's comes in at 38 IBU. With the ratio you presented, it's about
> 14% of the total hop bill for the boil and 86% at the end.
>
> Assuming a five gallon batch size and 5% aa Styrians, that's about 2
> ounces for the boil and a whopping 12 ounces at the end. Ouch!

I think you did some math wrong. Scaling from 50 bbls to 5 gallons would indicate .36 ounces in the kettle and 2.27 ounces in the whirlpool (44/50 = .88 lbs per bbl, or 14 oz per bbl or .454 per gallon or 2.27 per 5 gallons). Scaling like this is easy using my recipe calculator, which can formulate recipes of 100+ bbls and then scale to any size or units, and it works in *any* units known to man (because you can add and define your own units). See sig line for more info on my calculator.

--
John Varady The HomeBrew Recipe Calculating Program
Boneyard Brewing Custom Neon Beer Signs For Home Brewers
Glenside, PA Get More Information At:
rust1d@usa.net http://www.netaxs.com/~vectorsys/varady

4472. Re: Freq counter/VFO stabilizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <37246fbb.4326991@news.magiclink.com>
Source record: 70858

Or see my COMPUTING counter-dial/AFC on pages 35-44 of Spring 1998
issue of Communications Quarterly.

Bill - W7AAZ

On 26 Apr 1999 14:39:09 GMT, "Richard Hosking" <richardh@iinet.net.au>
wrote:

>
>> Richard Hosking
>> VK6BRO
>> http://www.iinet.net.au/~richardh/VK6BRO.htm
>> richardh@iinet.net.au
>> QRP/Amateur Radio/Microcontrollers
>>
>> Soon Available
>>
>> Counter 0-40 MHz 10 Hz resolution
>> LCD display (board mounts on back of display)
>>
>> 16 user selectable offsets via 4 I/O pins
>> Each offset can be user set to within 10 Hz with positive or negative
>> offset using two Pushbutton switches connected temporarily to the board
>>
>> PLL VFO stabilizer as part of board (just connect a varicap
>> to your VFO circuit to give a swing of +/- 5 KHz for 0.5-4.5 V)
>>
>> Uses AVR AT90S1200 controller
>>
>> Supply 7-12 V @ 22 mA
>>
>> Size approx 3.5 by 2 inches
>>
>> Board plus controller AUS$40
>>
>> E mail me if interested
>
>or at http://www.iinet.net.au/~richardh/vfostab.htm

4473. Re: *** Looking for M57716 UHF Module source****

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3723974b.616773557@news.online.no>
Source record: 70859

On Sun, 25 Apr 1999 15:06:28 +0100, Frank Dinger
<frank.dinger@zetnet.co.uk> wrote:

k
>
>
>Mitsubishi RF Power module 57716 Price : GBP 58.60 approx US$ 94.00
>
>Definitely above US$60.-
>
>If someone advises you on cheaper alternative supplier ,please let me know.
>
>73 Frank GM0CSZ / KN6WH
>
>Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
>e-mail :gm0csz.kn6wh@ukrs.org
>
>
has anybody modified MHW720 for linear operation? OZ2BB modified some
early Motorola linear power modules, should sometimes be quite easy

4474. Schematic for Yaesu FT727

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: danny@portal.ca
Message-ID: <nS0V2.2537$qu5.1418306@WReNphoon4>
Source record: 70860

If anyone has a copy scanned, it would be greatly appreciated.
I had a copy and lost it:(

please email it to me :

danny@portal.ca

thankyou

dan

-**** Posted from RemarQ, http://www.remarq.com/?c ****-
Search and Read Usenet Discussions in your Browser

4475. Re: Comb Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7g2a92$qr8$1@nnrp1.dejanews.com>
Source record: 70861

In article <Pine.SOL.4.10.9904231811270.19945-100000@Ocean.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:
>
> I was wondering about the application too. If it's for a certain range,
> one old trick was to put a signal into the middle of the range and
> modulate it with 100KHz or 10KHz or whatever frequency. On either side of
> the main signal there will be signals spaced the modulating frequency
> apart. By starting with the centre frequency you wouldn't have to worry
> about the harmonics of the low frequency signal dropping off by the time
> it reaches that frequency, but you'd still get the closely spaced signals
> that you wouldn't get if you started with a higher frequency.

Now *that* is cute!

Another stunt I've pulled when trying to tell markers apart is
to use two oscillators on different frequencies. Have one
run continuously, modulate the other. When you hear them both
you are at a common multiple of the frequencies, which should
be large enough not to be ambiguous. An example: 80 MHz
(modulated), 50 MHz (running steadily). Hear them both every
400 MHz.

I've seen this with calibrators, so that (say) the 100 kHz
markers are stady, while the 10 kHz markers are going dit
dit dit...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4476. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: real.address@bottom.of.message
Message-ID: <real.address-2604991213000001@dyna8.sesp.nwu.edu>
Source record: 70862
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

In article <MPG.118e4cd7e29096e99896ff@netnews.netaxs.com>, rust1d@usa.net
(John Nicholas Varady) wrote:

> skablazr@astro.temple.edu says...
> > On Wed, 21 Apr 1999 15:34:43 -0500, real.address@bottom.of.message
> > (Andrew D. Ager) wrote:
> >
> >
> > >The hop bill I never got scaled dow correctly. For a 50bbl batch, it was
> > >7 lbs. in the kettle, and 44 lbs. in the whirlpool.
> > >
> > Honker's comes in at 38 IBU. With the ratio you presented, it's about
> > 14% of the total hop bill for the boil and 86% at the end.
> >
> > Assuming a five gallon batch size and 5% aa Styrians, that's about 2
> > ounces for the boil and a whopping 12 ounces at the end. Ouch!
>
> I think you did some math wrong. Scaling from 50 bbls to 5 gallons would
> indicate .36 ounces in the kettle and 2.27 ounces in the whirlpool (44/50
> = .88 lbs per bbl, or 14 oz per bbl or .454 per gallon or 2.27 per 5
> gallons). Scaling like this is easy using my recipe calculator, which can
> formulate recipes of 100+ bbls and then scale to any size or units, and
> it works in *any* units known to man (because you can add and define your
> own units). See sig line for more info on my calculator.

I've always wanted to try your calculator, actually (I like the recipe
reports!), but I work on Macs (home and office, although the two are
merging these days...). Doh.

--
Andrew D. Ager
Chicago, IL
andrew-ager at nwu dot edu

4477. Re: REQ: Recipe for Honker's Ale (All Grain)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: rust1d@usa.net
Message-ID: <MPG.118e7e1d75465ae8989701@netnews.netaxs.com>
Source record: 70863
Cross-posted to: alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

In article <real.address-2604991213000001@dyna8.sesp.nwu.edu>,
real.address@bottom.of.message says...
> In article <MPG.118e4cd7e29096e99896ff@netnews.netaxs.com>, rust1d@usa.net
> (John Nicholas Varady) wrote:
>
> > skablazr@astro.temple.edu says...
> > > On Wed, 21 Apr 1999 15:34:43 -0500, real.address@bottom.of.message
> > > (Andrew D. Ager) wrote:
> > >
> > >
> > > >The hop bill I never got scaled dow correctly. For a 50bbl batch, it was
> > > >7 lbs. in the kettle, and 44 lbs. in the whirlpool.
> > > >
> > > Honker's comes in at 38 IBU. With the ratio you presented, it's about
> > > 14% of the total hop bill for the boil and 86% at the end.
> > >
> > > Assuming a five gallon batch size and 5% aa Styrians, that's about 2
> > > ounces for the boil and a whopping 12 ounces at the end. Ouch!
> >
> > I think you did some math wrong. Scaling from 50 bbls to 5 gallons would
> > indicate .36 ounces in the kettle and 2.27 ounces in the whirlpool (44/50
> > = .88 lbs per bbl, or 14 oz per bbl or .454 per gallon or 2.27 per 5
> > gallons). Scaling like this is easy using my recipe calculator, which can
> > formulate recipes of 100+ bbls and then scale to any size or units, and
> > it works in *any* units known to man (because you can add and define your
> > own units). See sig line for more info on my calculator.
>
> I've always wanted to try your calculator, actually (I like the recipe
> reports!), but I work on Macs (home and office, although the two are
> merging these days...). Doh.

And I always wanted to port it to the Mac but never found the time.
Theoretically it should be easy since Foxpro is supposedly a cross
platform dev language and I have both the Win & Mac versions at my
disposal.

--
John Varady The HomeBrew Recipe Calculating Program
Boneyard Brewing Custom Neon Beer Signs For Home Brewers
Glenside, PA Get More Information At:
rust1d@usa.net http://www.netaxs.com/~vectorsys/varady

4478. Re: Source for second osc. crystals 10.245 etc ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: "aaa@bbb.com" <aaa@bbb.com>
Message-ID: <3724C23B.5B3F0DFB@bbb.com>
Source record: 70864
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Digikey sells 10.240Mhz EPSON tuning fork crystals , and the work fine.

4479. Re: FS: Russian 6C4C (=6B4G)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <3724d2d8.1349232@news1.telia.com>
Source record: 70865
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

On 26 Apr 1999 14:35:03 -0400, randy@ultra0.rdrc.rpi.edu (Randall Bradley) wrote:

> And the manufaturer of these Russian 6B4s is?
>
> Date?
>
> _-_-randy

I am not sure, all is written i cyrillic letters and I don't read that very well.. A sheet with techical data is enclosed with each valve, and the last line reads: 3 4587 03.79 THp 10 000
The 'H' in THp is not a real H, but looks a bit like H.
The valves has a rhombic logo with the number 54 inside and the letters OTK 71 on the glassbulb. In addition to this there is the coding 6C4C, probably a date code: 85 01 and another logo which looks like a circle with a 'C' inside and three short paralell lines one the left and right of the main circle.

The valves has two getters inside, looks like a saucer upside down.
The base is black, and pin 1, 4 and 6 is missing.

Regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets, transformers, caps, resistors and books about valves and valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

4480. Hi Amp batter connector source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: PAW <73457.650@CompuServe.COM>
Message-ID: <ez76CGDk#GA.228@nih2naac.compuserve.com>
Source record: 70866

Anyone know a source for the RU battery plug-sockets? I've tried truck stops and the major Auto parts stores around Joliet. Mouser, DigiKey, Altronics, and All Electronics don't list. They are in McMasterCarr if worst comes to worst.

--
PAW PCR 1000 Icom $350
(W9JMN@Compuserve.com) Check our site for mikes, ham, video, etc
http://ourworld.compuserve.com/homepages/w9jmn

4481. Re: HOW TO: Calibrate SWR/Watt meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990426191237.24085.00001784@ng-ca1.aol.com>
Source record: 70867

I found the best way to calibrate a "bird" wattmeter was to get a large 32 oz. waffle faced hammer and.....

Then again "average" is the problem

4482. Re: 75 Ohm Hard line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: AB7RS <tglenn@imt.net>
Message-ID: <372504CC.56B@imt.net>
Source record: 70868
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael Smith wrote:
>
> I may be getting some 3/4 or7/8 inch hard line that is 75 ohms. I remember
> reading a article about using 75 ohm line. The author only did test up to 2
> meters. I want to use this line on 70 cm. Will cotangent transformers work
> for this band? I have heard if everything else is good you would only get a
> 1.5 to 1 match any how. Also do I have to mess with the antenna? I would
> like to use this at a 440 repeater site and the antenna is a 4 dipole
> array. Is there any one that sells matching transformers?
>
> Any help?
>
> Mike
>
> mjs@nolnet.net
Just pay attention to the lenghth so it mirrors the antennas impedance
and it will work GREAT! Tracy

4483. HAM RADIO CLASSIFIED ADS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: K2BJ <webmaster@k2bj.com>
Message-ID: <7g2vok$7oo@dfw-ixnews11.ix.netcom.com>
Source record: 70869

Upload images to attach to your ad...
http://www.k2bj.com

4484. Re: Geiger tube wanted.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: csmolinski@erols.com
Message-ID: <csmolinski-ya02408000R2604992124210001@news.erols.com>
Source record: 70870

Try LND. They're the largest mfg of GM & proportional tubes, and ion chambers:
http://www.lndinc.com

Also, you may want to give my Radiation Experiments page a look:
http://www.blackcatsystems.com/science/radiation.html

73's
Chris
N3JLY

In article <19990426101212.09810.00002107@ng-fv1.aol.com>, jpnoll@aol.com
(JPNOLL) wrote:

> I am looking for a geiger tube (with pinouts) if you know where to get one,
> please let me know.
>
> KD6KOS
> James

--
Check out Black Cat Systems for radio (pirate, spy numbers) and Mac
software. http://www.blackcatsystems.com

The Numbers Racket - a CD-ROM of Spy Numbers stations, info available at
http://www.blackcatsystems.com/numbers

4485. Re: FS: Russian 6C4C (=6B4G)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: postmaster@triodeel.com
Message-ID: <pfbV2.1871$cq2.76582@newscene.newscene.com>
Source record: 70871
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

On, 26 Apr 1999 14:35:03 -0400 , In rec.audio.tubes Randall Bradley
<randy@ultra0.rdrc.rpi.edu> wrote:
> And the manufaturer of these Russian 6B4s is?

It'll have a "C" logo indicating it was made by the
Svetlana factory. Only place, AFAIk, that made that style
of 6B4-G in Russia, at least in latter years.

The Russians also made 2A3's, but I've never seen one.

--
Gold plated RCA jacks, binding posts, banana plugs etc, reasonable prices..
http://www.triodeel.com/parts.htm#connector

Ned Carlson Triode Electronics "where da tubes are!"
2225 W Roscoe Chicago, IL, 60618 USA http://www.triodeel.com
ph 773-871-7459 fax 773-871-7938
12:30 to 8 PM CT, (1830-0200 UTC) 12:30-5 Sat, Closed Wed & Sun

4486. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFAuxJB.E5F@netcom.com>
Source record: 70872
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7g0682$vc7$1@nnrp1.dejanews.com>, <oap1@my-dejanews.com> wrote:
>HI. I am looking for a board to do the same with some old monitors I have.
>How about the Radio Electronics/ Harmony Research converter that was
>mentioned earlier?,

>1.would this work with a CGA, EGA or a VGA monitor?

CGA, No. Actually it looks kind of neat, like some special effects
in a rock video (solarization, I think it's called), but not something
you'd use for watching TV programs.
EGA, apparently no, according to the magazine article.
VGA, No.

>2. Are some CGA monitors TTL and others Analog

Yes, back in the early half of the 1980's there were a number of
monitors made to run on both the TV (and CGA) scan rates and on some
of the higher scan rates. The Multisync line, from NEC, among others.
These were premium price monitors that had the advantage that they could
be used on IBM PCs and also on other computers like the Amiga, Atari ST,
Zenith, and various Apple machines that used Analog RGB at TV scan rates.

>3. Could such a circuit work on
>a SUN /Sony fixed sync (lowest res 1024 x 768) workstation monitor (I have
>used this on a PC by just modifying the cable and adding a capacitor to
>combine the sync wires.)

No. The Harmonic Research unit doesn't do scan rate conversion.

4. What is the resolution of a regular 19" colour
>TV vs a CGA monitor with composite input or a VGA monitor with an adapter?

NTSC is a compression scheme. Frankly, it sucks. You can't get more than
100 to 200 discrete color changes in any one scan line. S-Video would be
higher, but not that much.

>5. How much improvement would you get by feeding say a satellite receiver
>composite video output to the TV with a composite input vs going through a
>vcr input then via the antenna connection to the TV?

You might want to ask in one of the rec.video newsgroups or see if they
have a FAQ. Perhaps you'll get some improvement as you'll avoid any
more bandwidth filtering in the TV's tuner and IF, and less distortion
from avoiding the video modulator in the tuner. S-Video would probably
give even more, depending on where they bandpassed filtered the color
information. Also depends on if it's a C-band analog system or a

digital DBS system. With C-Band, it's sent as a composite signal so
you can't get more out of it that was sent in the first place.

>6. Finally has anyone seen another converter other than the Harmony one.

I've seen both Video -> VGA and VGA -> Video converters on the shelf
at CompUSA. About $200. Usually limited to 640x400, as the scan
rate conversion is relativly easy for that mode. Never saw what the
results looked like, though.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

4487. Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-26 00:00:00 UTC
From: The Conqueror <joetheripper@hotmail.com>
Message-ID: <3726276f.0@news.gulliver.fr>
Source record: 70873
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I was just wondering why they still keep the Morse code testing requirements if the military doesn't use it anymore and telegraphs are not that common. I think because they stopped it for the marines, there's no point in using it in ham radio either. And if you want to say it is for security, you are not allowed to use codes when intended to obscure meaning.

-Dan K3DRQ

k3drq@qsl.net

4488. My digital filter using a soundcard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7g301f$78n@eldborg.rhi.hi.is>
Source record: 70874

Hi

Some of you migth find this interesting:
I've implemented a digital audiofilter using a
full duplex soundcard and a computer.
I wrote a program for Linux (NOT Windows or Dos)
that implements low pass audiofiltering. I've used it as
the audio filter on my DC receiver. The source to the
program is free and released under the GPL so if anyone
is interested feel free to try it out.
Some of you might even want to add features to it.

You can find it on my web page: http://www.hi.is/~hkelle/

--
//----------------------//--
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

4489. Re: Freq counter/VFO stabilizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: maddog@io.com
Message-ID: <37253526.53582215@news.io.com>
Source record: 70875

On Mon, 26 Apr 1999 13:57:38 GMT, bcarver@magiclink.com (Bill Carver) wrote:

>Or see my COMPUTING counter-dial/AFC on pages 35-44 of Spring 1998
>issue of Communications Quarterly.

Bill, does Communications Quarterly have a web site?

monty N5FC

4490. Re: Freq counter/VFO stabilizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: maddog@io.com
Message-ID: <372535d8.53759531@news.io.com>
Source record: 70876

On 26 Apr 1999 14:39:09 GMT, "Richard Hosking" <richardh@iinet.net.au>
wrote:

>
>> Richard Hosking
>> VK6BRO
>> http://www.iinet.net.au/~richardh/VK6BRO.htm
>[snip]
>or at http://www.iinet.net.au/~richardh/vfostab.htm

Richard, my internet server reports the images on this page as "file
not found"... watsa?

monty N5FC

4491. Re: FSK decoder - 4levfsk.gif (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: 12345@not.com
Message-ID: <37256a04.11022089@news.lightspeed.net>
Source record: 70877

On Wed, 14 Apr 1999 18:21:23 -0700, Norm Melick
<henmel@worldnet.att.net> wrote:

>Does anyone have a good, 4 level FSK decoder schematic that
>they would share with me?
>
>Thanks much.
>
>Norm/KQ6SD

I found this while surfing around one day. I don't remember what web
site it came from. I think this is what you are looking for.

Bill

4492. Re: See my blocks

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3725AC99.EF04A550@fallschurch.esys.com>
Source record: 70878

We knew what you meant, Harry! "Bollocks" has two ells! HI! es 73,
W1AEL

4493. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <3725B1CF.3597AF6D@NOSPAM.aud.alcatel.com>
Source record: 70879
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Considering the comments on velocity factor, you willl want to measure the
resonant frequencyt of the notch with some type of equipment. The stubs
I've built had to be tuned to frequency.

If you need higher notch-Q (at the expense of slightly less notch depth) you
can use a longer stub (i.e.: 3/4 wavelength, 5/4 wavelength - don't forget the

Vf adjustment).

Another approach to improving the notch filter is to use multiple notch
filters
separated by a 1/4 wave transmission line.

```
<--1/4-->
In ------+--------+------- Out
| |
| |
stub stub
```

I've used this techniques to knock down a paging transitter signal located
very, very close (a few feet away). Tuning of the stubs was necessary. Start

with them long, and snip off 1/2" pieces to bring them into resonance. For
longer stubs, RG-213 gives better notch depth than RG-58 (due to lower loss).

Tom, N5EG

Michael Smith wrote:

> Does any one have info on building notch filters to be used as a low power
> notch duplexer. I have heard you can make a notch out of shorted coax
> stubs. Are the stubs 1/4 waves at the notch frequency? Anyone have plans
> for these types of filters.
>
> Mike
>
> mjs@nolnet.net

4494. 1SS97 DIODE 1SS97 DIODE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7g4cic$3nf$2@news7.svr.pol.co.uk>
Source record: 70880

I'm looking for some 1SS97 diodes. I need 4 to repair a piece of
professional test equipment. They are used in a UHF balanced mixer.
Ideally I would like say 12 so that I can measure the forward voltage drop
and select 4 matched diodes.

If you have any 1SS97's or know where I can get them please let me know.

John G3UGY

4495. Re: 75 Ohm Hard line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: K <kwin@execpc.com>
Message-ID: <7g49n2$dd@newsops.execpc.com>
Source record: 70881
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Address didnt work.

Brad Kellison KA8TOK wrote in message <37246575.BF27BF9A@four-way.net>...
>I can .. I live in the same town as Paul and YES the Info is correct.. you
can
>also go to he web site at the following address.
>
> http://www.kuggie.com/rbtip/ZDEngineering.html
>
>Gary Coffman wrote:
>
>> On Sun, 25 Apr 1999 10:13:58 -0400, "Michael Smith" <mjs@nolnet.net>
wrote:
>> >I may be getting some 3/4 or7/8 inch hard line that is 75 ohms. I
remember
>> >reading a article about using 75 ohm line. The author only did test up
to 2
>> >meters. I want to use this line on 70 cm. Will cotangent transformers
work
>> >for this band? I have heard if everything else is good you would only
get a
>> >1.5 to 1 match any how. Also do I have to mess with the antenna? I
would
>> >like to use this at a 440 repeater site and the antenna is a 4 dipole
>> >array. Is there any one that sells matching transformers?
>>
>> ZD Engineering sells transformers for most types of CATV hardline.
>> They work fine, and also serve as substitutes for the often expensive
>> hardline connectors. The address I have is 605 Balsley Avenue,
>> Findlay Ohio, 45840. The phone number is 419-424-8765. ZD
>> Engineering is owned by Paul Darwactor W8ZD. I've used these
>> transformers and can recomend them.
>>
>> (It has been some years since I've bought any. I can't guarantee
>> that the address and phone number are still good, but it is the
>> best info I have.)
>>
>> Since the SWR isn't really that high, and excess SWR loss is
>> relatively low, the question of why should we care is relevant.
>> The reason is that the reactive termination can *detune your
>> duplexer*. This leads to desense problems.
>>
>> You can work around that in a couple of ways (absorb the reactance

>> into the tuning of the duplexer, or cut the line to a multiple of a
halfwave,
>> remembering velocity factor), but it is generally better to match the
>> system up as best you can so you can freely interchange parts without
>> having to retune the entire system. A pair of these transformers are
>> useful for doing that. (You still have to get your antenna tuned
correctly,
>> or you'll have SWR on the line anyway.)
>>
>> Gary
>> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
>> 534 Shannon Way | We break it |
>> Lawrenceville, GA | Guaranteed |
>

4496. Re: 75 Ohm Hard line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Brad Kellison KA8TOK <KA8TOK@four-way.net>
Message-ID: <3725D4B9.9EF416FB@four-way.net>
Source record: 70882
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc
Body handling: Binary attachment payload not displayed: KA8TOK.vcf

the website may not work but the telephone and house address sure do.

K wrote:

> Address didnt work.
>
> Brad Kellison KA8TOK wrote in message <37246575.BF27BF9A@four-way.net>...
> >I can .. I live in the same town as Paul and YES the Info is correct.. you
> can
> >also go to he web site at the following address.
> >
> > http://www.kuggie.com/rbtip/ZDEngineering.html
> >
> >Gary Coffman wrote:
> >
> >> On Sun, 25 Apr 1999 10:13:58 -0400, "Michael Smith" <mjs@nolnet.net>
> wrote:
> >> >I may be getting some 3/4 or7/8 inch hard line that is 75 ohms. I
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> >> >reading a article about using 75 ohm line. The author only did test up
> to 2
> >> >meters. I want to use this line on 70 cm. Will cotangent transformers
> work
> >> >for this band? I have heard if everything else is good you would only
> get a
> >> >1.5 to 1 match any how. Also do I have to mess with the antenna? I
> would
> >> >like to use this at a 440 repeater site and the antenna is a 4 dipole
> >> >array. Is there any one that sells matching transformers?
> >>
> >> ZD Engineering sells transformers for most types of CATV hardline.
> >> They work fine, and also serve as substitutes for the often expensive
> >> hardline connectors. The address I have is 605 Balsley Avenue,
> >> Findlay Ohio, 45840. The phone number is 419-424-8765. ZD
> >> Engineering is owned by Paul Darwactor W8ZD. I've used these
> >> transformers and can recomend them.
> >>
> >> (It has been some years since I've bought any. I can't guarantee
> >> that the address and phone number are still good, but it is the
> >> best info I have.)
> >>
> >> Since the SWR isn't really that high, and excess SWR loss is

> >> relatively low, the question of why should we care is relevant.
> >> The reason is that the reactive termination can *detune your
> >> duplexer*. This leads to desense problems.
> >>
> >> You can work around that in a couple of ways (absorb the reactance
> >> into the tuning of the duplexer, or cut the line to a multiple of a
> halfwave,
> >> remembering velocity factor), but it is generally better to match the
> >> system up as best you can so you can freely interchange parts without
> >> having to retune the entire system. A pair of these transformers are
> >> useful for doing that. (You still have to get your antenna tuned
> correctly,
> >> or you'll have SWR on the line anyway.)
> >>
> >> Gary
> >> Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
> >> 534 Shannon Way | We break it |
> >> Lawrenceville, GA | Guaranteed |
> >

[One or more binary attachments are retained only in the source text.]

4497. Re: Wanted - 4CX250K Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Mike Willis <"M.J.Willis "@rl.ac.uk>
Message-ID: <3725B8F7.DCAAEA94@rl.ac.uk>
Source record: 70883

brigode@ibm.net wrote:

> I am looking for sockets for 4CX250Ks
> 73
> wb8dbf
>

We have some over here.

4498. Re: ** Help ** identify Capacitor Please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be9110$b429dfe0$3aeaabc3@default>
Source record: 70884

Just measure its resistance with a multimeter on the
100K-ohm range. It will charge up better in one direction
of polarity.

4499. Re: Source for second osc. crystals 10.245 etc ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Randy Ott <k5hj@NOSPAMfastlane.net>
Message-ID: <AC38F362ED05DA0B.77DA706B76139E26.85C729E0E508999A@library-proxy.airnews.net>
Source record: 70885
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

You might want to consider the fact that you will be off by 5 kHz.

<aaa@bbb.com> wrote in message news:3724C23B.5B3F0DFB@bbb.com...
>
> Digikey sells 10.240Mhz EPSON tuning fork crystals , and the work fine.
>
>
>
>

4500. Re: 30 to 60MHz band

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: frussle@erols.com
Message-ID: <372cf3fa.3499310@news.erols.com>
Source record: 70886

On Sat, 24 Apr 1999 11:47:16 +0100, "David Cunningham"
<D.L.C@btinternet.com> wrote:

>I was thinking of making an experimental receiver, a simple superhet type,
>covering a range of about 30 to 60MHz or higher. I wondered if anyone knows
>what sort of signals I could receive in this range, besides the
>6 metre amateur radio band. Would it be worth while building such a
>receiver, and will the signals be mostly AM or FM? I was wondering if any
>low-VHF DX signals would be present in this range.

Mostly FM. It's commonly set up in simplex to Base configurations.
Mobiles can run 100 watts. Bases often run 300 Watts. It does skip
nicely during periods of heavy solar activity.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4501. Re: Source for second osc. crystals 10.245 etc ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7g50d8$848$1@scotty.tinet.ie>
Source record: 70887
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

Jay Hennigan wrote in message ...

>Anyone know of a place to buy these in reasonable quantities for
>experimenters (10 at a time or so) at reasonable prices?
>

Cirkit (UK) mailorder@cirkit.co.uk

price 1.12 UKP, 1997 price list.

73, Ed EI9GQ

4502. TM 11-2715, Installation of Radio Sets in Military Jeeps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Ben Azari <bijan@armyradio.com>
Message-ID: <925245193.20661.15.nnrp-03.9e98f6bb@news.demon.co.uk>
Source record: 70888

The Complete TM 11-2715, Technical Manual, Installation of Radio Sets in Military Jeeps.
http://www.armyradio.com/publish/TM_11-2715/TM_11-2715.htm

Articles on:
Model AQST East German 'HRO' Receiver.
Communication Equipment of The North Vietnamese Army and the Viet Cong.
Collection of Japanese W.W.II Military Radios.
Russian Military Radios.
The Iraqi Radios of Desert Storm.
http://www.armyradio.com/publish/Articles/Your_Articles.htm

Other useful information on Military Radios and Vehicles.
http://www.armyradio.com/publish/Information.htm

Army Radio Sales Co. Specialise in Military Communications Equipment.
website at www.armyradio.com

--

Ben Azari
Army Radio Sales Co.
HTTP: www.armyradio.com
HTTP: www.armyradio.co.uk
E-Mail: sales@armyradio.com

4503. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Greg Baker <bakergsj@maranatha.net>
Message-ID: <34qV2.5890$%L2.257019@news6.ispnews.com>
Source record: 70889
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Morse Code has its uses and should be encouraged, but not worry too much about those who don't know the code. I think the opportunity to pump signals out on a narrow band to distant parts of the world has its own charms.

The US Marines still use Morse code, and a few of us keep our keys handy just in case.

Greg Baker
WB3EBO.
Old Rusty Fist.

The Conqueror wrote in message <3726276f.0@news.gulliver.fr>...
>I was just wondering why they still keep the Morse code testing requirements
>if the military doesn't use it anymore and telegraphs are not that common. I
>think because they stopped it for the marines, there's no point in using it
>in ham radio either.

4504. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: w2upX@mindspring.com
Message-ID: <37264024.9804835@news.mindspring.com>
Source record: 70890
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Mon, 26 Apr 1999 18:22:42 -0400, "The Conqueror"
<joetheripper@hotmail.com> wrote:

>I was just wondering why they still keep the Morse code testing requirements
>if the military doesn't use it anymore and telegraphs are not that common. I
>think because they stopped it for the marines, there's no point in using it
>in ham radio either.
>-Dan K3DRQ
>
>k3drq@qsl.net
>
With your logic, shouldn't you go through basic training before you
get a ham license?

4505. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <8420-372643A6-3@newsd-111.bryant.webtv.net>
Source record: 70891

wait a minute, jesus was raised from the dead. he was alive, and rose into heaven ALIVE. when did he die again? how can he be reincarnated if he is currently alive? he will come back to earth as himself, as he is. not re-born as a baby (witch is normally required for the popular belief in reincarnation) so where did you get this idea?.....to the group, sorry. i know i should ignore off-topic posts and not encourage them. but hell, how can you let this go by without pointing out how ignorant it is?

4506. WTD: How to make an AM radio the 'old-fashioned' way!??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: huntingtonbears@worldnet.att.net
Message-ID: <37264e59.8249779@netnews.worldnet.att.net>
Source record: 70892

Can anyone help me make an AM receiver the 'old-fashioned' way using a toilet paper tube, copper wire, a 9V battery, and a crystal?? Please email me or post an URL. My nephews and their summer nights thank you.
bb
huntingtonbears@worldnet.att.net

4507. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Art Winterbauer <artwinte@sprynet.com>
Message-ID: <7g5las$7a$1@nntp2.atl.mindspring.net>
Source record: 70893

Well, I brought a Ranger back from the dead.

4508. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Don or Darla Arnold <DArnold@datasync.com>
Message-ID: <37266576.5CCA2DB7@datasync.com>
Source record: 70894
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

ALL IMI ALL REQUIREMENTS (except for the ITU requirement)
and amateur radio were dropped WORLDWIDE on 1 FEB 99.

don
kb5fhx

Barry wrote:

> On Mon, 26 Apr 1999 18:22:42 -0400, "The Conqueror"
> <joetheripper@hotmail.com> wrote:
>
> >I was just wondering why they still keep the Morse code testing requirements
> >if the military doesn't use it anymore and telegraphs are not that common. I
> >think because they stopped it for the marines, there's no point in using it
> >in ham radio either.
> >-Dan K3DRQ
> >
> >k3drq@qsl.net
> >
> With your logic, shouldn't you go through basic training before you
> get a ham license?

--
OUR WEB PAGE UPDATED 17 April 99
http://www.geocities.com/Heartland/Valley/6430 Darla and Don's Website
http://hattiesburg.net/columns/darnold.shtml My online column

DARLA (dawn) ICQ# 7341931
Don (weathernut) ICQ# 14664294

Right now we are on the threshold of whatever comes next!!!
MAYBE!!

4509. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <3726986A.950@nbnet.nb.ca>
Source record: 70895
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Howdy Dan....In all the hoopola about whether anyone should or can't use morse anymore.....a few points never seem to be brought out...or are only mentioned briefly.

Morse - Is a mode that allows communications to be copied verbatim easily (you can come close on voice or often do it if words are standardized but its not easy)......
- Is a mode that is indeed digital but which requires the most rudimentary interfacing and for which our own "processor" causes error correcting and speed compensating depending on the ability of the other "terminal" or "line" conditions.
- Is a mode which transcends language and dialect barriers when suitable signals are used...such as the international "Q" signals...and others. Hard to get most computer systems to do that yet and our ability to merely speak one language (english for example) with a wide variation of accents is hard enough sometimes.
- Is a mode whose "standardization" is unheard of in communications, where for at least a hundred years was not obsolete for the purpose of basic communications (stuff that's GOOD for critical use...such as lifesaving...and cheap commerce).
- Is a mode which, when the equipment is tired....just needs a good dinner and a cup o coffee to revive it.....stuff we have around anyway !
- When send using CW transmission (the 2 are NOT the same!) is extremely effective, using suitable narrow filters at both ends, for solid communications under the worst circuit noise and conditions. It might not be the very best...but when you consider the rudimentary equipment needed it becomes mighty attractive.
- Is a mode which, because it only requires very basic equipment, lends itself well to "field repairability".....a handy thing if you've ever sat in a remote spot and listened to digital signals that couldn't connect to you...telling yourself...."if they'd only just turn 'em on and off...I could get the message! After all...what is slower....a slow sent message or one that never arrives????

There's likely lots of other good and bad reasons why anyone should keep morse alive. Yep its old.....but well made and the fact that it hasn't undergone a million transformations tells us all that it works well. It is slow, but when mere text will suffice, is an adequate method of communication in conjuction with simple equipment. It does require skill to use...but everything we do also does (Tell me that a windows NT system hung up on a satellite link doesn't require skill to figure out what happened!). There is also a thing about operating morse that only

morse operators may truely feel...but its a kindred spirit that transcends whether you were a mere ham or a skilled commercial operator, a struggling boy scout trying it or a pilot who was able to make himself understood when his mic stopped working. To that last end I can only offer that to those who WON'T use it...it will always be a thing despised....to those who do or have, a thing revered.

73 - Gord VE1AJF...(and merchant R/O in recent times :)

4510. fs/ft: 1500@450vdc caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: AL GOSS <renal@frontiernet.net>
Message-ID: <372675FE.7368A77C@frontiernet.net>
Source record: 70896

High power amp builders......10 these in series = 150 @ 4500vdc. Yes need step-start but talk about DC ! I even have some 24 v high current handling relays to help step-start.
All brand new MALLORY 3" X 6" non-PCB. Have quantity of 60. Will sell or trade! Located Rochester, NY can ship (your expense) or maybe arrange a meet at reasonable distance from WNY. AL k2spo

4511. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: "Edward L. Dowdy" <eldowdy@net66.com>
Message-ID: <XXuV2.1587$v3.270530@news21.ispnews.com>
Source record: 70897
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Bravo!

Gord Skiffington wrote in message <3726986A.950@nbnet.nb.ca>...
>Howdy Dan....In all the hoopola about whether anyone should or can't use
>morse anymore.....a few points never seem to be brought out...or are
>only mentioned briefly.
>
> Morse - Is a mode that allows communications to be copied verbatim
>easily (you can come close on voice or often do it if words are
>standardized but its not easy)......
> - Is a mode that is indeed digital but which requires the
>most rudimentary interfacing and for which our own "processor" causes
>error correcting and speed compensating depending on the ability of the
>other "terminal" or "line" conditions.
> - Is a mode which transcends language and dialect barriers
>when suitable signals are used...such as the international "Q"
>signals...and others. Hard to get most computer systems to do that yet
>and our ability to merely speak one language (english for example) with
>a wide variation of accents is hard enough sometimes.
> - Is a mode whose "standardization" is unheard of in
>communications, where for at least a hundred years was not obsolete for
>the purpose of basic communications (stuff that's GOOD for critical
>use...such as lifesaving...and cheap commerce).
> - Is a mode which, when the equipment is tired....just
>needs a good dinner and a cup o coffee to revive it.....stuff we have
>around anyway !
> - When send using CW transmission (the 2 are NOT the same!)
>is extremely effective, using suitable narrow filters at both ends, for
>solid communications under the worst circuit noise and conditions. It
>might not be the very best...but when you consider the rudimentary
>equipment needed it becomes mighty attractive.
> - Is a mode which, because it only requires very basic
>equipment, lends itself well to "field repairability".....a handy thing
>if you've ever sat in a remote spot and listened to digital signals that
>couldn't connect to you...telling yourself...."if they'd only just turn
>'em on and off...I could get the message! After all...what is
>slower....a slow sent message or one that never arrives????
>
>There's likely lots of other good and bad reasons why anyone should keep
>morse alive. Yep its old.....but well made and the fact that it hasn't
>undergone a million transformations tells us all that it works well. It
>is slow, but when mere text will suffice, is an adequate method of
>communication in conjuction with simple equipment. It does require

>skill to use...but everything we do also does (Tell me that a windows NT
>system hung up on a satellite link doesn't require skill to figure out
>what happened!). There is also a thing about operating morse that only
>morse operators may truely feel...but its a kindred spirit that
>transcends whether you were a mere ham or a skilled commercial operator,
>a struggling boy scout trying it or a pilot who was able to make himself
>understood when his mic stopped working. To that last end I can only
>offer that to those who WON'T use it...it will always be a thing
>despised....to those who do or have, a thing revered.
>
>73 - Gord VE1AJF...(and merchant R/O in recent times :)

4512. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37268717.6B68EB82@teleport.com>
Source record: 70898

What properties are you trying to model -- leakage current,
dissipation factor, "soak", inductance, ESR? A reasonably complete
model would be very complex, and tedious and time-consuming to build.
And the model would be significantly different for each value and each
manufacturer's varieties. So it's necessary to have some idea of what
properties are likely to be important in your application. This is
true of any modeling, not just for this particular type of component.

Roy Lewallen, W7EL

JD wrote:
>
> Hi all. is there an easy way of creating an electrolytic
> capacitor in p-spice ver 8.0. There is a schematic
> symbol for the standard cap but nothing doing for
> electrolytic types. Can't seem to find any reference
> to one in the docs...
>
> Any info would be most helpful..
>
> Thanks JD.

4513. want to buy

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Phil Singley <k5fsp@cblink.com>
Message-ID: <37269118.0@news.tislink.com>
Source record: 70899

wob - Globe chief 90, or Globe chief Deluxe Equipment. Also, Heathkit vf-1 vfo, and hw-12 with power supply. Any help appreciated.

4514. Re: Source for second osc. crystals 10.245 etc ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: rick@area.com
Message-ID: <7g63qosuc1@vax.area.com>
Source record: 70900
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

In article <slrn7i7tg4.etb.jay@slowpoke.sb.west.net>,
Jay Hennigan <jay@west.net> wrote:
>Hello! I'm in the process of building some VHF receivers using the
>Motorola MC13135 chip, and am looking for a source for 10.245MHz
>second oscillator crystals. 11.155 would work as well. I know that
>I can order them from International, wait for them to be custom made,
>and pay for a custom crystal.
>
>Anyone know of a place to buy these in reasonable quantities for
>experimenters (10 at a time or so) at reasonable prices?

I have a bunch of 10.245 MHz xtals that I will sell for 25 cents
each plus $4.00 per order shipping and handling.

Rick Karlquist N6RK
rick@area.com

4515. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: W6RCecilA <Cecil.A.Moore@IEEE.org>
Message-ID: <372690BC.1C65BF40@IEEE.org>
Source record: 70901
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Gord Skiffington wrote:
> Morse - Is a mode ...

Funny, Chapter 8 of "The FCC Rule Book" lists all the modes
available to the Amateur Radio Service and none of those modes
is Morse. I see CW, MCW, Phone, Image, RTTY, Data, Pulse, SS,
and Test, but no Morse.
--
73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

4516. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-27 00:00:00 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <37264FD5.F110302F@earthlink.net>
Source record: 70902
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I believe the International telecommunications Union, the international treaty that authorizes the Amateur Radio SERVICE, requires Morse Code for amateur licenses.

We have been playing with the definitions of how much morse has to be known, copied, skill level, etc. but I believe international law still requires it.

Dave

The Conqueror wrote:

> I was just wondering why they still keep the Morse code testing requirements
> if the military doesn't use it anymore and telegraphs are not that common. I
> think because they stopped it for the marines, there's no point in using it
> in ham radio either. And if you want to say it is for security, you are not
> allowed to use codes when intended to obscure meaning.
>
> -Dan K3DRQ
>
> k3drq@qsl.net

4517. Re: Yaesu HT PC-serial Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Adam Huber <ahuber@csulb.edu>
Message-ID: <37278BBC.C154C229@csulb.edu>
Source record: 70730

Go here http://www.icongrp.com/~sllewd/pcware.htm

Justin Davis wrote:

> Does anyone know how to make the guts on the PC connector end of one of
> these? The crap is so small I can't even read the part numbers...

4518. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <37278CEA.6E1E7528@nettally.com>
Source record: 70731
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am considering an open circuit coaxial notch filter for Mode-J (FO-20/FO-29 satellite) interference rejection. Reason I am considering an open circuit is to permit DC continuity (for preamplifier).I would use RG213 double shielded equivalent cable.

What 1/4 wave multiple would be best to trap third harmonic of 145.950 uplink without degrading loss or match at 2 meters??

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

4519. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <lwMV2.16020$95.486927@news2.giganews.com>
Source record: 70732
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Gary Coffman wrote in message <372b30d1.151478814@news.atl.bellsouth.net>...
>Actually, NTSC is *not* a compression scheme. Resolution is limited by the

Dunno, isn't it reasonable to say that NTSC *is* in part a compression scheme? (of course, there's a lot more to it!)

Without any type of compression, the transmission of color of the same resolution as the pre-NTSC B&W TV would require about 15mHz of bandwidth. Both lossless compression (interleaving the color subcarrier components between the sidebands of the B&W signal) and lossy compression (limiting the bandwidth of the color difference signals) are used to fit the whole thing into the pre-color 6mHz channel.

73 Doug

4520. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990428191630.23888.00000009@ng58.aol.com>
Source record: 70733

Peter Dahl has them and can be found on the web. Just search on Peter Dahl.

4521. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <372799FF.2FBF@sir.com>
Source record: 70734
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> Morse - Is a mode that allows communications to be copied verbatim
> easily (you can come close on voice or often do it if words are
> standardized but its not easy)......

It is much easier to copy something from English to English, It is much harder to copy something from a code back to English and thus more chance for error.

> - Is a mode that is indeed digital but which requires the
> most rudimentary interfacing and for which our own "processor" causes
> error correcting and speed compensating depending on the ability of the
> other "terminal" or "line" conditions.

Speech is compatible to 99% of the population's "processor", morse code only to a much smaller percent.

> - Is a mode which transcends language and dialect barriers
> when suitable signals are used...

What?! Neither my English or other foreign language speaking friends can understand morse code. This is a ridiculous statement.

> and our ability to merely speak one language (english for example) with
> a wide variation of accents is hard enough sometimes.

Yes, accents are hard enough, why make it MORE difficult?! If people can't understand a store check-out clerk in some weird accent, how many customers are going to understand him if he emits beeping noises from his mouth?

> - Is a mode whose "standardization" is unheard of in
> communications, where for at least a hundred years was not obsolete for
> the purpose of basic communications (stuff that's GOOD for critical
> use...such as lifesaving...and cheap commerce).

Yeah, that's why Police, Fire and Ambulance don't use it.

> is extremely effective, using suitable narrow filters at both ends, for
> solid communications under the worst circuit noise and conditions.
Completely worthless if the person on the other end doesn't understand code! (which is about 99% of the population)

> - Is a mode which, because it only requires very basic
> equipment, lends itself well to "field repairability"

A washboard is easier to repair than a washing machine too, but not a good reason to mandate people learning to use it before they are allowed to buy a washing machine.

.....a handy thing
> if you've ever sat in a remote spot and listened to digital signals that
> couldn't connect to you...telling yourself...."if they'd only just turn
> 'em on and off...I could get the message! After all...what is
> slower....a slow sent message or one that never arrives????

If no one on the other end understands code, it will never arrive.

Why don't advertisers make all their commercials on radio and TV in morse code so the message could reach more of an audience in bad conditions? Because MORE people would get the message EVEN IN BAD CONDITIONS if it is in voice, than in a secret code that they don't understand.

> There's likely lots of other good and bad reasons why anyone should keep
> morse alive.

There is only ONE. Because it is nostalgic and fun for many people. Don't take the fun away by forcing it on people that don't want to use it.

I bet if morse code was not a requirement (for certain classes of license) more people might take it up. No one wants to learn something that is forced opon them. People choose hobbies because they have an interest in them, not because someone hands them a fishing pole and orders them to fish!

> understood when his mic stopped working.

You people with your mic stopped working BS. Or stranded at the north pole with nothing for miles but a payphone with a broken microphone. Always have to try and make up some unrealistic situation to show how morse code could actually be usefull, and then THAT doesn't even fly!

I don't know of anyone ever going to be in the above situation, but even IF... would the operator on the phone or the police understand the code you are punching in on the touch tone pad, or would they think it is a prank call and hang up? Doesn't really matter, as this situation will never occur to either of us. They don't have payphones in the middle of the north pole. Especially with non-working microphones and working touch tone pads.

To that last end I can only
> offer that to those who WON'T use it...it will always be a thing
> despised....to those who do or have, a thing revered.

Think about what you just said! Think about WHY it would EVER be DESPISED! NO ONE would ever depise it if it wasn't shoved down anyones's throat!

People don't DESPISE model airplane kits. They might if people were
FORCED to build them in order to take up some other hobby!

4522. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <37279AC2.3104@sir.com>
Source record: 70735
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mark wrote:
>
> If I might add one more...
>
> -- It's fun!

To YOU and many others it is fun, to others it is boring and slow.

To some people restoring old cars is fun, to others it is boring and slow.

At least car restorer's don't want that hobby to be a requirement in order to enjoy some other hobby.

4523. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <37279BB4.52C6@sir.com>
Source record: 70736
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Michael Ruther wrote:
>
> Friend of mine's son is a radio op in the coast guard. He was taught code, and
> can do about 15 wpm.

I know a lot of obsolete skills too. Tape editing with razor blades and
tape come to mind. Perhaps that will save my life in some emergency
when my digital audio workstation breaks, or will allow me to edit in
bad weather conditions.

4524. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Don or Darla Arnold <DArnold@datasync.com>
Message-ID: <3727AA1D.9F4B2D76@datasync.com>
Source record: 70737
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

ALL the below are VERY CORRECT and TRUE, BUT,
is that ANY reason to use it on a TEST for getting your ticket
keep the subbands..if you want, EXPAND them if you like
IF we use this MODE to test people should we not have a test to see if you
can talk correctly for phone, type correctly for packet,
and expand that by building your own computer for digital modes.
THAT'S ALL I AM AGAINST IS FOR A TEST
keep the mode if it makes you happy but don't use it for TESTING.
NUFF SAID
DON
KB5FHX
NCI-1070
MARS AREA COORDINATOR
ARES RACES OPERATOR
SKYWARN FOUNDER
21 YEARS IN NAVAL COMMUNICATIONS

Gord Skiffington wrote:

> Howdy Dan....In all the hoopola about whether anyone should or can't use
> morse anymore.....a few points never seem to be brought out...or are
> only mentioned briefly.
>
> Morse - Is a mode that allows communications to be copied verbatim
> easily (you can come close on voice or often do it if words are
> standardized but its not easy)......
> - Is a mode that is indeed digital but which requires the
> most rudimentary interfacing and for which our own "processor" causes
> error correcting and speed compensating depending on the ability of the
> other "terminal" or "line" conditions.
> - Is a mode which transcends language and dialect barriers
> when suitable signals are used...such as the international "Q"
> signals...and others. Hard to get most computer systems to do that yet
> and our ability to merely speak one language (english for example) with
> a wide variation of accents is hard enough sometimes.
> - Is a mode whose "standardization" is unheard of in
> communications, where for at least a hundred years was not obsolete for
> the purpose of basic communications (stuff that's GOOD for critical
> use...such as lifesaving...and cheap commerce).
> - Is a mode which, when the equipment is tired....just
> needs a good dinner and a cup o coffee to revive it.....stuff we have
> around anyway !
> - When send using CW transmission (the 2 are NOT the same!)

> is extremely effective, using suitable narrow filters at both ends, for
> solid communications under the worst circuit noise and conditions. It
> might not be the very best...but when you consider the rudimentary
> equipment needed it becomes mighty attractive.
> - Is a mode which, because it only requires very basic
> equipment, lends itself well to "field repairability".....a handy thing
> if you've ever sat in a remote spot and listened to digital signals that
> couldn't connect to you...telling yourself...."if they'd only just turn
> 'em on and off...I could get the message! After all...what is
> slower....a slow sent message or one that never arrives????
>
> There's likely lots of other good and bad reasons why anyone should keep
> morse alive. Yep its old.....but well made and the fact that it hasn't
> undergone a million transformations tells us all that it works well. It
> is slow, but when mere text will suffice, is an adequate method of
> communication in conjuction with simple equipment. It does require
> skill to use...but everything we do also does (Tell me that a windows NT
> system hung up on a satellite link doesn't require skill to figure out
> what happened!). There is also a thing about operating morse that only
> morse operators may truely feel...but its a kindred spirit that
> transcends whether you were a mere ham or a skilled commercial operator,
> a struggling boy scout trying it or a pilot who was able to make himself
> understood when his mic stopped working. To that last end I can only
> offer that to those who WON'T use it...it will always be a thing
> despised....to those who do or have, a thing revered.
>
> 73 - Gord VE1AJF...(and merchant R/O in recent times :)

--
OUR WEB PAGE UPDATED 17 April 99
http://www.geocities.com/Heartland/Valley/6430 Darla and Don's Website
http://hattiesburg.net/columns/darnold.shtml My online column

DARLA (dawn) ICQ# 7341931
Don (weathernut) ICQ# 14664294

Right now we are on the threshold of whatever comes next!!!
MAYBE!!

4525. WTB: 10 GHz Gunnplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Allan <doblera@cadvision.com>
Message-ID: <3727BF2B.19E62D88@cadvision.com>
Source record: 70738

I am looking for a couple of 10GHz gunnplexers for a uW
newbie WBFM ham project. Something surplus like M/A-Com or
Solfan 10mW units will do. I would also be interested in
horn antennas and/or small parabolic dishes.

Anything like that kicking around?

Thanks
Allan Dobler VE6XK

4526. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <3727C53A.E682BA2F@netdoor.com>
Source record: 70739
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Skywarn founder?

magee KF5DE

Don or Darla Arnold wrote:

> ALL the below are VERY CORRECT and TRUE, BUT,
> is that ANY reason to use it on a TEST for getting your ticket
> keep the subbands..if you want, EXPAND them if you like
> IF we use this MODE to test people should we not have a test to see if
> you can talk correctly for phone, type correctly for packet,
> and expand that by building your own computer for digital modes.
> THAT'S ALL I AM AGAINST IS FOR A TEST
> keep the mode if it makes you happy but don't use it for TESTING.
> NUFF SAID
> DON
> KB5FHX
> NCI-1070
> MARS AREA COORDINATOR
> ARES RACES OPERATOR
> SKYWARN FOUNDER
> 21 YEARS IN NAVAL COMMUNICATIONS
>
>
> Gord Skiffington wrote:
>
>> Howdy Dan....In all the hoopola about whether anyone should or can't
>> use
>> morse anymore.....a few points never seem to be brought out...or are
>>
>> only mentioned briefly.
>>
>> Morse - Is a mode that allows communications to be copied
>> verbatim
>> easily (you can come close on voice or often do it if words are
>> standardized but its not easy)......
>> - Is a mode that is indeed digital but which requires
>> the
>> most rudimentary interfacing and for which our own "processor"
>> causes
>> error correcting and speed compensating depending on the ability of
>> the
>> other "terminal" or "line" conditions.

>> - Is a mode which transcends language and dialect
>> barriers
>> when suitable signals are used...such as the international "Q"
>> signals...and others. Hard to get most computer systems to do that
>> yet
>> and our ability to merely speak one language (english for example)
>> with
>> a wide variation of accents is hard enough sometimes.
>> - Is a mode whose "standardization" is unheard of in
>> communications, where for at least a hundred years was not obsolete
>> for
>> the purpose of basic communications (stuff that's GOOD for critical
>> use...such as lifesaving...and cheap commerce).
>> - Is a mode which, when the equipment is tired....just
>> needs a good dinner and a cup o coffee to revive it.....stuff we
>> have
>> around anyway !
>> - When send using CW transmission (the 2 are NOT the
>> same!)
>> is extremely effective, using suitable narrow filters at both ends,
>> for
>> solid communications under the worst circuit noise and conditions.
>> It
>> might not be the very best...but when you consider the rudimentary
>> equipment needed it becomes mighty attractive.
>> - Is a mode which, because it only requires very basic
>> equipment, lends itself well to "field repairability".....a handy
>> thing
>> if you've ever sat in a remote spot and listened to digital signals
>> that
>> couldn't connect to you...telling yourself...."if they'd only just
>> turn
>> 'em on and off...I could get the message! After all...what is
>> slower....a slow sent message or one that never arrives????
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>> There's likely lots of other good and bad reasons why anyone should
>> keep
>> morse alive. Yep its old.....but well made and the fact that it
>> hasn't
>> undergone a million transformations tells us all that it works
>> well. It
>> is slow, but when mere text will suffice, is an adequate method of
>> communication in conjuction with simple equipment. It does require
>> skill to use...but everything we do also does (Tell me that a
>> windows NT
>> system hung up on a satellite link doesn't require skill to figure
>> out
>> what happened!). There is also a thing about operating morse that
>> only
>> morse operators may truely feel...but its a kindred spirit that

>> transcends whether you were a mere ham or a skilled commercial
>> operator,
>> a struggling boy scout trying it or a pilot who was able to make
>> himself
>> understood when his mic stopped working. To that last end I can
>> only
>> offer that to those who WON'T use it...it will always be a thing
>> despised....to those who do or have, a thing revered.
>>
>> 73 - Gord VE1AJF...(and merchant R/O in recent times :)
>
> --
> OUR WEB PAGE UPDATED 17 April 99
> http://www.geocities.com/Heartland/Valley/6430 Darla and Don's Website
>
> http://hattiesburg.net/columns/darnold.shtml My online column
>
> DARLA (dawn) ICQ# 7341931
> Don (weathernut) ICQ# 14664294
>
> Right now we are on the threshold of whatever comes next!!!
> MAYBE!!
>

4527. C.B Pager

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Leroy Jackson <leroyj@swbell.net>
Message-ID: <3727C1E3.DD9DDB92@swbell.net>
Source record: 70740

Has anyone built the CB Pager in H.Friedmans "99 Electronic Projects"?

4528. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: AB7RS <tglenn@imt.net>
Message-ID: <372784B2.5908@imt.net>
Source record: 70741
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

The Conqueror wrote:
>
> I was just wondering why they still keep the Morse code testing requirements

To weed out the serious from the lazy and stupid.

> if the military doesn't use it anymore and telegraphs are not that common. I
> think because they stopped it for the marines, there's no point in using it
> in ham radio either.

What the heck do any of these points have to do with Morse code in the
amateur service?

And if you want to say it is for security, you are not
> allowed to use codes when intended to obscure meaning.

Somehow you managed to obscure the meaning of your entire post.
_ _... ..._ _ Tracy

>
> -Dan K3DRQ
>
> k3drq@qsl.net

4529. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: AB7RS <tglenn@imt.net>
Message-ID: <3727855D.4989@imt.net>
Source record: 70742
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Edward L. Dowdy wrote:
>
> Bravo!
>
> Gord Skiffington wrote in message <3726986A.950@nbnet.nb.ca>...
> >Howdy Dan....In all the hoopola about whether anyone should or can't use
> >morse anymore.....a few points never seem to be brought out...or are
> >only mentioned briefly.
> >
> > Morse - Is a mode that allows communications to be copied verbatim

Morse is not a mode,but a language that is the common one used on the
mode continuous wave.Tracy

4530. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: &NM7U <&NM7U@pcez.com>
Message-ID: <37279416.AFFA71F4@pcez.com>
Source record: 70743

Reg Edwards wrote:
>
> For solid polyethylene 50-ohm line, Capacitance = 2.5 pF
> per inch. Cut off 4 inches and you remove 10pF.

This may be an accurate statement, but it implies that a 10pf
cap can restore the resonant frequency of the shortened stub.

Thy this thought experiment. Start with a 10" section of line.
Cut off all 10" and relpace the entire length with a 25pf cap.
Does it resonate at the same frequency?

When you cut the line, you also remove the distributed inductance
associated with that section.
You can calculate the effective capacitance required to resonate
the line, but the calculation is more complex.
miker
>
> ******************************
> Reg, G4FGQ For free software go to:-
> http://www.btinternet.com/~g4fgq.regp
>
> ******************************

--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

4531. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be914d$bafffb00$53e5abc3@default>
Source record: 70903

Everybody has a right to earn a living some way or other.

We are all confidence tricksters in our own way.

Live and let live !

Or should economic sanctions be imposed, followed by Cruise
missiles, then B52's, and then . . . . . .

Or should we all go back to the stone age the easy way ?
--
Reg.

4532. Re: How to make an AM radio the 'old-fashioned' way!??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01be910d$846eaa40$83b14d0c@default>
Source record: 70904

Have Fun!

http://www.midnightscience.com/index.html
http://home.t-online.de/home/gollum/
http://hibp.ecse.rpi.edu/~john/xtal.html
http://www.midnightscience.com/xtal_frm.htm

BB <huntingtonbears@worldnet.att.net> wrote in article
<37264e59.8249779@netnews.worldnet.att.net>...
> Can anyone help me make an AM receiver the 'old-fashioned' way using a
> toilet paper tube, copper wire, a 9V battery, and a crystal?? Please
> email me or post an URL. My nephews and their summer nights thank you.
> bb
> huntingtonbears@worldnet.att.net
>

4533. Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: im@home.now
Message-ID: <37265b90.1028992@news.atl.mindspring.com>
Source record: 70905

Hi all. is there an easy way of creating an electrolytic
capacitor in p-spice ver 8.0. There is a schematic
symbol for the standard cap but nothing doing for
electrolytic types. Can't seem to find any reference
to one in the docs...

Any info would be most helpful..

Thanks JD.

4534. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: maddog@io.com
Message-ID: <37268047.138363848@news.io.com>
Source record: 70906
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Tue, 27 Apr 1999 07:47:11 -0500, Tom McDermott
<mcdermot@NOSPAM.aud.alcatel.com> wrote:

>Another approach to improving the notch filter is to use multiple notch
>filters
>separated by a 1/4 wave transmission line.
>
> <--1/4-->
> In ------+--------+------- Out
> | |
> | |
> stub stub
>
>I've used this techniques to knock down a paging transitter signal located
>very, very close (a few feet away). Tuning of the stubs was necessary. Start
>
>with them long, and snip off 1/2" pieces to bring them into resonance. For
>longer stubs, RG-213 gives better notch depth than RG-58 (due to lower loss).

Well if you have to tune the stubs, would it also follow that you
would have to tune the section between the stubs? If so, how would
you do that?

73,
monty N5FC

4535. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: maddog@io.com
Message-ID: <37267f8b.138175799@news.io.com>
Source record: 70907

On Tue, 27 Apr 1999 19:39:37 GMT, maad65@dial.pipex.com (Nick) wrote:

>You can always fit a small trimmer cap across the end (say 5pf) this allows the
>stub to be tuned without pruning it.

OK, Nick. Then what length do you recommend for the stub. Shorter?
90%, 95% of 1/4 wave?

73,
monty N5FC

4536. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: maddog@io.com
Message-ID: <372681c6.138746816@news.io.com>
Source record: 70908
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Tue, 27 Apr 1999 22:11:06 -0700, Gord Skiffington
<skiffing@nbnet.nb.ca> wrote:

>[snip] There is also a thing about operating morse that only
>morse operators may truely feel...but its a kindred spirit that
>transcends whether you were a mere ham or a skilled commercial operator,
>a struggling boy scout trying it or a pilot who was able to make himself
>understood when his mic stopped working. To that last end I can only
>offer that to those who WON'T use it...it will always be a thing
>despised....to those who do or have, a thing revered.
>
>73 - Gord VE1AJF...(and merchant R/O in recent times :)

Here, here!

I've been trying to explain to wife/family/friends for over 30 years,
and haven't ever come up with a "reason" for using CW that satisfies
those that don't have the experience. To those who have conquered
their demons, learned to communicate via CW, and discovered the reward
of it, no explanation is necessary.

If the code requirement is dropped (as it may well be), the incentives
that lead one past the hurdles of learning the code, to the most
rewarding experiences offered by CW, will be removed, and perhaps the
ranks of CW ops will diminish. Some will be happy if this should be
the case.

I think it's interesting to observe, that since the proliferation of
digital modes in the last ten years or so, CW activity on the ham
bands seems to have grown, not diminished, both here in the States and
internationally. Considering that many countries don't have a code
requirement anymore, I wonder why that would be, if it truly is a dead
mode?

Saying CW is dead is kind of like saying pianos are useless because
PCs with sound cards can make more sounds, and never need tuning.
Those who play or listen to fine pianos can instantly perceive the
difference, and those whose minds are made up won't be listening for
pianos in the first place.

When I got started 33 years ago, I struggled for a year to get my code
speed to 13 WPM so I could get my "general" ticket and move on to fone
and rtty operation. But 99% of my operation since then has been CW.
Go figure, huh?

73,
monty N5FC

4537. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Mark Brown <kb0pyo@rconnect.com>
Message-ID: <37269DA0.3B4F205F@rconnect.com>
Source record: 70909
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Here we go again, please take this off of
rec.radio.amateur.equipment and rec.radio.swap & take it
back to policy where it belongs. I could care less if you
want to learn the code or not. Don't learn it & miss some of
the best dx, learn it & work it but don't clutter up groups
where it doesn't belong.
Mark

BD wrote:
>
> Doesn't sound funny to me.. "Better keep your day job..."
>
> W6RCecilA <Cecil.A.Moore@IEEE.org> wrote in message
> news:372690BC.1C65BF40@IEEE.org...
> > Gord Skiffington wrote:
> > > Morse - Is a mode ...
> >
> > Funny, Chapter 8 of "The FCC Rule Book" lists all the modes
> > available to the Amateur Radio Service and none of those modes
> > is Morse. I see CW, MCW, Phone, Image, RTTY, Data, Pulse, SS,
> > and Test, but no Morse.
> > --
> > 73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

4538. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: gelleric@goethe.informatik.uni-stuttgart.de
Message-ID: <7g6d00$8mq$2@inf2.informatik.uni-stuttgart.de>
Source record: 70910

In article <37265b90.1028992@news.atl.mindspring.com>, im@home.now (JD) writes:
|> Hi all. is there an easy way of creating an electrolytic
|> capacitor in p-spice ver 8.0. There is a schematic
|> symbol for the standard cap but nothing doing for
|> electrolytic types. Can't seem to find any reference
|> to one in the docs...

If you just need a capacitor with a value usually realized with an electrolytic capacitor then you can simply use the symbol for a normal capacitor. If you need to care for "real" properties of an el. capacitor, like leakage current or its inductance, try adding a paralle resistor to model the leakage current, a serie resistor to model its ESR, and so on.

73, Wolfgang DJ3TZ

4539. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <37270961.1247@nbnet.nb.ca>
Source record: 70911
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Howdy Cecil.....Interesting point - often confused.....CW, MCW etc are modes of operation for a signal source.....morse is a mode (method) of communicating information, like voice etc. I know you know the difference of course....what I see is when green hams (we were all one eh!) start to confuse all this not understanding that you can send morse over an FM circuit by keying a tone or by calling that CW. Then they're scratching their heads the first time we show 'em a signal generator heheh.
I think we all ought to make our "tech" talk a little more accurate by times...maybe.

73 - Gord

4540. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be91aa$3c23ce80$aae5abc3@default>
Source record: 70912

For solid polyethylene 50-ohm line, Capacitance = 2.5 pF
per inch. Cut off 4 inches and you remove 10pF.

****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

4541. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <3727022C.55A8A84B@NOSPAM.aud.alcatel.com>
Source record: 70913
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Well, sorry that the fonts messed up the drawing. It's
pretty easy to tune the series section. Use 'T' connectors
for connecitng the stubs, the input line, the output line,
and the series 1/4 wve section.

Build the 1/4 wave series section by soldering a connector on
one end only, then temporarily configure it as a stub in a simple
test setup. Then tune it for a notch on the desired frequency
by snipping off little bits of the non-connectorized end. Snip off
just a little bit more to compensate for the connector that you will
then be putting on the open end. Install the connector, and you
now have the series line section.

-- Tom, N5EG

Monty Northrup wrote:

> Well if you have to tune the stubs, would it also follow that you
> would have to tune the section between the stubs? If so, how would
> you do that?
>
> 73,
> monty N5FC

4542. Re: AD8307 Log. Power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37270CA4.1F049BFE@fallschurch.esys.com>
Source record: 70914

Gerhard et al.
I get 4.47 microvolts rms, or -94 dBm.
73 de W1AEL

4543. Re: TM 11-2715, Installation of Radio Sets in Military Jeeps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37272CD7.7108CCD6@fallschurch.esys.com>
Source record: 70915

Sir, you have us confused (or cross-posted?) with the
rec.radio.boatanchors newsgroup!

4544. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: m4bz@garlic.SPAMNO.com
Message-ID: <37272e32.5658915@news.garlic.com>
Source record: 70916
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

If I might add one more...

-- It's fun!

Mark, KC9C

On Tue, 27 Apr 1999 22:11:06 -0700, Gord Skiffington
<skiffing@nbnet.nb.ca> wrote:

>Howdy Dan....In all the hoopola about whether anyone should or can't use
>morse anymore.....a few points never seem to be brought out...or are
>only mentioned briefly.
>

4545. Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Lee Scott <DownWithJunkMail@Spam.Net>
Message-ID: <01be9192$34d6d5e0$c99d45d1@leescott>
Source record: 70917

Does anyone know of a good source for getting tube plate power supply
transfomers?

Leland C. Scott
KC8LDO
--
"We learn in time that subjects are not controversial,
but how we communicate about them and the
elements of personal blame we add in anger. "

4546. A new ham that needs advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Joseph Merfalen <jmerfale@engr.csulb.edu>
Message-ID: <37273D28.552761B@engr.csulb.edu>
Source record: 70918

Hello. I just recently received my Tech license and I have a hand held only right now. I was reading an old ARRL book that I found in the school library and it mentions the wonderful idea of building your own rig. Now this has 2 apparent rewards. one is that you have the gratification of knowing you built your own rig and two the savings of building the radio yourself. My hand held is a dual bander and i like it for its versatility but I would really like to build my own. I thought what better place to get suggestions than this news group. Please keep in mind that I am brand new to the hobby but i do have some good experience with soldering and schematic reading as I am an EE major and I have done a couple of internships where I did get some hands on training with various engineering jobs. I looked at 2 web sites on the internet one for a company called Ramsey and another for a company called Ten-Tec. What do you guys think of these companies? Good deal? Poor Quality parts? What I wanted was a 220 MHz transceiver or even a dual bander that can get 2 meters and 220 MHz. Can anyone help me with suggestions or advice? I am really in need. Thank you very much for taking the time to read this......73's KF6VVQ joseph

4547. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <372b30d1.151478814@news.atl.bellsouth.net>
Source record: 70919
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 26 Apr 1999 18:22:24 GMT, mzenier@netcom.com (Mark Zenier) wrote:
>4. What is the resolution of a regular 19" colour
>>TV vs a CGA monitor with composite input or a VGA monitor with an adapter?
>
>NTSC is a compression scheme. Frankly, it sucks. You can't get more than
>100 to 200 discrete color changes in any one scan line. S-Video would be
>higher, but not that much.

Actually, NTSC is *not* a compression scheme. Resolution is limited by the bandwidth allocated for the signal, and by the scan rates chosen. Typically, horizontal resolution is about 225 lines, but because it is interlaced, the effective resolution is actually about 450 lines. Vertically the resolution is limited by the scan rate to 262.5 lines per field, doubled to 525 lines by interlace. (Because of the way the lines of a test chart fall on the interlace, the vertical resolution is actually only 262 lines, IE to resolve a line requires a transition, and that requires two vertical scan lines to reproduce.)

If this doesn't quite make sense, picture a test chart with vertical and horizontal lines drawn on it. The vertical lines are resolved by the horizontal bandwidth of the TV, and the horizontal lines are resolution limited by the number of scan lines in a field. So NTSC should yield a resolution of about 450x262. It usually doesn't quite do that well horizontally because most receivers aren't adjusted to recover the full transmission bandwidth. 320x200 is closer to what you see on the typical home receiver with an off the air picture.

But that's not nearly as bad as it may sound to computer types used to talking in terms of pixels. NTSC is analog, a transition can occur *anywhere* on the screen. Transitions aren't limited to discrete locations as they are in computer displays. This yields an *apparent* resolution which is much better than can be achieved with a CGA computer display. For example, there are no jaggies on slanted lines with NTSC, but there are with computer generated graphics. This analog nature also shows up benefically for objects in motion. The movements are all smooth.

Hue is also analog, and can vary in infinitesimal steps. You aren't limited to a preset number of colors as you are with a computer display. This turns out to be very important because the human visual system is more sensitive to differences in hue than it is to differences in spatial resolution. That's why TV pictures look lifelike while higher resolution computer displays still look like a cartoon. The *apparent* resolution of NTSC is a close match for 16mm film (that was chosen deliberately when the standard was formulated).

Of course, from the way the poster you're answering spells color as colour, we can assume he's in a PAL country. The bandwidths and scan rates are slightly different for PAL than for NTSC, with the advantage going to PAL. So he should see somewhat better resolution than we would.

To approach the apparent resolution of NTSC requires a computer display running 800x600 with 16 million colors. It will still have visible artifacts that will identify it as pixelated compared to an analog TV signal with moving pictures, but it will be close to the same visually if you sit back from it the standard 9 feet used for TV viewing.

Now HDTV *is* compressed for transmission. That's a different kettle of fish entirely. Channel bandwidth would have to be over 100 MHz to transmit HDTV without compression. HDTV uses MPEG 2 compression to reduce the bandwidth to fit in a 6 MHz RF channel. MPEG 2 is a lossy compression, so there are artifacts, and the HDTV picture is wider than NTSC, so it *needs* more horizontal resolution to equal the apparent sharpness of NTSC.

The end result is that HDTV at 1080i has about twice the apparent resolution of NTSC. It looks really good, about equal to 35mm movie film (again that was a deliberate choice). But because it is digitized, and because of the lossy nature of the compression, there are some artifacts. You'll notice some strobing on areas of solid color. Jay Leno's desk is a good example. In the two shot with the guest, you can see a bit of strobing of the desk. Still, the amount of detail you can see is really breathtaking. The closeups during Jewel's number Monday night had you believing she was in the room with you. (The 5 channel surround sound doesn't hurt the realism either.) When Jay goes into the audience, you feel like you are there in the audience too. There's none of the fuzziness and loss of depth of field that you get with NTSC. (The latter is partially due to the way the show is lit, of course, but it is mostly due to the inherently higher resolution of 1080i.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4548. Signal Generator as VFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37274AFB.FCC3B5B@asu.uswest.net>
Source record: 70920

I seem to recall reading somewhere that one can use an RF signal generator as a temporary VFO for homebrew receivers. Is this correct? How is the generator connected to the receiver? Also, is it possible to use a similar arrangement for transmitters?

p.s. my interest here lies in the hollow-state stuff.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4549. WANTED: Schematic for programming interface for HT800 + Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Chris Koubek <oe5kco@sbox.tu-graz.ac.at>
Message-ID: <37275011.2F0B@sbox.tu-graz.ac.at>
Source record: 70921

I am looking for a schematic for a programming interface for a motorola
ht800 + software to reprogramm frequencies to amateur band.

Thanks
Chris

4550. Re: A new ham that needs advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: frussle@erols.com
Message-ID: <372b545f.2580995@news.erols.com>
Source record: 70922

On Wed, 28 Apr 1999 09:54:00 -0700, Joseph Merfalen
<jmerfale@engr.csulb.edu> wrote:

>Hello. I just recently received my Tech license and I have a hand held
>only right now. I was reading an old ARRL book that I found in the
>school library and it mentions the wonderful idea of building your own
>rig. Now this has 2 apparent rewards. one is that you have the
>gratification of knowing you built your own rig and two the savings of
>building the radio yourself. My hand held is a dual bander and i like it
>for its versatility but I would really like to build my own. I thought
>what better place to get suggestions than this news group. Please keep
>in mind that I am brand new to the hobby but i do have some good
>experience with soldering and schematic reading as I am an EE major and
>I have done a couple of internships where I did get some hands on
>training with various engineering jobs. I looked at 2 web sites on the
>internet one for a company called Ramsey and another for a company
>called Ten-Tec. What do you guys think of these companies? Good deal?
>Poor Quality parts? What I wanted was a 220 MHz transceiver or even a
>dual bander that can get 2 meters and 220 MHz. Can anyone help me with
>suggestions or advice? I am really in need. Thank you very much for
>taking the time to read this......73's KF6VVQ joseph

Ramsey is known far and wide to be a great place to get EE training.
In other words, you will have many hours of joy trying to get your
project to function.

Ten Tec is at the other end of the spectrum from Ramsey. They have a
reputation rivaling the very best that ever graced the electronic kit
business (Heathkit).

I speak from experience, having built projects from both companies.

You will learn a lot from building kits from either company. One of
the learning experiences will be more pleasant, however.

Feel free to e-mail further questions...

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4551. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Michael Ruther <michael.ruther@alliedsignal.com>
Message-ID: <372761DC.12D21180@alliedsignal.com>
Source record: 70923
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Friend of mine's son is a radio op in the coast guard. He was taught code, and can do about 15 wpm.
AA7QA

The Conqueror wrote:

> I was just wondering why they still keep the Morse code testing requirements
> if the military doesn't use it anymore and telegraphs are not that common. I
> think because they stopped it for the marines, there's no point in using it
> in ham radio either. And if you want to say it is for security, you are not
> allowed to use codes when intended to obscure meaning.
>
> -Dan K3DRQ
>
> k3drq@qsl.net

4552. Re: Pspice Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <37276C29.19CA3D4C@lsid.hp.com>
Source record: 70924

Wolfgang Gellerich wrote:
>
> In article <37265b90.1028992@news.atl.mindspring.com>, im@home.now (JD) writes:
> |> Hi all. is there an easy way of creating an electrolytic
> |> capacitor in p-spice ver 8.0. There is a schematic
> |> symbol for the standard cap but nothing doing for
> |> electrolytic types. Can't seem to find any reference
> |> to one in the docs...
>
> If you just need a capacitor with a value usually realized with an electrolytic
> capacitor then you can simply use the symbol for a normal capacitor. If you
> need to care for "real" properties of an el. capacitor, like leakage current
> or its inductance, try adding a paralle resistor to model the leakage current,
> a serie resistor to model its ESR, and so on.

One fairly important part of the "and so on" could be a diode shunting
across the capacitor, if it is a polarized type. Usually electrolytics
become very leaky if you try to apply reverse voltage. Depending on the
application, the same effects (usually not including the diode) might be
important with other types of caps, too. That is, at RF, you might care
about the inductance in a Mylar cap. And in a precision integator, you
might be interested in the dielectric absorption of even a polystyrene
or a Teflon capacitor. For a lot of uses, though, it's fine to just use
the standard SPICE capacitor. All this points out that SPICE is a fine
tool, but it's not a tool to replace your brain. You still need to
think carefully about what the answers are telling you, and understand
the limitations of your model. -- You may be able to find articles on
modelling various real-world components with the idealized SPICE
components; they fairly often pop up in magazines like "Electronic
Design" and "EDN."

(Just yesterday, I started work on "reforming" a photo-flash
electrolytic that had been uncharged for at least 10 years and became
very leaky above about 25 volts at first.
That would be an interesting effect to try to model! -- that 330V cap is
now up to about 250 volts, after being charged with 1mA or so
overnight. Remains to be seen if it still will flash the lamp
properly.)

Cheers,
Tom

4553. Re: Signal Generator as VFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <3727A2D8.3071C44E@home.com>
Source record: 70925

I think that if you attach a mechanical device like a wind-up timer to the case of an old RCA or Eico RF signal generator you will be relieved of any necessity of physically tuning the receiver or transmitter and be able to hear many different frequencies within milliseconds. It is also best, in my recollection, to place such a device in a drafty environment and, if possible, attach it to the same ac outlet that an airconditioner or vacuum cleaner runs off.

Will White wrote:

> I seem to recall reading somewhere that one can use an RF signal generator as
> a temporary VFO for homebrew receivers. Is this correct? How is the generator
> connected to the receiver? Also, is it possible to use a similar arrangement
> for transmitters?
>
> p.s. my interest here lies in the hollow-state stuff.
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

4554. F12 HY-GAIN MOSLEY MONO-BANDERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Andrey Pinsky <optimex@mb.sympatico.ca>
Message-ID: <37279FEC.CAA84E36@mb.sympatico.ca>
Source record: 70926

F12 HY-GAIN MOSLEY MONO-BANDERS

Does anybody have experience with any of these antennas? Which company makes the strongest mechanical design? Thank you.

73, Andrey VE4QQ.

4555. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7g84bq$2sj$1@nnrp1.dejanews.com>
Source record: 70927

In article <01be9192$34d6d5e0$c99d45d1@leescott>,
"Lee Scott" <DownWithJunkMail@Spam.Net> wrote:
> Does anyone know of a good source for getting tube plate power supply
> transfomers?

How big? If you mean "good=cheap," you'll have to scrounge the surplus markets and hamfests. Don't bother with most of the commercial surplus houses mail-order, because nowadays they're nearly as expensive as new. Consider broadcast surplus and powerline surplus -- you might get lucky. You might also find surplus from semiconductor manufacture -- they used plasma generators in a lot of processes that were basically 3 KW amplifiers for 13.56 MHz, running some really big tubes.

If "good=good" and you need full legal limit, try Peter Dahl.

If "good=I made it myself" there are some transformer winding articles way back in the archives of 73 that offer some ideas. There is also a rumor that you can successfully "fix" a microwave oven transformer so it won't saturate. Interestingly, all the online microwave oven conversion articles I've seen referenced have vanished -- seems it's c onsidered too dangerous to publish these plans, but the stuff about homemade bombs and drugs is still out there.

73

Jim N6OTQ

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4556. Ten-Tec

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-28 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <kSLV2.30668$Hh5.3963@news-reader.bt.net>
Source record: 70928

Hi,
Do Ten-Tec make a 50mg rig? If so does anyone know how much for? Is
this a good kit for a rookie? Are any of these on the second hand market?

Thanks and I hope you can help

David

4557. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: "Rudolph M. Marcelletti" <rudym@net-link.net>
Message-ID: <7gaclg$qjs@newsops.execpc.com>
Source record: 70680
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I thought the code requirement was for INCENTIVE purposes for a HOBBY that obviously needs to be regulated by the government so it won't turn into a fiasco like the mistake that happened with CB. You don't need to learn CW to be a ham and if all you want to do is rag chew on local 2 meters or other VHF/UHF freqs that's fine. They did away with CW in most military services because there are more effective ways to communicate reliably in war time. War is not a hobby (to most) and the military has a hard enough time teaching people with a 6th grade level education how to fire a million dollor rocket by "pushing the RED button" that they don't have time to spend teaching a HOBBY to 6th graders, most of who did not want the job to begin with! Ham radio is not a "way of life" it is a fun way to enjoy life. A code requirement provides incentive to upgrade. Our society (meaning the United States) over the last 10 years or so have become a bunch of whiners and get really irritated when told "no--you can't have it all right now!" If prospective hams spent as much time focussing on learning the code as they have whining about the requirement--there would be a lot more general class and higher I am sure. I don't like stop signs. Sometimes I like to drive fast. I think gas should be as free as water and I should not have to buy insurance and pay taxes. Learning the code shows you are somewhat dedicated to your hobby and perhaps worthy of increased frequency priviledges thereby allowing you to communicate with others who enjoy the hobby in other parts of the world. You are in effect an ambassador of the US! We could use more good ambassadors, that't for sure. Look at all the lids (former or current CB'ers) who took the time to learn the code then abuse it on 20 and 75. Perhaps the FFC is finally getting around to some long needed enforcement and are taking away the privilege. Just like driving--it is a privledge--not a right. So you don't need to learn much to ride a bike (scanners) but need more to drive a car (vhf/uhf no-code) but you need more road tests for cycle endorsements, big rigs, hazardous materials, flying an airplane, jets etc., pass 5 wpm you get some limited HF. Pass 13, you get to play with big rigs and big amps. Pass 20, you can do it all. I'd like to do it all and fly a jet but don't have the time to learn it all and get my 20 just yet! And I still shy away from the CB-like chatter on the ham bands, but still love to chat on 2 meters and give out my 1010# to all the KC***** call signs I hear on 10 meters. I always try to tune into a CW rag chew just to see how many characters I can copy at 20+wpm from the oldtimers who don't need to write anything down! A friend of mine has over the last year spent close to $50,000.00 on antennas including a 3 element rotatable full size yagi at 180 feet. 12 monoband antennas in all, and ALL are cut for the CW portions of the ham bands. CW is alive. Just because the military did away with it does not mean hams should also. After all, I want a college educated officer to get a VERY clear error free packet transmission before he tells the 6th grader to "push the RED button!" Kwitchyerbitchen and learn the code--or don't drive the big rigs!
Rudy, K8SWD, Advanced Class
Don or Darla Arnold wrote in message <3727AA1D.9F4B2D76@datasync.com>...
ALL the below are VERY CORRECT and TRUE, BUT,
is that ANY reason to use it on a TEST for getting your ticket
keep the subbands..if you want, EXPAND them if you like

IF we use this MODE to test people should we not have a test to see if you can talk correctly for phone, type correctly for packet,
and expand that by building your own computer for digital modes.
THAT'S ALL I AM AGAINST IS FOR A TEST
keepe the mode if it makes you happy but don't use it for TESTING.
NUFF SAID
DON
KB5FHX
NCI-1070
MARS AREA COORDINATOR
ARES RACES OPERATOR
SKYWARN FOUNDER
21 YEARS IN NAVAL COMMUNICATIONS

Gord Skiffington wrote:

Howdy Dan....In all the hoopola about whether anyone should or can't use morse anymore.....a few points never seem to be brought out...or are only mentioned briefly.
Morse - Is a mode that allows communications to be copied verbatim easily (you can come close on voice or often do it if words are standardized but its not easy)......
- Is a mode that is indeed digital but which requires the most rudimentary interfacing and for which our own "processor" causes error correcting and speed compensating depending on the ability of the other "terminal" or "line" conditions.
- Is a mode which transcends language and dialect barriers when suitable signals are used...such as the international "Q" signals...and others. Hard to get most computer systems to do that yet and our ability to merely speak one language (english for example) with a wide variation of accents is hard enough sometimes.
- Is a mode whose "standardization" is unheard of in communications, where for at least a hundred years was not obsolete for the purpose of basic communications (stuff that's GOOD for critical use...such as lifesaving...and cheap commerce).
- Is a mode which, when the equipment is tired....just needs a good dinner and a cup o coffee to revive it.....stuff we have around anyway !
- When send using CW transmission (the 2 are NOT the same!) is extremely effective, using suitable narrow filters at both ends, for solid communications under the worst circuit noise and conditions. It might not be the very best...but when you consider the rudimentary equipment needed it becomes mighty attractive.
- Is a mode which, because it only requires very basic equipment, lends itself well to "field repairability".....a handy thing if you've ever sat in a remote spot and listened to digital signals that couldn't connect to you...telling yourself...."if they'd only just turn 'em on and off...I could get the message! After all...what is slower....a slow sent message or one that never arrives????

There's likely lots of other good and bad reasons why anyone should keep morse alive. Yep its old.....but well made and the fact that it hasn't undergone a million transformations tells us all that it works well. It is slow, but when mere text will suffice, is an adequate method of communication in conjuction with simple equipment. It does require skill to use...but everything we do also does (Tell me that a windows NT system hung up on a satellite link doesn't require skill to figure out what happened!). There is also a thing about operating morse that only morse operators may truely feel...but its a kindred spirit that transcends whether you were a mere ham or a skilled commercial operator, a struggling boy scout trying it or a pilot who was able to make himself understood when his mic stopped working. To that last end I can only offer that to those who WON'T use it...it will always be a thing despised....to those who do or have, a thing revered.

73 - Gord VE1AJF...(and merchant R/O in recent times :)

--
OUR WEB PAGE UPDATED 17 April 99
http://www.geocities.com/Heartland/Valley/6430 Darla and Don's Website
http://hattiesburg.net/columns/darnold.shtml My online column

DARLA (dawn) ICQ# 7341931
Don (weathernut) ICQ# 14664294

Right now we are on the threshold of whatever comes next!!!
MAYBE!!

4558. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7gamjb$285$1@scotty.tinet.ie>
Source record: 70681

> wait a minute, jesus was raised from the dead. he was alive,

Well, maybe. Did he build any homebrew radio equipment
while he was alive, or has this message been posted to the wrong
NG?

Ed. EI9GQ

4559. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Mark Brown <kb0pyo@rconnect.com>
Message-ID: <3729158C.E341D0AC@rconnect.com>
Source record: 70682
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Please please please take this off of
rec.radio.amateur.equipment and rec.radio.swap. This
argument has bben going on forever (years!) & will not end
until the fcc changes the rules one way or the other.

Joe wrote:
>
> What a lame analogy.....what if dont mean SHIT in the real
> world!!!!WHAT IF your mama gave your dad a blow job on a particular
> night.....where would you be?
>
> On Thu, 29 Apr 1999 19:05:50 -0500, Sir <sir@sir.com> wrote:
>
> >What if you wanted to play the flute, but a law required that you learn
> >how to play the harp before you were allowed to play the flute?
> >
> >What if you didn't like the harp and only wanted to play the flute, and
> >other flute players called you lazy for not wanting to waste time
> >learning an instrument you had no intention of ever playing?
> >
> >Some people want to get into the hobby of radio to talk on the radio.
> >They have no desire to use morse code. How silly it would be to waste
> >the time to learn morse code, only to forget it once one has the license
> >to go ahead and use voice.
> >
> >Only people who intend to USE morse code should learn it.

4560. Re: temp. comp. of an Xtal oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: rick@area.com
Message-ID: <7gb9fq$84n$1@vax.area.com>
Source record: 70683

In article <37280315.2FAE@vyh.fi>,
Arjen Raateland <Arjen.Raateland@vyh.fi> wrote:
>
>In the oscillator circuit the 16 MHz 'miniature' Xtal sits between two
>pins of a PIC and from each pin there is a trimmer cap to ground. I
>think you recognize the circuit. There is a varicap diode with
>adjustable reverse voltage for the compensation over one of the trimmer
>caps with a styroflex cap of 150 pF in series. The trimmer caps are of
>different types. One is 'teflon' and the other just 'foil'.
>
>I'd like to have information/literature/links on how to compensate an
>Xtal time base oscillator for temperature variations, so that I can
>attempt to get the compensation to actually work. (I'm not attempting

To begin with, do not use a gate oscillator in a microcontroller as
the oscillator circuit. Instead, build an analog oscillator using
a discrete transistor. Secondly, get a low tempco crystal, not a
microprocessor grade crystal. Then, if you still need more stability,
you can think about temperature compensation.

Rick Karlquist N6RK
rick@area.com

4561. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Joseph Merfalen <jmerfale@engr.csulb.edu>
Message-ID: <37292E6B.3BC9EFC@engr.csulb.edu>
Source record: 70684

Oh excellent. Thank you so much for this URL.

73' KF6VVQ joseph

ibrew2@my-dejanews.com wrote:

> Why post and wait for an answer? Come to the Homebrew Research Page and find
> your answer now. Visit the Homebrew Digest page at this site and learn how to
> find your answer in the archives. It's probably already been asked and
> answered on the web! Visit http://www.geocities.com/napavalley/8304
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4562. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Joseph Merfalen <jmerfale@engr.csulb.edu>
Message-ID: <3729305C.9412BA57@engr.csulb.edu>
Source record: 70685

Man i thought this was a HAM radio web site and it is about beer? Sheeeesh....
I am not thankful for this URL...hehehehehe I dont drink....joey

4563. This really looks impossible.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Phil de Cadanet <BigMobile@g4zow.freeserve.co.uk>
Message-ID: <Tx8aOKAq9EK3EwUP@g4zow.freeserve.co.uk>
Source record: 70686

I'm trying, without much success, to get a data sheet on the 50v FET
'ENI 21'. These are/were popular in fairly high power HF plasma
generators.

I thought that motorola may of produced these pills for ENI but they are
no help.

ENI don't want to know either!

Does anyone on the ng have someone that works there!

Many thanks

Phil G4ZOW
http://www.bigradios.com - My favourite site.

4564. Solid state amps....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: wizard@eskimo.com
Message-ID: <3727b68c.601297844@eskinews.eskimo.com>
Source record: 70744

Amplifiers for sale......

Henry S-80 2M mobile amp, 80W out with 5W in - $60

Homebrew 80-6M base amp, 1.5KW out for 100W in, VSWR; Temp;
Overcurrent protection, Thermaly switched cooling, Digital power
display, Seperate amp and power supply decks. Requires 220VAC. Uses 8
MRF151G dual power MOSFET's. - $1800

KC7IYU

4565. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <3727d3f9.225339138@news.io.com>
Source record: 70745
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Mon, 26 Apr 1999 18:22:42 -0400, "The Conqueror"
<joetheripper@hotmail.com> wrote:

>I was just wondering why they still keep the Morse code testing requirements
>if the military doesn't use it anymore and telegraphs are not that common. I
>think because they stopped it for the marines, there's no point in using it
>in ham radio either. And if you want to say it is for security, you are not
>allowed to use codes when intended to obscure meaning.

Hi ,Dan!

Well, in just a few short days, you've managed to create quite a stir
with your question (wink) ... 19 replies so far, and I bet it ain't
over yet. I've noticed in the past, that nothing gets things stirred
up quite so much as code and licensing issues. Anyway, well done!

I'd like to make an observation about human nature. [Now, please
understand, I'm not talking about you. Heck, you asked a question,
and you seem to be the best example of an open mind I've seen in this
thread so far.] Anyway, I've noticed that when my mind is made up
ahead of time, it tends to adopt as its purpose to support that
decision in any and every way it can. And once that purpose is
established, it will endeavor to interpret everything I hear and see
as evidence I am "right". It doesn't make me right, mind you, but
it's a mighty temptation to judge everything and everybody as either
threatening or supportive, with no gray area between.

So whenever I encounter myself feeling defensive (or offensive) about
a subject, I suspect I've pre-determined how I want things to be, or
how I want things to come out. And that's a warning signal to me that
my mind is pretty much closed. For me, the warning flags went up when
I though somebody might threaten my beloved CW.

But on re-examination, I think both "sides" can find common ground.
We don't necessarily need code proficiency tests for everyone to prove
they can do it ahead of time. Nobody's going to get on the air
sending morse when they only know 12 letters of the alphabet. So,
maybe just a sampling of questions on the written tests, concerning
the use of the mode, would be in order - to show an understanding of
the mode and its operating procedures, for those who have the
potential for using CW. Same would apply to voice, digital modes,
repeaters, satellites, anything that has significant usage on the ham
bands.

After that, it's up to us avid CW fans to promote and expose the positive and rewarding aspects of the mode (and there are many). We haven't done a good job of that thus far, maybe as a result of being so defensive.

As for actually learning CW, when I think about it (at least for me), the fastest part of the learning curve was when I was practicing it "on-the-air", without the pressure of "having to pass a test". It also happened to be the time that I really learned to love it.

Come on, folks - both pro and con - let's look for new viewpoints, consider them with an open mind, and see if we can't make the amateur service even more fun and more friendly than it already is.

73,
monty N5FC

4566. Re: A new ham that needs advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <3727dcba.227580469@news.io.com>
Source record: 70746

On Wed, 28 Apr 1999 09:54:00 -0700, Joseph Merfalen
<jmerfale@engr.csulb.edu> wrote:

>Hello. I just recently received my Tech license[
>[snip]
>Can anyone help me with
>suggestions or advice? I am really in need. Thank you very much for
>taking the time to read this......73's KF6VVQ joseph

Hi Joseph!

Congrats on the new ticket, and welcome to the ranks.

Kits are loads of fun, and there are lots of links to homebrew
projects on the net. The following are not my own sites, but I know
they have LOTS of links you'd be interested in, so I offer them here:

http://www.ac6v.com/pageay.html (HAM RADIO KITS)

http://home.earthlink.net/~af4k/hamlynx/hamhomeb.htm (AF4K's
HOMEBREW)

There are enough links here to keep you busy for many moonsweekends,
and you'll find lots to satisfy your homebrewing urges.

There's nothing quite as satisfying as building something yourself,
and finally seeing it work... but I suspect you already knew that,
being an EE student.

Have fun & 73,

monty N5FC

4567. Re: Signal Generator as VFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: maddog@io.com
Message-ID: <3727df4e.228240491@news.io.com>
Source record: 70747

On Wed, 28 Apr 1999 10:53:01 -0700, Will White <wcw@asu.uswest.net>
wrote:

>I seem to recall reading somewhere that one can use an RF signal generator as
>a temporary VFO for homebrew receivers. Is this correct? How is the generator
>connected to the receiver?

Hi, Will!

Sure you can. Just couple it into the mixer and/or front end with a
small loop of wire, or a very tiny "gimmick" capacitor made from two
small insulated wires twisted together, but not otherwise electrically
connected. Don't expect to much performance wise: signal generators
are typically noisy or warbly or drifty. But it'll work to get the
rest of the circuitry working.

>Also, is it possible to use a similar arrangement
>for transmitters?

Probably not a very good idea, but if the signal generator were
atypically stable, it would probably be OK.

Let us know how it works!

73,
monty N5FC

4568. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7g8vbc$bn1@nnrp3.farm.idt.net>
Source record: 70748

Thanks for the info everyone. The Peter Dahl company has a good selection but the price is "up there" too. I am thinking about using some used industrial control transformers run backwards (120vac to 480vac). With two control transformers connected in series and working into a full wave voltage doubler will also work for the supply I'm thinking about. I think I can find these control transformers for less than the cost of a new/used single plate supply transformer. I was hoping that the single plate transformer solution was as cheap or cheaper that the dual industrial control transformer idea.

Leland C. Scott
KC8LDO

4569. temp. comp. of an Xtal oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Arjen Raateland <Arjen.Raateland@vyh.fi>
Message-ID: <37280315.2FAE@vyh.fi>
Source record: 70749

I have built a frequency counter from a kit. It has a 16 MHz time base Xtal oscillator that I would like to apply tempreature compensation to.

I got one schematic from a fellow ham that doesn't work for me as it should with the components I built it with, so I'd like to read up on the matter.

In the oscillator circuit the 16 MHz 'miniature' Xtal sits between two pins of a PIC and from each pin there is a trimmer cap to ground. I think you recognize the circuit. There is a varicap diode with adjustable reverse voltage for the compensation over one of the trimmer caps with a styroflex cap of 150 pF in series. The trimmer caps are of different types. One is 'teflon' and the other just 'foil'.

I'd like to have information/literature/links on how to compensate an Xtal time base oscillator for temperature variations, so that I can attempt to get the compensation to actually work. (I'm not attempting rocket science, however.)

Thanks for reading this.
--
Arjen Raateland
OH2ZAZ

Finnish Environment Institute
SAS Support
phone +358 9 4030 0350

4570. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7g91me$4o3@groucho.cs.ubc.ca>
Source record: 70750
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

ke4zv@bellsouth.net (Gary Coffman) writes:

>Actually, NTSC is *not* a compression scheme. Resolution is limited by
>the bandwidth allocated for the signal, and by the scan rates chosen.
>Typically, horizontal resolution is about 225 lines, but because it is
>interlaced, the effective resolution is actually about 450 lines.

No, that's not correct. The ratio between the bandwidth and the
horizontal sweep gives the number of cycles that can be resolved
horizontally. Interlace has nothing to do with horizontal resolution.
The ratio between the 4.2 Mhz broadcast bandwidth and the 15734 Hz
horizontal sweep is about 267. However, about 15% of the horizontal
period is non-picture information, so you'd expect to be able to
resolve about 225 cycles per picture width. Now, TV resolution is
measured in "lines", not "line pairs" like photography, and you can
resolve 2 "lines" in one cycle (the Nyquist limit popping up again).
So you'd expect to be able to resolve an absolute maximum of about 450
(vertical) lines across the width of a broadcast TV image.

However, TV horizontal resolution is quoted in "lines per picture height"
(to make it comparable to vertical resolution), not lines per picture
width, so you have to multiply by the 3/4 aspect ratio to get the
official figure. As a result, broadcast television is limited to a
horizontal resolution of about 340 lines per picture height.

VHS is worse, about 250. SVHS is better, and analog videodisc is
better yet - about 550 lines.

>Vertically the resolution is limited by the scan rate to 262.5 lines
>per field, doubled to 525 lines by interlace. (Because of the way the
>lines of a test chart fall on the interlace, the vertical resolution is
>actually only 262 lines, IE to resolve a line requires a transition,
>and that requires two vertical scan lines to reproduce.)

Again, not quite. The number of active lines per field is somewhere
around 240-243 - the rest are used up by non-image information. Due
to interlace, the lines from even fields are drawn between the lines
from odd fields, so a properly operating TV (with no overscan) will
show about 480-486 actual scan lines.

According to the Nyquist limit, this many scan lines allows you to
display about 240 cycles or 240 line pairs or 480 lines per picture
height. But if you tried to approach this, you'd find that either the
pattern would go grey, or it would flicker madly since all the white
lines are in one field and all the black lines are in another field -

either way it's not pleasant.

Because of interlace, and because the scanlines overlap somewhat, the actual useful vertical resolution is about 70% of the theoretical limit - about 335-340 lines per picture height. (This 70% factor is called the "Kell factor" in video literature). Note that for broadcast television, the horizontal and vertical resolution is about the same - this is not an accident.

>If this doesn't quite make sense, picture a test chart with vertical
>and horizontal lines drawn on it. The vertical lines are resolved by
>the horizontal bandwidth of the TV, and the horizontal lines are
>resolution limited by the number of scan lines in a field. So NTSC
>should yield a resolution of about 450x262. It usually doesn't quite do
>that well horizontally because most receivers aren't adjusted to
>recover the full transmission bandwidth. 320x200 is closer to what you
>see on the typical home receiver with an off the air picture.

Well, a *good* NTSC monitor should be able to display about 340 lines (counting both black and white ones) vertically and about 440 lines horizontally. Typical TVs may well be less.

>But that's not nearly as bad as it may sound to computer types used to
>talking in terms of pixels. NTSC is analog, a transition can occur
>*anywhere* on the screen. Transitions aren't limited to discrete
>locations as they are in computer displays. This yields an *apparent*
>resolution which is much better than can be achieved with a CGA
>computer display. For example, there are no jaggies on slanted lines
>with NTSC, but there are with computer generated graphics. This analog
>nature also shows up benefically for objects in motion. The movements
>are all smooth.

It's not that simple. NTSC is analog horizontally only - it's just as discrete as any frame buffer vertically. You don't see discrete locations vertically in video because the signal is adequately low-pass filtered during sampling. But that can be done equally well in computer-generated images - and often is in high-quality pictorial images. This low-pass filtering is not usually applied to window edges or to text on computer displays, because the apparent sharpness of the unfiltered version is preferred.

Jaggies are also caused by a failure to low-pass filter the image before sampling - they are aliasing artifacts in the spatial domain (instead of time). They can be reduced or eliminated by "anti-aliasing" techniques, which are just low-pass filtering. Well-filtered computer-generated images do *not* show jaggies.

The appearance of smooth motion in video is because of the 60 Hz sampling rate in time, combined with motion blur. Both of these are possible, if not yet common, in computer-generated imagery.

>Hue is also analog, and can vary in infinitesimal steps. You aren't
>limited to a preset number of colors as you are with a computer

>display. This turns out to be very important because the human visual
>system is more sensitive to differences in hue than it is to
>differences in spatial resolution. That's why TV pictures look lifelike
>while higher resolution computer displays still look like a cartoon.

Uh, have you looked at any good computer displays lately? Say, with
24 bits or more per pixel? Displays with only 8 or 16 bits per pixel
have to quantize the colour to a small set of available hue/saturation/
intensity values, and this creates areas of solid colour with "jumps"
between areas. With 24-bit colour (or more), the steps between adjacent
representable colours are so small that you can't see them, and the
appearance is indistinguishable from continuous colour.

In fact, most video broadcast these days is *also* quantized to 24 bits
since that's all the digital video recorders record. There are fewer
possible colours than in computer graphics, because video uses up some
of the 256 values for sync and blanking, and fewer are left for actual
image information.

>The *apparent* resolution of NTSC is a close match for 16mm film (that
>was chosen deliberately when the standard was formulated).

Well, for 16 mm film 50 years ago. These days, good fine-grain 16 mm
film has far more resolution than NTSC, and in fact is a pretty good
match for HDTV. (It also depends on whether you're talking about
negative resolution or on-screen projected resolution - see below).

>Of course, from the way the poster you're answering spells color as
>colour, we can assume he's in a PAL country. The bandwidths and scan
>rates are slightly different for PAL than for NTSC, with the advantage
>going to PAL. So he should see somewhat better resolution than we
>would.

Not necessarily. I spell colour the conventional (British) way, yet
I watch NTSC television identical to what the USA sees.

>To approach the apparent resolution of NTSC requires a computer display
>running 800x600 with 16 million colors. It will still have visible
>artifacts that will identify it as pixelated compared to an analog TV
>signal with moving pictures, but it will be close to the same visually
>if you sit back from it the standard 9 feet used for TV viewing.

No, a 640x48 display is sharper than NTSC, because its limiting resolution
really is 640x480 lines, not 440x340. And it can do that for all three
colours, not just luminance. The chrominance resolution of NTSC, as
decoded by most TVs, is about 50 lines across the picture width - one
eight the resolution of luminance (because the bandwidth is only 0.5 Mhz).

In addition, if the image being displayed is properly filtered, you
will not be able to see individual pixels or scanlines, nor more
motion artifacts than NTSC.

For a demonstration of this, take the highest quality digital *picture*
you can find, preferably from a Photo-CD or a good film scanner.
Reduce it to 640x480 using something like Photoshop. Then record the
same image in NTSC, using the highest-quality video output system you
can get your hands on. Compare it to the 640x480 image on a computer
monitor. The NTSC version is just not as sharp, though it's often
surprisingly good for most natural scenes.

>The end result is that HDTV at 1080i has about twice the apparent
>resolution of NTSC. It looks really good, about equal to 35mm movie
>film (again that was a deliberate choice).

It depends on how you measure 35mm resolution. HDTV is comparable to
or better than a 35mm print shown on a standard 35mm projector, at least
in resolution. But a 35mm negative scanned on a good scanner has at least
twice the resolution as HDTV. The difference between negative and
projected release print is partly due to the multiple generations in
between, but mostly due to poor stability in the projectors.

So HDTV is equivalent to 35mm film for projection, but not equivalent
for original image capture. It depends on what you're talking about
using them for.

Dave

4571. List Of Stamp Applications [990429]

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: cjX@hth.com
Message-ID: <3727b91d.26300699@news.buller.se>
Source record: 70751
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Below is the latest index of L.O.S.A and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 What is L.O.S.A all about?

This list was started back in -95 when I heard about (more or less)
uniqe problems that was solved by using a BASIC Stamp. Especially Guy
Gustavson's story (see #001) about how he saved his beloved cat Kesha
gave me the inspiration to start writing L.O.S.A. I hope Kesha still
is alive and having a great life. Now 4 years later there are 150+
applications described and I hope you will enjoy reading all (or
parts) of them.

The main purpose of this list is to get an idea of what other people
are using their BASIC Stamps for and maybe get some inspiration or
hints for your own projects. Some of the projects described in the
list also have links to source code and schematics for download.

1.1 How can I contribute to this list ?

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 Why are some links dud's ?

Since people changes their e-mail and web addresses some links may
be dud's. If you previously contributed with one (or more) of the
applications please take a quick look and check your e-mail address
and/or web-links. I'm only able to keep the list updated if I'm

informed about changes, thanks in advance.

1.3 List of contributions

> = Indicates a new or updated application since last time.

001 Robo-Cat
002 Logic Rudder
003 Interfacing MAX186 8 channel 12bit A/D
004 Scrolling LED Sign
005 Tone Decoder
006 Pager
007 HexWalker Mobile Robot
008 Robo Bug
009 EXPBOT Robot controlled by Stamp
010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
># 043 Distinctive Ring Detector
044 Extended Stamp Memory

045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
># 058 Caller-ID Interface
059 Wind speed and wind direction measurement device
060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Mobile Robot
074 R/C helicopter altitude control unit
075 Automobile Rally Odometer Interface to Laptop
076 LCD drivers
077 Stamp I / PC Interface Demo
078 Stamp Photo Meter
079 Stiquito(TM) 97 HexaPod Robot
080 XRaCS DTMF Radio X10 Control with Voice Response
081 Interfacing the Basic Stamp 2 with I2C Devices
082 The WeatherStamp Meteorological Station
083 Maxxum 7000 Remote Release Widget
084 Xs And Os games for college project
085 Stamp II Mouse Emulator (Version 6)
086 Basic Alarm System
087 Interfacing with a Printer
088 Dinosaur Quiz Game
089 Chemical Injection System
090 RS-232 connections between Stamp and host
091 Video Character Overlay Generator Controller
092 Suction tube depth measurement display
093 Electronic Compass with Basic Stamp 2
094 Event Logger with 8K 24C65 I2C memory

095 Fixing the depth of a suction-pipe with the BS 2
096 Superchaser
097 Corky'z Robotz
098 Cloudrider: analog network with BS2 and BS1's
099 Yet Another Real Time Clock, Dallas DS1287
100 Amateur RadioSatellite Tracking (Az/El) Controller
101 DTMF Decoder
102 PC to STAMP via RS232 routines
103 PC Frequency Counter
104 Sub-Millisecond Reaction Timer
105 Computerized Dynamics Cart
106 Ham Radio Interface Using the Basic Stamp 2
107 Remote tempsensors communicates over the power lines
108 Interfacing a BASIC Stamp to SRAM
109 Stepper controller pulse generator
110 Automatic rang caller
111 Automatic emergency broadcast system
112 BASIC Stamp I as an welding machine
113 PLM-24 to X-10 Gateway
114 Semi-Automated Combusitible Gas Indicator Tester
115 Counter-rotating Servos
116 Joystick Controlled Robotic Arm
117 Anti Traction Control Device
118 Cat Chasing Lego Robot and Other Circuits
119 Camlift
120 Control 15 Servos in Parallel
121 8 Digit "Smart" Alphanumeric Display
122 Cycle Testing AC Motor Controller
123 Controlling an LCD by BS2 via I2C Bus
124 The Newcastle Robotic Bilby Project
125 The EM1 (Electric mule)
126 Distance Measurement with GP2D02 SHARP Sensor
127 TI82 Interface
128 Operator Interface for Multiple Stamps
129 Infrared Glucose (Blood Sugar) Monitor
130 Fox For ham radio or Automated Propogation Beacon
131 GPS Data Overlay on Video
132 10Base-T Cable Tester
133 Kodak DC40/50/120 camera control
134 Implement S.N.A.P network protocol in a BASIC Stamp
135 Stamp/PC RS-485 Network
136 Easy-to-build BS keyboard/display w/ 10 keys/LEDs
137 Joystick control: BS2, 2 motors & 2 HBridges
138 Basic Stamp 2 Mobile Robot
139 Home Automation and Security System
140 UM3750 Read Code
141 Magnetic Stripe Reader
142 Telephone Remote Control and Remote Alarm
143 Tube preamplifier control section
144 Interrupt for PBASIC

145 dLOG
146 Compass
147 BS-2 serial VISCA interface
148 Servo tester
149 Small-bot
150 Repeater Controller
151 ESD Tester for Foot and Wrist Straps
152 Beneficial Insect Dispenser
153 Bugsey
154 Vector2X Compass Module with the new BS2SX Stamp
># 155 Serial Mouse to BS2 Interface
># 156 Radio Repeater Controller
># 157 Keypad reader

Enjoy,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

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-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
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4572. 1.288Mbps PSK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Anthony Hall <term@seesaw.wustl.edu>
Message-ID: <7g9gbu$1f9$3@news1.mpx.com.au>
Source record: 70752

Hello,

Has anybody built the 1.288Mbps PSK Data link by hamradio.si in the Hardware Page under the 13cm/23cm PSK Data Link?

If so, could you please email me the components used and possibly suppliers of these ?

Better drawings would be great..

killer00@tig.com.au

4573. Glowbugs & transformer-less power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <372847D6.73ACD202@asu.uswest.net>
Source record: 70753

I need info on constructing a voltage-multiplying (doubler?) transformer-less power supply for a couple of glowbug projects I want to get started on. Something like or better than those used in All-American Five AC/DC sets. My budget precludes the acquisition of any HV transformers for the time being. So I need hints, advice, consent, a schematic, bibliography, and what-all to do this *safely.*

I could also use some suggestions as to tube selection. I want to start with a 2 or 3 tube regen. RX (I have several 6L6s, OD3s, and 5U4Gs for a transmitter project for later). Thus far, I am looking at a 6U8 design, but from memory it seems that tube takes either +150 or +250V on the plate, and either would be tricky with above said doubler supply. So, what bottle fits the bill here?

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4574. Re: Signal Generator as VFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <37284f14.0@news.netwalk.com>
Source record: 70754

Yes, it is possible. Just connect it into where the normal local oscillator would go.

I would hesitate to use it for transmitting, unless you mean for testing purposes on a dummy load. Most signal generators available to hams are not very stable and may have some spurious signals on the output.

Now, if you are fortunate enough to have some one give you one of the new $20000 synthesized generators from HP, go right ahead....it is probably better than the one built into the transmitter!

Jim
N8EE

4575. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3728580C.4FDF02CF@fallschurch.esys.com>
Source record: 70755
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Very well said, Monty! Your post marks you as a gentleman and a
scholar. It is very difficult to convey to the no-code types what an
aesthetic experience proficiency in morse provides, but even this
long-time CW op has come to realize that using the code test as a
barrier to amateur radio is unproductive. To the others: Welcome to
ham radio -- be tolerant, and 73.
deW1AEL, Allan.

4576. Re: Signal Generator as VFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: tbendell@bmts.com
Message-ID: <925390921.704857@cindy.bmts.com>
Source record: 70756

On 1999-04-28 jdwalton@home.com said:
>Newsgroups: rec.radio.amateur.homebrew
>I think that if you attach a mechanical device like a wind-up timer
>to the case of an old RCA or Eico RF signal generator you will be
>relieved of any necessity of physically tuning the receiver or
>transmitter and be able to hear many different frequencies within
>milliseconds. It is also best, in my recollection, to place such a
>device in a drafty environment and, if possible, attach it to the
>same ac outlet that an airconditioner or vacuum cleaner runs off.

My signal generator is capable of producing exceptionally clean
and highly stable
signal source of modulated or unmodulated carrier. Indeed being an avid
QRP op I have used it as a VFO and even a transmitter. Your not by chance
using the fine "glass fet" variety of the bygone era are you?

Modern Digital Signal generators dont have to work in the "SWEEP" mode
at all.

73
Terry VE3TKB

tbendell@bmts.com

Net-Tamer V 1.11.2 - Test Drive

4577. Re: A new ham that needs advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <372859B9.AB439CEA@fallschurch.esys.com>
Source record: 70757

KF6VVQ de W1AEL -- Welcome to our avocation, Joseph! You will find the
Ramsey and Ten-Tec stuff to be fun, but Ten-Tec has better kits in
terms of design engineering. Have a great time and stay in touch.
73, Allan.

4578. 800mhz to 900mhz conversions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: The Martell's <mike-n-terri@erols.com>
Message-ID: <37285BE4.4F088E92@erols.com>
Source record: 70758

Is there anybody out there doing conversions on commercial 800mhz radios to go to the 900mhz Ham Bands?? Looking for info to do similar for short range simplex operations, info appreciated.

Thanks..Mike..KA1IFQ

4579. Re: Ten-Tec

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37285B8F.F8F7884E@fallschurch.esys.com>
Source record: 70759

Sure they do! The #1208 is a 50 MHz transverter used with a 14 - 16 MHz HF rig; the 1209 is a transverter for use with a 2-meter rig; the #1260 is a complete FM transceiver for 6 meters. These are on pages 4 & 5 of their Catalog A-97, and I bet you can get a copy by browsing to their Web-site at www.ten-tec.com. I cannot say enough good things about Ten-Tec!
73 de W1AEL, Allan.

4580. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: hkelle@rhi.hi.is
Message-ID: <7g9no0$sh3@eldborg.rhi.hi.is>
Source record: 70760
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Svo mi¿½lti AB7RS <tglenn@imt.net>:
* > I was just wondering why they still keep the Morse code testing requirements
*
* To weed out the serious from the lazy and stupid.

Well all the "lazy and stupid" go use the Internet today for satisfying
their need for playing with technical stuff and communicating with
people. Those who are not "lazy and stupid" go through learning all
the electronics and regulations that you have to learn to get a ham licence.

--
//-----------------------//---
// Hrafnkell Eiriksson // Student of Computer- and Electrical engineering
// hkelle@rhi.hi.is // at the Univeristy of Iceland
// // "Blessed are they who go around in circles,
// Finger for PGP key // for they shall be known as Wheels"

4581. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Michael Ruther <michael.ruther@alliedsignal.com>
Message-ID: <3728653D.B68822F7@alliedsignal.com>
Source record: 70761
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

You missed the point. the comment was the military doesn't use it , not true in the case of the coast gaurd. The guy was taught code as part off the m.o.s. to be a radio operator.
I think as far as the coast gaurd the military still thinks it is important to have coded operators.
Mike AA7QA

Sir wrote:

> Michael Ruther wrote:
> >
> > Friend of mine's son is a radio op in the coast guard. He was taught code, and
> > can do about 15 wpm.
>
> I know a lot of obsolete skills too. Tape editing with razor blades and
> tape come to mind. Perhaps that will save my life in some emergency
> when my digital audio workstation breaks, or will allow me to edit in
> bad weather conditions.

4582. Re: Ten-Tec

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <3728670E.ABD322C@my-dejanews.com>
Source record: 70762

Allan Kaplan wrote:
>
> Sure they do! The #1208 is a 50 MHz transverter used with a
> 14 - 16 MHz HF rig; the 1209 is a transverter for use with
> a 2-meter rig; the #1260 is a complete FM transceiver for 6 meters.
> These are on pages 4 & 5 of their Catalog A-97, and I bet you can
> get a copy by browsing to their Web-site at www.ten-tec.com.
> I cannot say enough good things about
> Ten-Tec!
> 73 de W1AEL, Allan.

Just a quick fix on the web address for Ten-Tec. It should
be "http://www.tentec.com". The one you listed connects you
to some other strange site.

But, I do agree that Ten-Tec has a lot of good stuff. I have
been considering the 10 Meter to 2 Meter transverter myself.

Martin

--
Martin E. Meserve KB7EQS martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4583. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <37286E9D.14BA91F9@cig.mot.com>
Source record: 70763

Nick wrote:
>
> On Wed, 28 Apr 1999 03:27:44 GMT, maddog@io.com (Monty Northrup) wrote:
>
> >On Tue, 27 Apr 1999 19:39:37 GMT, maad65@dial.pipex.com (Nick) wrote:
> > >
> > >
> > >>You can always fit a small trimmer cap across the end (say 5pf) this allows the
> > >>stub to be tuned without pruning it.
> > >
> > >OK, Nick. Then what length do you recommend for the stub. Shorter?
> > >90%, 95% of 1/4 wave?
> > >
> > >73,
> > >monty N5FC
> >
> > The shorter you make it the larger the C needs to be. Play with it and see what
> > works best.
> >
> > If you start of at resonant quarter wave without the C and take a little off at
> > a time. I suspect 80% length and about 5pF would work (at 70cm) but play with it
> > and see.
> >
> > I used to make these for 70cms and put them inside mast head pre-amps for TV.
> >
> > If you get really creative you can put another trimmer between the centre of the
> > stub and the input and change the shape of the notch giving a steep HF slope and
> > a shallow LF one.
> >
> > This worked when I was trying to notch at 70cm and not have significant loss at
> > 470MHz.
> >
> > I seem to recall about 15dB notch at 430 and 2dB through loss at 470MHz from
> > memory.
> >
> > The straight tunes notches were giving about 20dB notch and about 8dB through
> > loss at 470MHz.
> >
> > The numbers are only from memory, I was doing this lot 15 years ago.
> >
> > Nick

Seems somewhat high in loss. If using decent coax (Semi-Rigid is
better) then

expect ~27dB notch and less than 1dB I.L. for 1/4 Wave. 3/4 Wave will give
you a narrower, but deeper notch. I found these useful for additional harmonic
attenuation from amplifiers.

Chuck KD9JQ

http://www.imaxx.net/~kd9jq

4584. 2 Meter Packet Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <37287aac.0@209.128.1.3>
Source record: 70764

I am new to ham radio and I was looking for some help. I would like to give packet a try. I saw a add for a $89 TNC I think it was a Baycom, or a Tigertronics, are these any good? Does anyone have a diagram of a TNC that I may build myself. Also I saw I software program call flexnet which uses your sound card as a TNC. Has anyone tries this software? Thanks for the help. 73's

V01BIL

4585. Programming EPROM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <37287aad.0@209.128.1.3>
Source record: 70765

I have a Standard GX3000V VHF Radio. I also have an EPROM burner and eraser. I was wondering if anyone knew if there is any software that I could input a frequency into my EPROM. I know that you can buy a programmer from Standard to change the frequencies but seeing I have an EPROM burner I would like to be able to do it myself. Thanks. 73's

VO1BIL
BILL

4586. Re: Glowbugs & transformer-less power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904291150300.29217-100000@Stratus.CAM.ORG>
Source record: 70766

There are really good reasons for using a transformer in a power supply. Things like the All-American Five and tv sets may have gone without transformers, but they were all carefully designed so you couldn't touch any metal parts and any input and output were carefully isolated.

I'm not sure that you can ensure that at a home made unit will be properly isolated, especially when you have to get the piece of equipment working after it's built and would probably not be concerned about keeping it in a plastic case with all the knobs on at that point.

But unless you are talking about high power, one way to get isolation is to use back to back low voltage transformers of appropriate wattage, so you feed one from the AC line and get say 12 VAC out, and then you feed that into the 12VAC side of another transformer and get 120VAC or whatever out of it. You still have to deal with filament (the old tv sets and radios used tubes with exotic filament voltages in series that all added up to the AC line voltage, which restricts what tubes you can use and if one filament goes bad it's not immediately obvious), and probably getting a higher voltage for the plate supply. But you'll be safe.

One wild idea I've wondered about is whether you could take two identical switching supplies (the local surplus store had plenty at one point of non-PC switchers) and used one normally, but take the transformer out of another one and use it in reverse (as above) to get 120VAC or more. It may not work because it will provide the wrong load to the existing switcher, you will have to select one output winding and remove the rectifier and filter capacitor, but if it works it will give you isolation at maybe a cheaper cost than two traditional transformers.

If you want a "real" transformer, keep an eye out for big tv sets. I imagine most tube-based sets have already been discarded, but you never know. They used to be considered a good source of transformers for projects, either as is or rewound to get the most desired voltage.

If you have access to a good size hamfest, a transformer shouldn't be a problem. Somebody will have tv transformers they've scrounged over the yearss, or something else.

Years ago I ran a tube 2meter FM rig that was originally intended for mobile use. I took out the vibrator, and fed the pins where the vibrator's output normally went with a fairly decent 12V transformer that was on hand. The rigs transformer probably got hotter than it should, but it worked. So there may be life in those old transformers and I can't imagine anyone putting a high price on them now. I find it hard to picture someone using one of those rigs in their car nowadays.

Or, get one of those transformers and build a circuit on the primary that acts like the vibrator but which is mechanically quiet. Run it from a switching supply and you've got your power supply.

Michael VE2BVW

On Thu, 29 Apr 1999, Will White wrote:

> I need info on constructing a voltage-multiplying (doubler?) transformer-less
> power supply for a couple of glowbug projects I want to get started on.
> Something like or better than those used in All-American Five AC/DC sets. My
> budget precludes the acquisition of any HV transformers for the time being. So
> I need hints, advice, consent, a schematic, bibliography, and what-all to do
> this *safely.*
>
> I could also use some suggestions as to tube selection. I want to start with a
> 2 or 3 tube regen. RX (I have several 6L6s, OD3s, and 5U4Gs for a transmitter
> project for later). Thus far, I am looking at a 6U8 design, but from memory it
> seems that tube takes either +150 or +250V on the plate, and either would be
> tricky with above said doubler supply. So, what bottle fits the bill here?
>
>
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net
>
>

4587. Re: Ten-Tec

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <7ga0mv$jub@freenet-news.carleton.ca>
Source record: 70767

Martin Meserve (meserve@my-dejanews.com) writes:
> Allan Kaplan wrote:
> But, I do agree that Ten-Tec has a lot of good stuff. I have
> been considering the 10 Meter to 2 Meter transverter myself.
>
> Martin
>
I just built the 1210. Was thinking of posting a review
and schematic on the web site if anyone was interested.

--
73 de va3rr/aa8lu
http://www.qsl.net/va3rr

4588. Re: Glowbugs & transformer-less power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37289C0F.B452C2D7@teleport.com>
Source record: 70768

Michael Black wrote:
>
> There are really good reasons for using a transformer in a power supply.
> Things like the All-American Five and tv sets may have gone without
> transformers, but they were all carefully designed so you couldn't touch
> any metal parts and any input and output were carefully isolated.
>
> I'm not sure that you can ensure that at a home made unit will be properly
> isolated, especially when you have to get the piece of equipment working
> after it's built and would probably not be concerned about keeping it in a
> plastic case with all the knobs on at that point.
>
> But unless you are talking about high power, one way to get isolation is
> to use back to back low voltage transformers of appropriate wattage, so
> you feed one from the AC line and get say 12 VAC out, and then you feed
> that into the 12VAC side of another transformer and get 120VAC or whatever
> out of it. You still have to deal with filament (the old tv sets and
> radios used tubes with exotic filament voltages in series that all added
> up to the AC line voltage, which restricts what tubes you can use and if
> one filament goes bad it's not immediately obvious), and probably getting
> a higher voltage for the plate supply. But you'll be safe.
>. . .

I heartily second that advice!

Another inexpensive source of isolation transformers is your local electronics surplus store. Lots of test equipment, transformer-type power supplies, and other gear use transformers which have a dual primary. This is so the same transformer can be used in countries having 120 or 240 volt power -- the primaries are connected in series for 240 and parallel for 120. Look for a 120/240 volt selector switch on the rear panel as a clue, although the primaries are often hard-wired when there are separate models for different countries. You can use these two windings as an isolation transformer. Who knows -- you might even get something useful from some of the other windings.

Roy Lewallen, W7EL

4589. Modulation transformer data needed: UTC Special Series S22

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: w6fm@qsl.net
Message-ID: <372898a0.8385669@news.slonet.org>
Source record: 70769
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Looking for technical specifications on the above transformer. Can anyone help?

Ron Patterson
W6FM

4590. service manual wanted ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: JOHN M1CUU <johnjr@m1cuu.freeserve.co.uk>
Message-ID: <7ga68mehv1@news5.svr.pol.co.uk>
Source record: 70770

hi to all.i am looking for a serveice manual for a trio ts-780 vhf/uhf
tvcr.....
please email me at johnjr@m1cuu.freeserve.co.uk

thanks
de m1cuu
john

4591. Multi band KK7B DDS VFO Web site

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Stephen Farthing <stephen@stevef.demon.co.uk>
Message-ID: <925411230.50830.0.nnrp-80.7521989e@news.demon.co.uk>
Source record: 70771
Cross-posted to:
alt.ham-radio.hf,alt.ham-radio.vhf-uhf,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,uk.radio.amateur

Dear R2/T2, miniR2 and Phasing DC fans,

Jan (G0BBL), Alan (G7PUB) and Steve(G0XAR) would like you to visit their QRP2000 web site at http://www.stevef.demon.co.uk/qrp2k/qrp2000home.htm. It describes our progress so far on building a multi band transceiver based on the well known KK7B R2/T2 modules coupled with BPF, PA, LPF modules from Hands electronics. It covers top band to ten meters, USB,LSB and CW. Our contribution is our own design dual DDS VFO coupled with a PIC based controller. This overcomes the difficulties of generating perfect phasing over a wide range of frequencies using analogue techniques. The result is the effective multi-banding of what, in the past, has largely been considered as a single band design.

We hope it is of interest to the QRP community.

Jan, Alan and Steve AKA the QRP2000 team.

4592. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01be92b4$989f5520$70cbac3e@default>
Source record: 70772

Miker wrote -
> You can calculate the effective capacitance required to
resonate
> the line, but the calculation is more complex.
==========
Yes you can. In fact the calculation can be done for a
coax line using my program COAXPAIR, and for a
balanced-pair line using program RJELINE2. Download ready
for use in a few seconds from my website.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

4593. Radiotron Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: C0510@VM.SC.EDU
Message-ID: <1832FCB2FS85.C0510@VM.SC.EDU>
Source record: 70773

Hi,
I am trying to learn about tube electronics and I have a book: 1933 Radio Physics Course that I am trying to learn from, but one of my fathers friends said that my book is too old. He said that I should try to find the Radiotron Handbook. Does anyone know of this book?
Thank you,
Dan
Please reply to c0510@vm.sc.edu

4594. FS: MILITARY AN/PRC-68

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-2904991250220001@murphy1.cts.com>
Source record: 70774
Cross-posted to:
rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,misc.survivalism,alt.military.collecting

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EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

4595. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7gairl$7hj$1@nnrp1.dejanews.com>
Source record: 70775

In article <7g8vbc$bn1@nnrp3.farm.idt.net>,
"Leland C. Scott" <no-spam@junk-mail.net> wrote:
> Thanks for the info everyone. The Peter Dahl company has a good selection
> but the price is "up there" too. I am thinking about using some used
> industrial control transformers run backwards (120vac to 480vac). With two
> control transformers connected in series and working into a full wave
> voltage doubler will also work for the supply I'm thinking about. I think I
> can find these control transformers for less than the cost of a new/used
> single plate supply transformer. I was hoping that the single plate
> transformer solution was as cheap or cheaper that the dual industrial
> control transformer idea.

That'll work, depending on the current you need, and assuming that if you're wiring the secondaries as your 110V primary, the original primary is rated for a high enough voltage.

Diode doublers don't have an especially good reputation for providing a stiff supply, and you may find that the series resistance of the primary windings limits the current you can put in. So -- it might work and it might not. I've found that most of the time, big iron is pretty forgiving (but my Fluke DVM is NOT).

Happy experimenting, and take the usual precautions.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4596. Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: ibrew2@my-dejanews.com
Message-ID: <7gapjddmo1@nnrp1.dejanews.com>
Source record: 70776

Why post and wait for an answer? Come to the Homebrew Research Page and find your answer now. Visit the Homebrew Digest page at this site and learn how to find your answer in the archives. It's probably already been asked and answered on the web! Visit http://www.geocities.com/napavalley/8304

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4597. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Dave Shrader <dshrader@earthlink.net>
Message-ID: <3728ED83.824422B4@earthlink.net>
Source record: 70777
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Come on!! CW and MCW are modes that carry the understanding that the
method will be international Morse code.

W6RCecilA wrote:

> Gord Skiffington wrote:
> > Morse - Is a mode ...
>
> Funny, Chapter 8 of "The FCC Rule Book" lists all the modes
> available to the Amateur Radio Service and none of those modes
> is Morse. I see CW, MCW, Phone, Image, RTTY, Data, Pulse, SS,
> and Test, but no Morse.
> --
> 73, Cecil, W6RCA http://www.bigfoot.com/~w6rca

4598. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <3728F3DE.3D0F@sir.com>
Source record: 70778
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

What if you wanted to play the flute, but a law required that you learn how to play the harp before you were allowed to play the flute?

What if you didn't like the harp and only wanted to play the flute, and other flute players called you lazy for not wanting to waste time learning an instrument you had no intention of ever playing?

Some people want to get into the hobby of radio to talk on the radio. They have no desire to use morse code. How silly it would be to waste the time to learn morse code, only to forget it once one has the license to go ahead and use voice.

Only people who intend to USE morse code should learn it.

4599. Re: AD8307 Log. Power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-29 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3727a157.881529619@news.online.no>
Source record: 70779

On Wed, 28 Apr 1999 09:27:00 -0400, Allan Kaplan
<akaplan@fallschurch.esys.com> wrote:

>Gerhard et al.
>I get 4.47 microvolts rms, or -94 dBm.
>73 de W1AEL
>
tnx to all of you, also rec'd some emails

73
jan-martin LA8AK

4600. Re: Radiotron Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Joe McElvenney <joemac@gto.net.om>
Message-ID: <VA.00000173.00c36d29@gto.gto.net.om>
Source record: 70687

Re: Radiotron Designer's Handbook

Hi,

The 'Radiotron Designer's Handbook', edited by F. Langford Smith, is one of radio's classic texts. It was named after the Australian Radiotron Valve Factory (Amalgamated Wireless Valve Co.) but was distributed in the U.S. by RCA. I have a 1941 edition with the RCA logo on the cover.

It went through several editions and in the U.K. metamorphosed into 'The Radio Designer's Handbook'. It was republished last year and should yield to a search on amazon.com (or amazon.co.uk).

Cheers - Joe

Muaskar Al Murtafa'a
Sultanate of Oman

4601. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: unit77@mynet.net
Message-ID: <3728f9d9.9099192@news.mindspring.com>
Source record: 70688
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

What a lame analogy.....what if dont mean SHIT in the real
world!!!!WHAT IF your mama gave your dad a blow job on a particular
night.....where would you be?

On Thu, 29 Apr 1999 19:05:50 -0500, Sir <sir@sir.com> wrote:

>What if you wanted to play the flute, but a law required that you learn
>how to play the harp before you were allowed to play the flute?
>
>What if you didn't like the harp and only wanted to play the flute, and
>other flute players called you lazy for not wanting to waste time
>learning an instrument you had no intention of ever playing?
>
>Some people want to get into the hobby of radio to talk on the radio.
>They have no desire to use morse code. How silly it would be to waste
>the time to learn morse code, only to forget it once one has the license
>to go ahead and use voice.
>
>Only people who intend to USE morse code should learn it.

4602. FS Bird 4381 $375.00

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: radioleo@earthlink.net
Message-ID: <7gbc06muv8@fir.prod.itd.earthlink.net>
Source record: 70689

4 Sale Bird 4381 RF Power Analyzer in very good condition. I think this unit needs either new recharger, or battery. I do not have an instruction manual, so I am not familiar with its use. New it sell for $929.00 so this is quite a deal. selling price is $375.00 plus shipping

Leo Ph/Fax (310) 670-6969

Thanks.....

4603. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7gbcph$15@nnrp2.farm.idt.net>
Source record: 70690

I think the control transformer idea will work better than a regular plate transformer would. All the power supply transformers (low voltage and most likely the same for the HV ones too) I have seen spec's for have as much as a 10 to 20 percent drop in output voltage from no-load to full-load. This is even before we talk about how well a voltage doubler will regulate from no-load to full-load. Industrial control transformers seem to be about 10 times better than your typical DC power supply transformer as far as voltage regulation goes. It really has to be or there would be BIG problems for any of the equipment connected to it if you think about.

All of the HV DC plate supplies I have seen for tube amplifiers look way too light on filtering. A circuit simulation I did showed for a full wave voltage doubler using 250 UF capacitors giving a 2KV output voltage (720 vac input) regulated to with in a few percent from no-load to full-load (about 8K for a 500W supply, good enough for a 4CX250). The ripple voltage at full-load looked to be about one percent (peak-to-peak) of the output voltage.

Leland C. Scott
KC8LDO

jstrohm@texas.net wrote in message <7gairl$7hj$1@nnrp1.dejanews.com>...
>In article <7g8vbc$bn1@nnrp3.farm.idt.net>,
> "Leland C. Scott" <no-spam@junk-mail.net> wrote:
>> Thanks for the info everyone. The Peter Dahl company has a good selection
>> but the price is "up there" too. I am thinking about using some used
>> industrial control transformers run backwards (120vac to 480vac). With
two
>> control transformers connected in series and working into a full wave
>> voltage doubler will also work for the supply I'm thinking about. I think
I
>> can find these control transformers for less than the cost of a new/used
>> single plate supply transformer. I was hoping that the single plate
>> transformer solution was as cheap or cheaper that the dual industrial
>> control transformer idea.
>
>That'll work, depending on the current you need, and assuming that if
you're
>wiring the secondaries as your 110V primary, the original primary is
>rated for a high enough voltage.
>
>Diode doublers don't have an especially good reputation for providing a
>stiff supply, and you may find that the series resistance of the primary
>windings limits the current you can put in. So -- it might work and it
>might not. I've found that most of the time, big iron is pretty forgiving

>(but my Fluke DVM is NOT).
>
>Happy experimenting, and take the usual precautions.
>
>------------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4604. FS: 811-A’s and 807’s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990430044455.14220.00000450@ng-ft1.aol.com>
Source record: 70691

I am selling a pair (2) type 811-A tubes. Both are RCA, in original boxes. One is date code 58-30, the other is date code 61-17. I am CERTAIN that the 61-17 is NOS, however the 58-30 has two small nicks on the base, so I canï¿½t say for certain that it is NOS. I WILL say that it looks ï¿½like newï¿½. I bought both of these from the same retail source, at the same time, and both test fine (tested within the past week). I have not PERSONALLY used these tubes...I purchased them for my repair parts stock. Theyï¿½ve been sitting around my shop for years, and itï¿½s time to find them a home somewhere.

$50 for the pair of 811-Aï¿½s
========

I am also selling an assortment of five (5) 807 type tubes. All have been tested recently, and they all test strong. All are NOS, in original boxes (5933 in original white box).

2 - 807 - RCA - brown base, date code 5-43
2 - GL807 - GE - brown base, date code 57-04
1 - CHS-5933/807W - Sylvania - brown base

$40 all for the 807ï¿½s
========

Interested? Please respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

4605. Re: Radiotron Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <37294652.54832231@news.magiclink.com>
Source record: 70692

I b'lieve full name is/was "Radiotron Designer's Handbook", think it was published for RCA and sometimes called the "RCA Radiotron Designer's Handbook". I used it for tube design ideas and formulae in the mid 60's and it was GREAT. There's gotta be some still around in libraries.

W7AAZ

On Thu, 29 Apr 99 14:26:55 EDT, C0510@VM.SC.EDU wrote:

>Hi,
>I am trying to learn about tube electronics and I have a book: 1933 Radio
>Physics Course that I am trying to learn from, but one of my fathers friends
>said that my book is too old. He said that I should try to find the Radiotron
>Handbook. Does anyone know of this book?
>Thank you,
>Dan
>Please reply to c0510@vm.sc.edu

4606. 1.288M/s PSK

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Anthony Hall <term@seesaw.wustl.edu>
Message-ID: <7gbub0$lh6$3@news1.mpx.com.au>
Source record: 70693

Has anybody constructed the design found on www.hamradio.si in the Hardware page, namely the 23/13cm designs for a 1.288m/s PSK packet radio device.

if so could you please contact me.
killer00@tig.com.au

4607. Re: 2 Meter Packet Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: slug@alumni.dee.uc.pt
Message-ID: <7gbvm6$2ak$2@rena.mat.uc.pt>
Source record: 70694

Bill Crann <bcrann@nf.sympatico.ca> wrote:
> your sound card as a TNC. Has anyone tries this software? Thanks for the

I used the soundmodem linux kernel driver at 1k2 without a problem, so you might give it a try. You only need about 4 to 5 components to trigger your radio PTT ... Check the AX.25 HOWTO on Linux Documentation Project (LDP) you can reach there from www.linuxhq.com , or sunsite.unc.edu/pub/Linux

Cheers,
Nuno Sucena
--

http://student.dee.uc.pt/~slug
CT1FOX CQG9304 @ 80m, 40m, 20m, 17m, 12m, 11m , 10m

4608. 1.2GHz and up uwave circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: slug@alumni.dee.uc.pt
Message-ID: <7gc014$2ak$3@rena.mat.uc.pt>
Source record: 70695

Hello,

i would like to experiment with microwave circuits, 1.2GHz ,
2.4GHz and possible higher. I am able to make reasonably medium quality
PCB's (using UV methods) but 0 experience with designing with that kind
of circuit at that frequency. I was thinking on buying all the books from
ARRL with uwave on its title , what do you think? Other important stuff,
do you know some cheap, small quantity, european component distributor that
i could use on my projects?
And about PCB, how can i know the dielectric and other important
characteristics to make microstrip?

Thank you for your help

--

http://student.dee.uc.pt/~slug
CT1FOX CQG9304 @ 80m, 40m, 20m, 17m, 12m, 11m , 10m

4609. Heathkit CR-1 Crystal Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: jfolk@dido.com
Message-ID: <7gc6fi$i64$1@nnrp1.dejanews.com>
Source record: 70696

If you have any information on this or a manual please email me.
73

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4610. Re: 2 Meter Packet Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <372999a2.261024715@news>
Source record: 70697

On Thu, 29 Apr 1999 15:30:46 GMT, "Bill Crann"
<bcrann@nf.sympatico.ca> wrote:

>I am new to ham radio and I was looking for some help. I would like to give
>packet a try. I saw a add for a $89 TNC I think it was a Baycom, or a
>Tigertronics, are these any good? Does anyone have a diagram of a TNC that
>I may build myself. Also I saw I software program call flexnet which uses
>your sound card as a TNC. Has anyone tries this software? Thanks for the
>help. 73's
>
>V01BIL
>
>

Hi, Bill and welcome to the hobby!

There are several versions of TNC: the Baycom unit is pretty much a
minimal modem and uses software in the computer to handle the packet
protocol and channel management. There are also units that you can
plug a terminal, or a computer pretending to be a terminal, into and
get on the air. There is also the sound card based type, which I
confess not having any experience with. My guess is, unless you are a
confirmed computer jock and can deal with driver and interrupt issues
readily, that you will get on the air fastest with a packaged TNC like
the KAM or MFJ for around US$120. Run your computer terminal emulator
or use the software that comes with the TNC, or look for some of the
really very good TNC interface software you can get from ham
entrepreneurs such as KAWIN. Most logging programs have support for
TNCs as well.

73 es cu on the air!

Dave
K1MBO

4611. Re: Glowbugs & transformer-less power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37299E45.414DB880@asu.uswest.net>
Source record: 70698

Would someone please explain for me why attaining good isolation is important here for considerations of *safety*? Insulation and proper grounding rather than isolation would seem to be the central safety concerns. Intuitively, and on examining a Hallicrafters S-120, and a few of my other radios that are AA5/no xfmr./selenium rectifier designs, I can't figure it out. With an isolation transformer, AC voltage in = AC voltage out; I don't "get" what it is the iso-xfmr. accomplishes. I don't understand very well the fundamental purpose and principle of isolation transformers and isolation in general, so I suppose that is why I am having trouble understanding the safety issues in this application. Thanks for your patience and insight.

Roy Lewallen wrote:
>
> Michael Black wrote:
> >
> > There are really good reasons for using a transformer in a power supply.
> > Things like the All-American Five and tv sets may have gone without
> > transformers, but they were all carefully designed so you couldn't touch
> > any metal parts and any input and output were carefully isolated.
> >
> > I'm not sure that you can ensure that at a home made unit will be properly
> > isolated, especially when you have to get the piece of equipment working
> > after it's built and would probably not be concerned about keeping it in a
> > plastic case with all the knobs on at that point.
> >
> > But unless you are talking about high power, one way to get isolation is
> > to use back to back low voltage transformers of appropriate wattage, so
> > you feed one from the AC line and get say 12 VAC out, and then you feed
> > that into the 12VAC side of another transformer and get 120VAC or whatever
> > out of it. You still have to deal with filament (the old tv sets and
> > radios used tubes with exotic filament voltages in series that all added
> > up to the AC line voltage, which restricts what tubes you can use and if
> > one filament goes bad it's not immediately obvious), and probably getting
> > a higher voltage for the plate supply. But you'll be safe.
> >. . .
>
> I heartily second that advice!
>
> Another inexpensive source of isolation transformers is your local
> electronics surplus store. Lots of test equipment, transformer-type
> power supplies, and other gear use transformers which have a dual
> primary. This is so the same transformer can be used in countries
> having 120 or 240 volt power -- the primaries are connected in series
> for 240 and parallel for 120. Look for a 120/240 volt selector switch

> on the rear panel as a clue, although the primaries are often
> hard-wired when there are separate models for different countries. You
> can use these two windings as an isolation transformer. Who knows --
> you might even get something useful from some of the other windings.
>
> Roy Lewallen, W7EL

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4612. Re: Radiotron Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Lyle Koehler <lyle@mlecmn.net>
Message-ID: <3729B367.8617FEA7@mlecmn.net>
Source record: 70699

The Radiotron Designer's Handbook is available in both CD-ROM and hard-copy versions (the hard-copy version is called the "Radio Designer's Handbook") at http://www.ultranet.com/biz/raddev/#CDROM

As another poster suggested, you may also find it by searching an on-line bookstore such as Amazon.

--
Lyle, K0LR

http://www.computerpro.com/~lyle

4613. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <3729DE8A.B42ABBC0@home.com>
Source record: 70700

From Jack:

The article was "Tailor Made Volts" in QST from the mid-60's.

Color TV transformers are still available - just go down to the town dump any saturday. Also - there are folks who still repair TV's - look in the yellow pages - some of these guys would be happy to part with the chasis of junkers.

"jstrohm@texas.net" wrote:

> In article <01be9192$34d6d5e0$c99d45d1@leescott>,
> "Lee Scott" <DownWithJunkMail@Spam.Net> wrote:
> > Does anyone know of a good source for getting tube plate power supply
> > transfomers?
>
> How big? If you mean "good=cheap," you'll have to scrounge the surplus
> markets and hamfests. Don't bother with most of the commercial surplus
> houses mail-order, because nowadays they're nearly as expensive as new.
> Consider broadcast surplus and powerline surplus -- you might get lucky.
> You might also find surplus from semiconductor manufacture -- they used
> plasma generators in a lot of processes that were basically 3 KW amplifiers
> for 13.56 MHz, running some really big tubes.
>
> If "good=good" and you need full legal limit, try Peter Dahl.
>
> If "good=I made it myself" there are some transformer winding articles
> way back in the archives of 73 that offer some ideas. There is also a
> rumor that you can successfully "fix" a microwave oven transformer so
> it won't saturate. Interestingly, all the online microwave oven
> conversion articles I've seen referenced have vanished -- seems it's c
> onsidered too dangerous to publish these plans, but the stuff about
> homemade bombs and drugs is still out there.
>
> 73
>
> Jim N6OTQ
>
> ----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4614. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <3729DF82.BBB89299@home.com>
Source record: 70701

One more idea - look at the power supplies at
www.members.aol.com/sbench101 for PWM switching supplies.

Lee Scott wrote:

> Does anyone know of a good source for getting tube plate power supply
> transfomers?
>
> Leland C. Scott
> KC8LDO
> --
> "We learn in time that subjects are not controversial,
> but how we communicate about them and the
> elements of personal blame we add in anger. "

4615. For Sale!-NOS 6KD6 Sweep Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <925484798.308.17@news.remarQ.com>
Source record: 70702
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

<Four (4) pieces left! NOS/NIB>
Three (3) International ServiceMasters and One (1) GE.
The International ServiceMasters are the Green-Banded type, two of Korean and one of Japanese manufacture (Yaesu guys will know that these are the best for Vintage Yaesu) and the GE is of US manufacture. $60 for all four (4) shipped to U.S. address.

Steve

odin@webspan.net

4616. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9904301051510.3964-100000@Stratus.CAM.ORG>
Source record: 70703

On Thu, 29 Apr 1999, Joseph Merfalen wrote:

> Man i thought this was a HAM radio web site and it is about beer? Sheeeesh....
> I am not thankful for this URL...hehehehehe I dont drink....joey

There was something about that post that made me think it was one of the occasional beer-making posts we get here from time to time. I'm not quite sure what it was that made me think that. Maybe it was the "why post and wait for an answer" since unlike a lot of newsgroups the questions ask aren't often common.

Michael VE2BVW

4617. trade: Hw-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: itzack@hotmail.com
Message-ID: <7gcmth$1nd$1@nnrp1.dejanews.com>
Source record: 70704

I have a hw-101 with bad finals. All else is well with the radio. It has a hs-1661 speaker and the ps. I would like to trade for an hw-16 with vfo.
John
Kc4npd

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4618. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Joseph Merfalen <jmerfale@engr.csulb.edu>
Message-ID: <3729E834.3931E9EE@engr.csulb.edu>
Source record: 70705

> Yeah heheh I went to the web site and i saw it was about beer.That is something I
> have no interest in at all. It was kind of funny because i am very interested in
> building my own rig so I went there expecting to see a bunch of projects but I saw
> it was beer heheheh it was kind of funny. Well to everyone interested in home
> brewed Beer than that link is what that is about. It is not about HAm radio gear.
> heheh have good day all...73'
>
> There was something about that post that made me think it was one of the
> occasional beer-making posts we get here from time to time. I'm not quite
> sure what it was that made me think that. Maybe it was the "why post and
> wait for an answer" since unlike a lot of newsgroups the questions ask
> aren't often common.
>
> Michael VE2BVW

4619. Re: Glowbugs & transformer-less power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <3729FFF7.EFEC331A@teleport.com>
Source record: 70706

Sure.

Here's the problem. One side of the A.C. mains is connected to the Earth, and the other side is 120 volts or so relative to this. If your house is wired and grounded properly, the side connected to the wide slot of the socket is the one connected to the Earth ("neutral"). It should be safe to use a polarized plug (having one blade wider than the other so it can't be reversed in the socket), and connect the neutral wire (the one going to the wide blade) to the chassis of your radio. But it ISN'T safe, because there are a lot of houses out there which are NOT wired or grounded properly, or where an outlet has been added or replaced by someone who doesn't know how to do it properly. If you connect one side of the A.C. line to the chassis, and the wiring is reversed, the chassis is then at 120 volts relative to the Earth. Touching the radio while simultaneously touching any grounded object like a faucet, metal appliance with third-wire ground, etc., or while having any other electrical contact with the Earth can be fatal. If you have a three-wire system, you can get some protection by connecting the third, ground, wire to the chassis also. But then if the other two wires are reversed, you'll directly short-circuit the mains. And you have to be sure that the third wire is also correctly installed and connected.

Some power supply configurations, like ones with a bridge rectifier, don't require a connection from either side directly to the chassis. But these result in a sizable voltage from the chassis to the Earth regardless of which way the plug is turned around (assuming one side of the output of the bridge or other circuit is connected to the chassis).

There are a couple of ways of dealing with this. One way is to "float" the chassis, and not connect either side of the mains or the power supply output directly to it. This was frequently done with AC-DC radios. But it's very desirable to use the chassis for shielding and for an AC ground in the radio, so the mains wire was usually connected to the chassis through a capacitor. The idea is that the capacitor would be a good conductor for RF but have a high impedance at 60 Hz. One problem with this approach is capacitor reliability. It's common to have very high voltage spikes (well over 1 kV) appear on the AC mains, and the capacitor has to withstand these without its leakage current increasing significantly. Also, a capacitor that's effective as an RF conductor at the common IF of 455 kHz and at the lower end of the BC band doesn't have as high an impedance as you'd like at 60 Hz. Most people of my generation recall getting a "tingly" feeling when touching a radio if the plug was inserted one way, but not so much if

it was turned around. (Most radios, as one poster mentioned, came in plastic boxes with plastic knobs to make it difficult to physically touch the chassis.) My first receiver was a Hallicrafters S-38D, which was a transformerless unit in a metal box. I nearly burned the house down by connecting the chassis to a good ground. When I turned the radio on, an arc formed across the power switch, which extinguished only when I raced down stairs and threw the circuit breakers (an event neither I nor my parents ever forgot).

The best way around this is to connect the radio to the mains through a transformer. You can then safely connect one side of the transformer secondary to the chassis (or have it at any other potential relative to the chassis), connect the chassis to Earth via the mains third wire or a grounded antenna, and not worry about killing yourself from touching the chassis.

One other word of advice for those of you playing with fire-fets: Keep one hand in your pocket when you're poking around in the radio's insides.

Roy Lewallen, W7EL

Will White wrote:
>
> Would someone please explain for me why attaining good isolation is important
> here for considerations of *safety*? Insulation and proper grounding rather
> than isolation would seem to be the central safety concerns. Intuitively, and
> on examining a Hallicrafters S-120, and a few of my other radios that are
> AA5/no xfmr./selenium rectifier designs, I can't figure it out. With an
> isolation transformer, AC voltage in = AC voltage out; I don't "get" what it
> is the iso-xfmr. accomplishes. I don't understand very well the fundamental
> purpose and principle of isolation transformers and isolation in general, so I
> suppose that is why I am having trouble understanding the safety issues in
> this application. Thanks for your patience and insight.
>
> Roy Lewallen wrote:
> >
> > Michael Black wrote:
> > >
> > > There are really good reasons for using a transformer in a power supply.
> > > Things like the All-American Five and tv sets may have gone without
> > > transformers, but they were all carefully designed so you couldn't touch
> > > any metal parts and any input and output were carefully isolated.
> > >
> > > I'm not sure that you can ensure that at a home made unit will be properly
> > > isolated, especially when you have to get the piece of equipment working
> > > after it's built and would probably not be concerned about keeping it in a
> > > plastic case with all the knobs on at that point.
> > >
> > > But unless you are talking about high power, one way to get isolation is
> > > to use back to back low voltage transformers of appropriate wattage, so

> > > you feed one from the AC line and get say 12 VAC out, and then you feed
> > > that into the 12VAC side of another transformer and get 120VAC or whatever
> > > out of it. You still have to deal with filament (the old tv sets and
> > > radios used tubes with exotic filament voltages in series that all added
> > > up to the AC line voltage, which restricts what tubes you can use and if
> > > one filament goes bad it's not immediately obvious), and probably getting
> > > a higher voltage for the plate supply. But you'll be safe.
> > >. . .
> >
> > I heartily second that advice!
> >
> > Another inexpensive source of isolation transformers is your local
> > electronics surplus store. Lots of test equipment, transformer-type
> > power supplies, and other gear use transformers which have a dual
> > primary. This is so the same transformer can be used in countries
> > having 120 or 240 volt power -- the primaries are connected in series
> > for 240 and parallel for 120. Look for a 120/240 volt selector switch
> > on the rear panel as a clue, although the primaries are often
> > hard-wired when there are separate models for different countries. You
> > can use these two windings as an isolation transformer. Who knows --
> > you might even get something useful from some of the other windings.
> >
> > Roy Lewallen, W7EL
>
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

4620. Re: temp. comp. of an Xtal oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Tom Bruhns <tomb@lsid.hp.com>
Message-ID: <3729F767.1E9AFDCC@lsid.hp.com>
Source record: 70707

Richard Karlquist wrote:

> Secondly, get a low tempco crystal, not a
> microprocessor grade crystal.

Good advice (as usual) from Rick. Specifically, I know that you can get AT-cut crystals rated at max +/-2ppm over a fairly wide temperature range. Something like 0C to 55C sticks in my mind, but I may be wrong about that. Check out International Crystal, esp. http://icmfg.com/tech.html. Tight control of the angle of cutting the crystal is required to guarantee low tempco, so expect to pay for it.

Cheers,
Tom

4621. WT:TRADE SCANNER FOR??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Steven KB9HGI <kb9hgi@qsl.net>
Message-ID: <3729B8E9.7FDBD02F@qsl.net>
Source record: 70708

Hello,
I have a Scantastic sheet fed computer scanner. Includes 16 bit ISA card cd-rom with the drivers and all the software for scanning and editing pictures or what ever.
I would like to trade this for a TNC, MC50 MIC or ????? Email me with what you have to offer. Thanks!

Steve KB9HGI
-=Quincy,IL=-
pacman@bcl.net

4622. Heathkit SB200 Linear Amplifier.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: rperc15531@aol.com
Message-ID: <19990430154457.12593.00000633@ng-fz1.aol.com>
Source record: 70709

The fixed tuned input circuit coil cores which were preset at the component factory have been disturbed. Anyone know how to reset them to ensure 50 Ohm input impedence to match in the exciter (FT1000MP) ?

4623. Euro travel transformers as HV supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <372A109E.5FBD3C36@asu.uswest.net>
Source record: 70710
Cross-posted to: rec.radio.amateur.equipment,Rec.radio.amateur.homebrew

Can someone describe the circuit that composes those little (3"x3"x4") 240/120 travel transformers you take along to use your 120V appliances when visiting countries with 240V AC mains? I had an idea to use one in a HB power supply for running a little homebrew tube receiver. What kind of isolation and current rating do these puppies have?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4624. Re: 2 Meter Packet Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: rnielsen@news.uidaho.edu
Message-ID: <7gd2t0pmd1@newshound.csrv.uidaho.edu>
Source record: 70711

Bill Crann (bcrann@nf.sympatico.ca) wrote:
> I am new to ham radio and I was looking for some help. I would like to give
> packet a try. I saw a add for a $89 TNC I think it was a Baycom, or a
> Tigertronics, are these any good? Does anyone have a diagram of a TNC that
> I may build myself. Also I saw I software program call flexnet which uses
> your sound card as a TNC. Has anyone tries this software? Thanks for the
> help. 73's

> V01BIL

I probably shouldn't be answering this since I'm in the same position you
are: a newcomer trying to get started. But I have seen someone using the
Baycomm TNC you describe that he was fairly pleased with it.

The most recent QST has a very interesting article about a new digital
mode called PSK31, I think. It ran through a sound card and software was
free. I'm looking to try out here. If anybody has any recommendations I'd
be glad to hear them.

--

Richard Nielsen, Dept. of Civil Engrg, Univ. of Idaho, Moscow ID 83844-1022
voice: 208-885-8961 fax: 208-885-6608

4625. Re: Euro travel transformers as HV supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-04-30 00:00:00 UTC
From: CJ <cjr@visi.com>
Message-ID: <372A2391.125AA5B@visi.com>
Source record: 70712
Cross-posted to: rec.radio.amateur.equipment,Rec.radio.amateur.homebrew

The small ones, 50w or so, are transformers. The larger ones that will
operate a hair dryer, etc., are sometimes only a diode in series with
the line or the equivalent. The former have good isolation, the latter
none. Your little radio will surely run on a 50w transformer, but be
sure that the unit you use is really a transformer.

73, CJ K0CJ

Will White wrote:
>
> Can someone describe the circuit that composes those little (3"x3"x4") 240/120
> travel transformers you take along to use your 120V appliances when visiting
> countries with 240V AC mains? I had an idea to use one in a HB power supply
> for running a little homebrew tube receiver. What kind of isolation and
> current rating do these puppies have?
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

4626. Re: Anything

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: zenith #1 <peitsch@concentric.net>
Message-ID: <7gfu03$rle@journal.concentric.net>
Source record: 70630
Cross-posted to:
rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.shortwave,uk.radio.amateur,rec.radio.swap

Jeeez!

Someone! wrote in message ...
>Hi,
> I'm after any kind of ham rig. HF, VHF, UHF, QRP, SSB, FM, AM, Valve,
>PLL, VFO anything!
>
>I'm a novice and I need some gear to get me going...perhaps you have just
>uprgraded to the latest rig, well please email me with what you've got.
>I'll pay upto $60usd (�40ukp)
>
>David
>
>
>
>

4627. Computer Interface for Morse Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Dennis Wyman <wyman@mail.psnw.com>
Message-ID: <372B7CE2.1B6BF593@mail.psnw.com>
Source record: 70631

Does anyone have any information on how to build a simple interface for their PC to be able to transmit and receive morse code using their computer?

Dennis KA6GDT

4628. QRP Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: The Conqueror <joetheripper@hotmail.com>
Message-ID: <372b88a7.0@news.gulliver.fr>
Source record: 70632
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Hi,

I was wondering if there was any way for me to homebrew or make from a kit a
2 meter QRP <1W transceiver with only 2 or 3 frequencies and PL support.

-Dan K3DRQ

4629. Re: Control project - ideas wanted please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: digitron1 <digitron1@csi.com>
Message-ID: <Oa0D3ZDl#GA.75@ntdwwaaw.compuserve.com>
Source record: 70633
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics,sci.electronics.design,sci.electronics.equipment,sci.electronics.repair,sci.engr.semiconductors

In need of some inspiration for a project ?

Try my site : http://ourworld.compuserve.com/homepages/digitron1/

Paul Wilson wrote in message <3729A471.96311B94@jesus.ox.ac.uk>...
>I'm in the middle of a 2 week UG project and desperately require some
>inspiration!
>
>Basically, I have already constructed a board with a 6502 processor and
>6522 input / output chip, a bit or RAM, and a ROM emulator. I now have
>to devise a simple control process.
>
>As a guide to the level (I haven't attempted anything like this before),
>the department suggested controlling two sets of traffic lights
>(boring!) and apparently someone else once connected up a set of LED's
>on a windscreen wiper, so the would light up in a sequence to spell out
>a word as the blade swept across. That would be OK - but it's been done
>before.
>
>Finally, I don't think I've got a lot or raw materials to work with, so
>ideas using things that are lying about the lab would be great!
>
>Cheers,
>
>Paul Wilson

4630. Looking For Operating Manual for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: rick <kc8dmn@accinternet.com>
Message-ID: <8FOW2.31$aT4.11013@iagnews.iagnet.net>
Source record: 70634
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

I am looking for a copy of an Operating Manual for Kenwood TS-830S .
If anyone can help me you can E-MAIL Me @ address below.

Thank You All,

Rick Ramzy de K8RMR

--
E-MAIL @ kc8dmn@accinternet.com
WEB PAGE @ www.accinternet.com/~kc8dmn

4631. Re: Computer Interface for Morse Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: kilroy <kilroy@SPAMTRAPfuse.net>
Message-ID: <925614267.404.8@news.remarQ.com>
Source record: 70635

Download a copy of HamComm and build the interface described in the help
file. www.simtel.com

73
KC8HPG
kilroy

--
NOTE: Email address is bogus!
Remove SPAMTRAP for valid address
Dennis Wyman wrote in message <372B7CE2.1B6BF593@mail.psnw.com>...
>Does anyone have any information on how to build a simple interface for
>their PC to be able to transmit and receive morse code using their
>computer?
>
>Dennis KA6GDT
>

4632. Want: TS-830S for personal use

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: zeitler@ibm.net
Message-ID: <372bd9c9@news1.us.ibm.net>
Source record: 70636
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

While I am still looking for a Icom 751-A I also would like to replace my backup rig with another backup rig--the Knwd TS-830S. I thought I found a nice one a month ago but it turned out to be in rough shape. So once again, I am looking for a real nice TS-830S. PLEASE if you can when replying give me the serial number, any options, of course the price and your phone number so if I need to I can give you a call. Pls be patient as it may take a while to get through all of the replies.

Thank you for the read.

Lane Zeitler
Ku7i
San Diego

4633. Eimac Application Bulletin - "Power Tetrodes"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Ron Ostman <w0nyq@minntaccdp.com>
Message-ID: <7gg9s6mur1@news3.spacestar.net>
Source record: 70637
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

For Sale:

Copies of Eimac Application Bulletin number eight - "The Care and Feeding of Power Tetrodes".
Dated 1953. 25 pages. Information on amplifier layout, circuit design, adjustment, choice of operating conditions, tube life, etc.

$15.00 Priority Mailed to U.S. addresses.

Ron, W0NYQ

4634. Diagram for Hallicrafters HT-33 Amp or PL172/8295 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Dudley Hurry <bhurry@wt.net>
Message-ID: <7ggjjj$57u$1@sys14.hou.wt.net>
Source record: 70638

I'm looking for a diagram for a Linear amp using a PL172/8295 Tube.. I understand that a Hallicrafters HT-33 amp used such a tube.. I have a commercial amp that has that tube in it, but I need to build a powersupply to match..

73's
Dudley
WA5QPZ
jhurry@us.ibm.com
512-303-1983

4635. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Angel Vilaseca <avilaseca@popmail.smis.ch>
Message-ID: <372AC580.A8636597@popmail.smis.ch>
Source record: 70639

jstrohm@texas.net a ï¿½crit:
>
> In article <01be9192$34d6d5e0$c99d45d1@leescott>,

> If "good=I made it myself" there are some transformer winding articles
> way back in the archives of 73 that offer some ideas. There is also a
> rumor that you can successfully "fix" a microwave oven transformer so
> it won't saturate.

What do you mean saturate? Can't you just use a microwave oven
transformer off the mains? Why?

> 73
>
> Jim N6OTQ
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

Vy 73 de Angel HB9SLV

4636. RF capacitor help ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: kengkengkeng@my-dejanews.com
Message-ID: <7gef9l$ft9$1@nnrp1.dejanews.com>
Source record: 70713

Could anyone explain me about this ? I've build the C-class 50MHz/60Watts transistor amplifier.It works quite well as the spesification described in the transistor data sheet.But the RF capacitor (in the matching circuit) of the final stage output turns very hot!! I'm not sure that it is a common behavior of this kind of RF amplifier or it shows a large mismatch energy transfer. Please advise, Thank you, 73 de HS0SZU

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4637. Re: Heathkit SB200 Linear Amplifier.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Gary Ferdinand <gferdinand@ipass.net>
Message-ID: <49GW2.21$LU3.84@news.ipass.net>
Source record: 70714

Throw an SWR bridge in between the SB200 and the FT1000MP and the SB200 into a dummy load. With the MP throttled way back (use full sensitivity on the SWR bridge and adjust MP power out for full scale forward power on the bridge), adjust the coils for each band. Don' t forget to run the MP **without** the built-in tuner :)) Also don't forget to retune the SWR bridge forward power for each measurement.

If your SB200 input coils are *way* off, you might need to use an old transmitter for this, as the MP will likely see the high swr and shut itself down.

Gary W2CS
Apex, NC

RPerc15531 wrote in message
<19990430154457.12593.00000633@ng-fz1.aol.com>...
>The fixed tuned input circuit coil cores which were preset at the component
>factory have been disturbed. Anyone know how to reset them to ensure 50
Ohm
>input impedence to match in the exciter (FT1000MP) ?

4638. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Gary Ferdinand <gferdinand@ipass.net>
Message-ID: <GaGW2.22$LU3.189@news.ipass.net>
Source record: 70715

I think beer is entirely on topic for this newsgroup. How else can one generate enough beer cans for the beercan vertical?

:)

Joseph Merfalen wrote in message <3729E834.3931E9EE@engr.csulb.edu>...
>> Yeah heheh I went to the web site and i saw it was about beer.That is something I
>> have no interest in at all. It was kind of funny because i am very interested in
>> building my own rig so I went there expecting to see a bunch of projects but I saw
>> it was beer heheheh it was kind of funny. Well to everyone interested in home
>> brewed Beer than that link is what that is about. It is not about HAm radio gear.
>> heheh have good day all...73'
>>
>> There was something about that post that made me think it was one of the
>> occasional beer-making posts we get here from time to time. I'm not quite
>> sure what it was that made me think that. Maybe it was the "why post and
>> wait for an answer" since unlike a lot of newsgroups the questions ask
>> aren't often common.
>>
>> Michael VE2BVW
>
>
>

4639. Re: Radiotron Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: david@slack.com
Message-ID: <372b2687.0@news.spies.com>
Source record: 70716

In article <372a4c6e.1719910962@news.cr.island.net>,
Steve Carlisle <quatsein@island.net> wrote:
>I believe the Radiotron Designers Handbook and the Radio Designers
>Handbook are two differant books. One has about 350 pages and the
>other has over 1000. I had both books that were authored by
>F Langford Smith.

The "Radiotron Designer's Handbook" went through 4 editions, in multiple printings.

I believe the 350 page version is the 3rd edition.

The 1000+ page version is the 4th edition.

The 1498 page, 1968 printing of the 4th edition was reprinted by Newnes as the "Radio Designer's Handbook", ISBN 0-7506-3635-1. It is also available on CDROM from Old Colony.

4640. Making better brew from kits.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: ibrew2@my-dejanews.com
Message-ID: <7gfft2$80h$1@nnrp1.dejanews.com>
Source record: 70717
Cross-posted to: rec.radio.amateur.homebrew,alt.beer,alt.beer.home-brewing,rec.food.drink.beer

Ready to step up from that kit in a can? Visit the Homebrew Research Page and check out the latest update: "Better Brew from Kits". Also catch "Ten Tips to Better HomeBrew". Please Sign the guestbook!! If you don't find what you are looking for, E Mail me, I know where to look! visit http://www.geocities.com/napavalley/8304

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4641. [Super Buy] 32CH.UHF 40W (/\/\) MAXTRACS=>EX CONDITION<=

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: msisco9939@aol.com
Message-ID: <19990501134245.06231.00000898@ng40.aol.com>
Source record: 70718

Yep:

I have received some 32 Channel 40 Watt Motorola Maxtracs. (16) Pin Style logic boards. These radios are in Excellent Condition. Comes complete with Mike, Bracket, Mounting Screws, and I can have a few channels programmed for free.

Asking $375.00+$8.00 for shipping and handling

Terms:

Acceptable PrePayment in the form of a Postal Money Order (if you desire immediate processing) or a Personal check is A-OK too if you do not mind a short delay do to bank processing

Monty

4642. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Mike Dickman <mdickman@alaska.net>
Message-ID: <372B3D60.979@alaska.net>
Source record: 70719
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Andy wrote:
>
> Keith Lodahl <lodahlkh@internetwis.com> wrote in message
> 372A70E8.94CFBD98@internetwis.com...
> >If it is intended to be a "twit filter" then it is failing. Just listen on
> the
> >low bands and tell me of the professionalism shown by all operators found
> there.
> >The Conqueror wrote:
> >
> > I was just wondering why they still keep the Morse code testing
> >requirements
> >To weed out the serious from the lazy and stupid.
>
> >> Lets talk bottom line...CW is a twit filter. It maintains a certain
> >> level of operator competentancy.
> >> It may indeed be an outdated means of "seperating the men from the
> >> boys" but until a suitable replacement can be implemented,
> >> CW is it....JUST DO IT !!!
> >> Practice, practice practice !!!
> >> Hugh Duff, VA3TO Toronto
> >>
> Well well then the STUPID have taken over the bands already with the CW test
> STILL in effect. A simple thing such as the PHOENETIC ALPHABET is destroyed
> all the time by operators who have GREAT CW skill. The only way for the
> phoenetic alphabet to work is when ALL use it correctly. The stupid have
> taken over and can't even use this SIMPLE thing correctly.
> We should change the test right now and make all of those old timers take a
> RELEVANT operating and proficiency test. Man that would clean a lot of the
> deadwood.Guys who can copy 30WPM CW but can't string a dipole. No wonder you
> are scared of losing the cw req most of you would LOSE your license if
> asked to retest.
> Operating knowledge will allways be better than operating 1 mode.
> Andrew
> VE1VVV

I would like to know how CW maintains this "level of operator
competentancy"? While "we" are debating CW, the Internet, cable modems,
sat. phones, cell phones are passing us in technology.

*** average temperature 6 below ***
sunrise 10:48 am sunset 2:44 pm
giving 3 hours 56 minutes of possible sunshine

Mike (KD4LLA)

For the people who like peace and quiet: a phoneless cord <grin>!

The longer Bill Clinton stays in office, the more we pay.

Our justice system pays because he has opened the door for millions of us to play games with the notion of telling "the whole truth" under oath. Our military personnel pay because they have to carry out their duties while grappling with questions regarding the motives of their commander in chief. Our national intellect pays because, with his myriad verbal contortions and willful deceptions, the president has become little more than a walking, talking insult to our intelligence. Finally, the taxpayers pay because, in his efforts to keep "looking presidential" and "doing the work of the people," he is creating more new programs and growing the government.

Haven't we paid enough already?

See my web page at http://www.alaska.net/~mdickman/Index.htm

4643. WTB: Anything

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <HHHW2.149$bi7.212@news-reader.bt.net>
Source record: 70720
Cross-posted to:
rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.shortwave,uk.radio.amateur,rec.radio.swap

Hi,
I'm after any kind of ham rig. HF, VHF, UHF, QRP, SSB, FM, AM, Valve,
PLL, VFO anything!

I'm a novice and I need some gear to get me going...perhaps you have just
uprgraded to the latest rig, well please email me with what you've got.
I'll pay upto $60usd (£40ukp)

David

4644. Re: Anything

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Steve Ellington N4LQ <n4lq@iglou.com>
Message-ID: <372b55e2.0@news.iglou.com>
Source record: 70721
Cross-posted to:
rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.shortwave,uk.radio.amateur,rec.radio.swap

Ok. Send me the $60 and I'll see what I can dig up. Maybe "anything".

Someone! wrote in message ...
>Hi,
> I'm after any kind of ham rig. HF, VHF, UHF, QRP, SSB, FM, AM, Valve,
>PLL, VFO anything!
>
>I'm a novice and I need some gear to get me going...perhaps you have just
>uprgraded to the latest rig, well please email me with what you've got.
>I'll pay upto $60usd (�40ukp)
>
>David
>
>
>
>

4645. Re: GelCell Charging

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37495589.400746811@news.atl.bellsouth.net>
Source record: 70722

On Sat, 01 May 1999 09:44:19 -0400, Bob Lewis <aa4pb@erols.com> wrote:
>I built a small series mode charge controller (from QST article) with
>the intent of charging a 4AH 12V gelcell from a 150 Ma solar panel. I
>realize it will take longer to charge at 150 Ma than the recommended
>rate of about 400 Ma but a 150 Ma panel is a much more manageable
>size. I substituted a power supply current limited to 150 Ma for the
>panel in order to test the controller. I find that unless I permit at
>least 300 Ma into the battery, the battery voltage never gets to 14.1
>volts so the charge controller never turns off. From this I suspect
>that one might be able to just directly connect a 150 Ma panel to a
>4AH battery without danger of overcharge (but use a diode to prevent
>reverse current flow with no sunlight). Anyone know if the battery
>will fully charge or be damaged with a low charge rate like this? Will
>the solar panel be damaged by a low impedance load or will it just
>self limit the current to 150 Ma?

Yeah, it'll work fine. It might take *weeks* to get the battery to full
charge, however. You might need a DC-DC converter to get enough
voltage for a topping charge. But if you don't care about that, and
there's little reason you should, then just connect the solar panel
to the battery through an isolation diode (Shottky or Germanium
preferred) and enjoy.

The problem here is that the 150 mA rating of the solar panel
is likely the short circuit current rating. Voltage won't be above
14 volts when you draw that much current. So you wind up with
a very slow taper charge as the battery nears full charge.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4646. Re: Anything

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <TVIW2.166$bi7.281@news-reader.bt.net>
Source record: 70723
Cross-posted to:
rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.shortwave,uk.radio.amateur,rec.radio.swap

oh come on...

David
Steve Ellington N4LQ wrote in message <372b55e2.0@news.iglou.com>...
>Ok. Send me the $60 and I'll see what I can dig up. Maybe "anything".
>
>
>Someone! wrote in message ...
>>Hi,
>> I'm after any kind of ham rig. HF, VHF, UHF, QRP, SSB, FM, AM, Valve,
>>PLL, VFO anything!
>>
>>I'm a novice and I need some gear to get me going...perhaps you have just
>>uprgraded to the latest rig, well please email me with what you've got.
>>I'll pay upto $60usd (�40ukp)
>>
>>David
>>
>>
>>
>>
>
>

4647. Re: Homemade 5/8 wave antenna problem...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: drmarc@wwa.com
Message-ID: <7gfm6n$cn6$1@hirame.wwa.com>
Source record: 70724

In article <924414441.686.18@news.remarQ.com>,
"Mr. 137" <ac137@iwvisp.com> wrote:
>Launched a 22.5 foot aluminum homemade antenna this evening with a 36"
>homemade gamma match clamped to the side of my beams upper masting (about a
>foot or so above boom). Couldn't even get my SWR's below 3.0:1. What the
>hell is my problem?
>
>Would it be my gamma match being too small?
>
>Is there a possible grounding problem?
>
>Is my antenna too close to my beam (the possible 18' distance above the beam
>mounting not done)?
>
>What about ground plane?
>
>What should I use as a ground plane?
>
>Am I seeing a pretty bad Impedance point problem?
>
>
>>>>Any or all comments will be appreciated.<<<
>
>73's...
>Ipo Camacho
****

I have exceedingly limited knowledge on this topic so be so advised.

I believe a 5/8ths type requires a ground plane. Ground it to an array of
ground wires buried or make a 4 prong ground plane of equal lengths that are
same as the vertical radiator.

Marc Schneider, Psy.D.
e-mail to: <drmarc@wwa.com>
(call sign: W4NVY)

4648. FS: E810F/7788

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: arnoldg@sf.telia.no
Message-ID: <372b5e18.10923154@news1.telia.com>
Source record: 70725
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.ham-radio,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap,rec.radio.amateur.equipment

Hi,

E810F Siemens and some Mullard for sale. All NOS and NIB. The Siemens
are even in sealed boxes. Also E80CC, E80F, E83F, E182CC, E180F/6688,
E280F and E282F in stock. Also Telefunken EF 804 NOS, NIB.
Please e-mail me or visit my homepage for details.

Best regards,

Arnold Goksoyr

DEMOSTENES A. Goksoyr
N5850 Balestrand
NORWAY
Phone +47 5769 1340
Fax +47 5769 1267
e-mail arnoldg@sf.telia.no

More than 1800 different valves in stock. Plus: sockets,
transformers, caps, resistors and books about valves and
valve equipment. Many rare European valve types.
You will find it at my homepage: http://demostenes.vestdata.no

4649. Re: Euro travel transformers as HV supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: munsch@ibm.net
Message-ID: <372b5fb2@news1.us.ibm.net>
Source record: 70726
Cross-posted to: rec.radio.amateur.equipment,Rec.radio.amateur.homebrew

I had always assumed that these were true two winding transformers, but recent tests showed most of them to be autoformers. So take your ohmmeter and check continuity between primary and secondary.

Maybe a couple or three husky AC wall warts back to back would be a better choice. A 24 volt 1 amp is 24 watts, and one driving two more backward whose original primaries are in series would provide 220 volts at near 100ma. 200 ma if you use 4 of them.

--
Crazy George

4650. Re: temp. comp. of an Xtal oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <jX2DTOAUF2K3EwwJ@ddwyer.demon.co.uk>
Source record: 70727

In article <3729F767.1E9AFDCC@lsid.hp.com>, Tom Bruhns
<tomb@lsid.hp.com> writes
>Good advice (as usual) from Rick. Specifically, I know that you can get
>AT-cut crystals rated at max +/-2ppm over a fairly wide temperature
>range. Something like 0C to 55C sticks in my mind, but I may be wrong
>about that. Check out International Crystal, esp.
>http://icmfg.com/tech.html. Tight control of the angle of cutting the
>crystal is required to guarantee low tempco, so expect to pay for it.

AT cut crystals have cubic tempco symetrical about approx 27deg C so the
best room temp performance would be to specify say +3ppm +-10C both
sides of 27C.
Really your best bet is to temperature control the crystal at just above
the maximum ambient. If you plot the crystal freq from room to +60 and
are lucky it may even be that the crystal will go through a turnover ie
a point of zero temperature coefficient. That will be the best temp
however it may be that the freq will be too far off to bring to nominal
by trimmer. As already said the temperature coefficient of the logic osc
circuit will be then worse than the crystal.
PS Ive got some 16.384MHZ ovened crystal reference standard oscillators
for sale uk pounds 50 , I bought them on the surplus market , they are
parts in ten to the eleven per deg c and parts in ten to eleven per day.
Can be used to lock the counter crystal to the same stability.

--
douglas dwyer

4651. Re: Making better brew from kits.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: Butch Magee <butchkay@netdoor.com>
Message-ID: <372B65E2.75C23C17@netdoor.com>
Source record: 70728
Cross-posted to: rec.radio.amateur.homebrew,alt.beer,alt.beer.home-brewing,rec.food.drink.beer

went to see the kits. saw the kits, saw the kit builder,...you look contentedly happy to me! Kit wurkz!!

Butch KF5DE

ibrew2@my-dejanews.com wrote:

> Ready to step up from that kit in a can? Visit the Homebrew Research Page
> and check out the latest update: "Better Brew from Kits". Also catch "Ten
> Tips to Better HomeBrew". Please Sign the guestbook!! If you don't find
> what you are looking for, E Mail me, I know where to look! visit
> http://www.geocities.com/napavalley/8304
>
> -----------== Posted via Deja News, The Discussion Network ==----------
> http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4652. Re: Shorted coax stubs-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-01 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3728d17f.959405945@news.online.no>
Source record: 70729

On Thu, 29 Apr 1999 09:37:17 -0500, "Charles H. Reichert"
<reichert@cig.mot.com> wrote:

>> This worked when I was trying to notch at 70cm and not have significant loss at 470MHz.

>> I seem to recall about 15dB notch at 430 and 2dB through loss at 470MHz from memory.
>>
>> The straight tunes notches were giving about 20dB notch and about 8dB through
>> loss at 470MHz.

>
>Seems somewhat high in loss.

seems important to understand the difference between power loss and
mismatch

4653. Satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: felixtcpip@aol.com
Message-ID: <19990502000443.24948.00001839@ng-fi1.aol.com>
Source record: 70640

Hi,
I am looking for a good antenna i can build that will be useful for satellites. I really enjoy using Sats, and if i could have a better antenna that would make things more fun. So if anyone has any schematics for an antenna like this, please let me know.

Thank you
Felix

4654. Re: DO YOU BELIEVE IN REINCARNATION? 7422

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: inagaddadavida@webtv.net
Message-ID: <4730-372BEA1A-78@newsd-112.bryant.webtv.net>
Source record: 70641

well, eamon..... i dont think my message was posted to the wrong group. especialy since it was a response to a post i read here, on this very group. what you probably meant to say was to "please keep off topic posts to a minimum" or maybe " please dont encourage off topic traffic by responding to it". or maybe even "dont read posts from my own personal news group, and keep your worthless opinion to yourself". however, i read a post and found it interesting. i gave an opinion. sorry. oh, by the way, i read this group because i do homebrew electronics. did you have some gadget you would like to introduce into this thread to get it back on track?

4655. PSK31 for the Mac

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: wd1v@amsat.org
Message-ID: <wd1v-0205990539480001@wdonev.ne.mediaone.net>
Source record: 70642

MultiMode 2.1.0 for the Macintosh has been released. This version adds transmit support for PSK31 and Hellschreiber modes.

MultiMode is shareware. MultiMode may be downloaded from the following URL:
http://www.blackcatsystems.com/software/multimode.html

Chris Smolinski
N3JLY

-
Web URL: http://www.blackcatsystems.com
Macintosh Software, Shortwave Radio, Spy Number Stations

4656. cep220 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: bill.ramsay@clear.net.nz
Message-ID: <372c23d2.10972549@news.clear.net.nz>
Source record: 70643

dear all,

have any of you heard of a cep220 tube, sometimes also known as a cep120 or 3c21 ? apparently it was used in collins modulators as a grounded grid something (modulator ?) any way i have two of these.

if anyone out there has any curves for these things, please contact me, i will of course pay for any copying and postage charges.

look forward to hearing from you

kind regards

bill ramsay.

4657. Re: Satellite Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <372C390B.AB83D252@gate.net>
Source record: 70644

Felix,

There are many variables to consider when choosing an Oscar setup.
There are a couple good groups out there, rec.radio.amateur.space, and
the AMSAT BBB. amsat-bb@amsat.org.

I posted a FAQ on listening to FO-29 with a scanner or handheld on both
of those groups this morning.

Most of the satellites are considered weak signal, so you will need some
gain (directionality) to work those birds easily. There are a couple
exceptions:

AO-27 is a LEO (Low Earth Orbit) FM bird. It has an uplink on 2 meters,
and a downlink on 70 cm. I can work it with a handheld and a gain
ducky. Of course a small handheld beam like the Arrow makes it easier.

Another bird, which is easy to work is RS-13 (Radio Sputnik 13). This
bird is currently in mode KA. It has a 15 meter, and a 2 meter uplink,
and comes back down on 10 meters. Of course, with most of the birds,
you will need a rig capable of full duplex operation, or two rigs.
Since the transponders are linear, you MUST be able to hear your own
downlink. I work RS-13 with a 2 meter and 10 meter turnstile. They are
both fixed antennas with modest gain.

Check out the AMSAT web site. There are many good articles on
satellites and equipment. Find that site at: http://www.amsat.org.

Also, lurk on the rec.radio,amateur.space site. Once the code/no code
flame wars are over there, it will return to being a fine group.

Good luck and let me know if you need any help. Satellite operation is
a very good use of amateur technology and spectrum.

FeLiXTCPIP wrote:

> I am looking for a good antenna i can build that will be useful for satellites.
> I really enjoy using Sats, and if i could have a better antenna that would make
> things more fun. So if anyone has any schematics for an antenna like this,
> please let me know.
--
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| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 ..... AMSAT member #31884 *

```
[X]~~~|k| * Fort Myers, FL 33902 ....... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org ........................... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_______________________________Oooo._________________________
.oooO ( )
( ) ) /
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4658. electronics training

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: bujiaj8@aol.com
Message-ID: <19990502085601.17985.00001157@ng-fb1.aol.com>
Source record: 70645

I am a 48 year old hs teacher who is beginning to investigate after retirement options. I have always been intrigued by electronics and the repair of radio and television. I am trying to locate some type of on-line or correspondence course which would help me to train for a future avocation in electronics repair. If you can help out, please email me with info.

tnx
bill

4659. FS/Trade 4CX250B's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Doug Snowden <snowden@primeline.com>
Message-ID: <372C6D0E.836C7228@primeline.com>
Source record: 70646

I have 3 4CX250B's. Used, all full output (tested in my HB linear)
and one SK600 socket. One ceramci chimney. Offer or trade. Always
looking for good 4-400 tubes.

Doug N4IJ
snowden@primeline.com

4660. Info on 78MGT IC ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Doug Snowden <snowden@primeline.com>
Message-ID: <372C6F1A.80682604@primeline.com>
Source record: 70647

I have an old Cubic PSU-6 power supply with
a 78MGT3C IC that sends control voltage to pass
transistors. It looks something like a TO-220
transistor with 4 leads. Any info on where I can
get one? A substitute?

Doug N4IJ
snowden@primeline.com

4661. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <372CA9C5.AD7B3706@home.com>
Source record: 70648

I'm sorry, its:
http://members.aol.com/sbench101

"Leland C. Scott" wrote:

> Jenette,
>
> I tried the link in your post, but it does not seem to work.
>
> Leland C. Scott
> KC8LDO
> "We learn in time that subjects are not controversial,
> but how we communicate about them and the
> elements of personal blame we add in anger. "
>
> Jeanette D. Walton wrote in message <3729DF82.BBB89299@home.com>...
> >One more idea - look at the power supplies at
> >www.members.aol.com/sbench101 for PWM switching supplies.
> >

4662. Icom eprom/ramboard

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Nardo' Roberto <nardo@pv.infn.it>
Message-ID: <372C7176.560B@pv.infn.it>
Source record: 70649

I'm Roberto IK2RND , I have realized a replacement board for EX-314 MEMORY BOARD installed in these Icom rigs :
IC-745 IC-751 IC-751/A ICR-71A/E IC-271 IC-471 IC-1271.
My board called EPROM/RAMBOARD definitely solve the problem related to the lithium battery fails. When battery fails the rig stop to work and you need to send your radio to the Icom service center to replace battery and reprogram the board.
Data in the my board are stored in an EPROM chip the RAM is used only to store the 32 memory channels.

73, Roberto IK2RND

for more info pse mailto:nardo@pv.infn.it

you can see photo http://www.pv.infn.it/~nardo/epromram.jpg

4663. FS 813 Tubes/Sockets/Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <372B970F.4A8A@sympatico.ca>
Source record: 70650
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have 7 813s for sale, used, good filaments @$10.00 each. Also have 4 porcelain 813 sockets (used)@$5.00 each, and 3 Porcelain National white plate caps @$3.00 each. Have a pair of 866s used $2.00 each. Postage and packaging extra.

4664. Homemade antenna for aircraft band scanner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Richard Soennichsen <richas@pacbell.net>
Message-ID: <2H%W2.830$ny.201376@typhoon-sf.snfc21.pbi.net>
Source record: 70651
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am a grounded pilot with a a handheld receiver. I would like to build an antenna to improve my reception. Does anyone have a design that I could build at a reasonable cost? Thank you.

Please email: richas@pacbell.net
Richard

4665. FS: Linear Amp Stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <372C8B2C.10148D69@starc.org>
Source record: 70652
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.amateur.equipment

Have the following Linear AMP parts for sale, will not split up, all or nothing:

1: Peter Dahl plate transformer: Primary: 115/230 VAC Secondary: 1250 VAC @ 1.5 Amp CCS (this produces 3100 VDC under load in a voltage doubler supply - It's a big puppy!)

8: 1500uf @450V Computer Grade Filter Caps

2: 4CX1500b Eimac Tetrodes (good medical pulls)

1: 7.0V @ 15A(?) filament xformer (will have to be dropped down to 6.0V to use with the 4CX1500b)

1: Socket for 4CX1500b

1: Dual Squirel Cage blower fan for cooling, good pull from military equipment.

1: Copies of several plans for linears that use the 4CX1500b (including Collins linear)

Asking $400.00 + shipping for the lot.

4666. Re: Info on 78MGT IC ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Thomas C Sefranek <tcs@cmcorp.com>
Message-ID: <372C9A6C.18E4EDA6@cmcorp.com>
Source record: 70653

Doug Snowden wrote:

> I have an old Cubic PSU-6 power supply with
> a 78MGT3C IC that sends control voltage to pass
> transistors. It looks something like a TO-220
> transistor with 4 leads. Any info on where I can
> get one? A substitute?

ua78MGT3C
Fairchild Linear Regulator
Positive Adjustable
Input 7-40 VDC
Output 5-30 VDC
..5A
2.8 ma quiecent.
78 db ripple rejection
2.5 V dropout

pin1 input
pin 2 out
pin 3 control
pin 4 common

I'd use a LM317.

>
> Doug N4IJ
> snowden@primeline.com

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

4667. Re: Eimac Application Bulletin - "Power Tetrodes"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Gerhard Hoffmann <ghf@berlin.snafu.de>
Message-ID: <372CC71B.737D6CCD@berlin.snafu.de>
Source record: 70654
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Ron Ostman wrote:
>
> For Sale:
"The Care and Feeding of Power Tetrodes".
> Dated 1953. 25 pages. Information on amplifier layout, circuit design,
> adjustment, choice of operating conditions, tube life, etc.

http://www.eimac.com/cf.htm

73, Gerhard

--
on the air: DK4XP
in the air: D-8551

4668. Re: ** Help identify a Capacitor **

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Barry Sloan <ve6sbs@home.com>
Message-ID: <823X2.2672$NC4.4652@news.rdc1.ab.wave.home.com>
Source record: 70655

If there are no polarity markings, such as black band around one end, then check the lead connections. Negative connection will be to capacitor can and positive connection will be through insulating plug at open end.
In photo it appears that there is a black band at each end, however lower band may just be a shadow in photo. If there is only one black band (top end in photo) then this is the negative connection.
Another way is to simply apply power to the circuit and measure the DC voltage polarity on the capacitor.
Finally, if this is a coupling capacitor, don't overlook the possibility that this could be a non-polarized electrolytic capacitor.

Good Luck! Barry VE6SBS

4669. INFO NEEDED HEATH µMATIC KEYER OR MANUAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <372CAE0B.E3D0B81A@uswest.net>
Source record: 70656
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

Need to know what voltage goes in the back.

4670. WTB:Cheap UHF FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: okieman <okieman@innocent.com>
Message-ID: <pe5X2.227$i43.8945@news20.ispnews.com>
Source record: 70657

Ham on fixed income is looking for a cheap UHF FM rig just for local repeater use on 444.

4671. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <372D198C.5637@sir.com>
Source record: 70658
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> >What if you wanted to play the flute, but a law required that you learn
> >how to play the harp before you were allowed to play the flute?
> >
> >What if you didn't like the harp and only wanted to play the flute, and
> >other flute players called you lazy for not wanting to waste time
> >learning an instrument you had no intention of ever playing?
> >
> >Some people want to get into the hobby of radio to talk on the radio.
> >They have no desire to use morse code. How silly it would be to waste
> >the time to learn morse code, only to forget it once one has the license
> >to go ahead and use voice.
> >
> >Only people who intend to USE morse code should learn it.

4672. Help: Amp Building

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: cp <craigdp1@execpc.com>
Message-ID: <7gj6d4$pnb@newsops.execpc.com>
Source record: 70659

I am thinking of building a 2m or possibly 2m & 70cm amp.

How difficult is this task going to be and where should I start to look for help.

I have some electronics bulding/soldering experience and would just like to build a piece of my own equipment...

Thanks.

4673. Re: Radiotron Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: pa0lbn@amsat.org
Message-ID: <372ed767.48230209@news.ping.be>
Source record: 70660

You are right. But they are different editions. The 350 page is the
3th, the 1398 page is the 4th edition.
The Radio Designers Handbook and the Radiotron Designers Handbook
are the same. The first is a British edition, the second an RCA/US
edition. A reprint of the British edition of the "Radio Designer's
Handbook" by F. Langford-Smith. It is still available as a copy of the
original 1953 4th edition with 1498 pages at
'Reed Educational and Professional Publishing Ltd"
ISBN 0 7506 3635 1 (1997) for a price much lower than the today's
price for an old original (Ebay) copy.
73,
Jan

On Sat, 01 May 1999 00:39:49 GMT, quatsein@island.net (Steve Carlisle)
wrote:

>I believe the Radiotron Designers Handbook and the Radio Designers
>Handbook are two differant books. One has about 350 pages and the
>other has over 1000. I had both books that were authored by
>F Langford Smith.
>
>On Fri, 30 Apr 1999 08:43:03 -0500, Lyle Koehler <lyle@mlecmn.net>
>wrote:
>
>>The Radiotron Designer's Handbook is available in both CD-ROM and
>>hard-copy versions (the hard-copy version is called the "Radio
>>Designer's Handbook") at http://www.ultranet.com/biz/raddev/#CDROM
>>
>>As another poster suggested, you may also find it by searching an
>>on-line bookstore such as Amazon.
>>
>>--
>>Lyle, K0LR
>>
>>http://www.computerpro.com/~lyle

4674. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-02 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990502232151704320@zetnet.co.uk>
Source record: 70661

> > If "good=I made it myself" there are some transformer winding articles
> > way back in the archives of 73 that offer some ideas. There is also a
> > rumor that you can successfully "fix" a microwave oven transformer so
> > it won't saturate.

> What do you mean saturate? Can't you just use a microwave oven
> transformer off the mains? Why?
> Vy 73 de Angel HB9SLV
==========
Microwave oven transformers are meant to operate for relatively short
periods only.
The core laminations are welded together ....eddy currents
.........core gets hot if used for longer time
First test transformer without load for say 30 minutes.

One end of the HV winding is always connected to mass (earth)

It might be worth trying to use 2 identical transformers as 1
transformer with an earthed centre tap and
2(strings) rectifying diodes (double phase rectification) Each of the
2 transformers rectifies half a cycle. But again first test the
transformers without load whether they don't get hot.

Even if the no-load test is satisfactory, do not use a single micro
oven transformer with a bridge rectifier.

73 Frank GM0CSZ / KN6WH

4675. Re: Eimac Application Bulletin - "Power Tetrodes"

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <372DFA33.1307@ixpres.com>
Source record: 70580
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Ron Ostman wrote:
>
> For Sale:
>
> Copies of Eimac Application Bulletin number eight - "The Care and Feeding of
> Power Tetrodes".
> Dated 1953. 25 pages. Information on amplifier layout, circuit design,
> adjustment, choice of operating conditions, tube life, etc.
>
> $15.00 Priority Mailed to U.S. addresses.
>
> Ron, W0NYQ

Ron OM,

Last I heard, these are available free for the asking direct from
Eimac's web site. That is where I got mine.

73,
Don, W6JL

4676. Re: A new ham that needs advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <372DF9CE.5A0B@ixpres.com>
Source record: 70581

> The satisfaction is definitely not elusive.
>
> A cost advantage is usually realized.
>
> You do learn with each new project.
>
> And... When the rig fails you can repair it yourself, usually very
> quickly.
>
> I once checked into a CW traffic net with traffic to send. The tx smoked
> immediately after check-in. I hauled it to the shop, took it apart,
> replaced the defective bias resistor, and was back on the air in time to
> clear my traffic. Try that with your average Yeasu!
>
> Bill KU8H

Hi Bill OM,

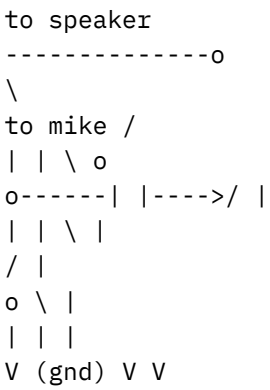
I heartily agree. To wit:
I have been on the air, in contact (linked) with another station on
40M AMTOR, when the cat walked into the (ugly style construction)
transmitter circuit of my homebrew 40W FSK/CW rig, and shorted out the
VCXO, which shorted the B-E junction on the 2N3904 osc transistor.
Real-time, without dropping the link mind you, a hot soldering iron
applied (while the circuit was energized), resulted in an easy component
change and fix. The op on the other end never knew about it, until I
told him. FUN stuff.
I have found that purchasing new ham gear does nothing for me at all,
except waste my money. Been there, done that.
I think I have maybe $25 in the complete transmitter, and $12 of that
is for a crystal I purchased new. I consider $10 to be a major expense
item for rigs.

73,
Don, W6JL

4677. How to connect speaker out to an electret mike input

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: David Dicarlo <r14793@email.sps.mot.com>
Message-ID: <372DFB6F.6B15F731@email.sps.mot.com>
Source record: 70582

What would I need to do to connect the audio from a speaker output to an input that uses an electret microphone? Is this what I would need to do: (ascii art schematic)



I assume I need a DC blocking cap on the micropnone side, and some means of adjusting the audio going into the mike input. What value of pot and cap?

Thanks,
david
wb2liv

4678. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7gl0hr$6d6$1@autumn.news.rcn.net>
Source record: 70583

Geeezus. Roy's post was ultrapolite and to the point.
I think "The Beer Guy" aka the "Squirrel" has sampling
some bad brew..

Pete

The Beer Guy wrote in message
<2e3ac8446f691c196cb23f67d301b13e@anonymous.poster>...
>I've got to hand it to you. I've seen some arrogant posts
>in my time, but you've got balls of brass, coming into a
>beer newsgroup and posting that little rant.
>
but you
>should have seen that coming, as you should have seen
>it coming when you (generic you, not you personally)
>gave your group that stupid-ass name.
>
>On Sat, 01 May 1999 18:43:13 -0700 Roy Lewallen <w7el@teleport.com> wrote:
>
>>There has been an increasing number of beer-related postings appearing
>>on rec.radio.amateur.homebrew lately. Apparently people are posting
>>and responding to messages without looking to see what groups they're
>>going to.
>>
>>"Homebrew" is a term used by radio amateurs to describe home-built
>>radios and radio equipment, and that's the subject of the
>>rec.radio.amateur.homebrew newsgroup. Although some of us also brew
>>beer, we'd prefer to look on the appropriate newsgroups for
>>beer-related topics, and the radio-related newsgroups for radio
>>topics.
>>
>>Please look at the groups your message will be going to before you
>>post.
>>
>>Thanks,
>>
>>Roy Lewallen (amateur radio W7EL)
>
>
>

4679. FS: 1000's of Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: "m.pasternack" <m.pasternack@cwix.com>
Message-ID: <01be95bb$a8ff9e20$879c3ea6@pavilion>
Source record: 70584
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

e-mail to "m.pasternack@cwix.com" to receive 10 page list. Murray, W6KRC

4680. Re: Help: Amp Building

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7glaho$fpr@nnrp2.farm.idt.net>
Source record: 70585

You can get a good start buy getting a copy of the ARRL Handbook, a copy of the ARRL UHF/Microwave Experimenters Manual and a copy of the ARRL UHF/Microwave Projects Manuals (Volumes 1 and 2). All three of these books have good design and construction info in them.

I would also suggest that you check out the following URL's too for ideas.

For tube amps ...

Good design article for screen and control grid power supplies.
I would read through his material BEFORE building anything.
http://www.ifwtech.demon.co.uk/g3sek/

Same sample 50Mhz amplifiers.
http://user.itl.net/~equinox/kw.html
http://user.itl.net/~equinox/amps.html

Good for tube data sheets.
http://www.svetlana.com/docs/tubeframe.html

Super design article for a 2M amp!!
http://www.svetlana.com/docs/TechBulletins/technoteNo42.html

Good general design points.
http://www.svetlana.com/docs/TechBulletins/appnoteNO.4.html
http://www.eimac.com/cf.htm (This will be a good reference when done!!)
http://www.winternet.com/~biro/articles/VTspice.html
http://duncanamps.simplenet.com/software.html (PS cal's work for V/UHF too.)
http://duncanamps.simplenet.com/technical/technical.html (May find something useful.)

Source for Plate Power Supply transformers.
The price maybe high, but at least you can get one if you
can't get it anywhere else.
http://www.pwdahl.com/

Source for tubes and other amplifier parts.
http://www.rfparts.com/index1.html
http://www.rell.com/edg/bcstline.html
http://www.burle.com/

Now If you want solid state ...

http://www.ibelings.com/n4ip/mrf157.html (Sample 1KW wideband amp to 6M)

Good source for transistors.
The test circuits serve very well as the base for a complete amplifier.
These

test circuits also include a parts list and PCB artwork too!!
http://mot-sps.com/sps/General/chips-nav.html

You can call Motorola and use their fax back service to order the following
application notes which you will find useful.

AN-791 "A Simplified Approach to VHF Power Amplifier Design"
AN955 "A Cost Effective VHF Amplifier for Land Mobile Radios"
AN1037 "Solid State Power Amplifier 300W FM 88-108 MHz"

Good Luck

73's
Leland C. Scott
KC8LDO

cp wrote in message <7gj6d4$pnb@newsops.execpc.com>...
>I am thinking of building a 2m or possibly 2m & 70cm amp.
>
>How difficult is this task going to be and where should I start to look
>for help.
>
>I have some electronics bulding/soldering experience and would just like
>to build a piece of my own equipment...
>
>Thanks.
>

4681. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Joseph Merfalen <jmerfale@engr.csulb.edu>
Message-ID: <372E4295.1AF3AFFB@engr.csulb.edu>
Source record: 70586

hehehehe lol ok :)

Gary Ferdinand wrote:

> I think beer is entirely on topic for this newsgroup. How else can one
> generate enough beer cans for the beercan vertical?
>
> :)
>
> Joseph Merfalen wrote in message <3729E834.3931E9EE@engr.csulb.edu>...
> >> Yeah heheh I went to the web site and i saw it was about beer.That is
> something I
> >> have no interest in at all. It was kind of funny because i am very
> interested in
> >> building my own rig so I went there expecting to see a bunch of projects
> but I saw
> >> it was beer heheheh it was kind of funny. Well to everyone interested in
> home
> >> brewed Beer than that link is what that is about. It is not about HAm
> radio gear.
> >> heheh have good day all...73'
> >>
> >> There was something about that post that made me think it was one of the
> >> occasional beer-making posts we get here from time to time. I'm not
> quite
> >> sure what it was that made me think that. Maybe it was the "why post and
> >> wait for an answer" since unlike a lot of newsgroups the questions ask
> >> aren't often common.
> >>
> >> Michael VE2BVW
> > >
> > >
> > >

4682. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7glilm$q41$1@autumn.news.rcn.net>
Source record: 70587

Ever since they have gone over to aluminum cans,
beercan verticals have gone the way of CW.

Pete

>
>> I think beer is entirely on topic for this newsgroup. How else can one
>> generate enough beer cans for the beercan vertical?
>>
>> :)
>

4683. wire antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Joseph Merfalen <jmerfale@engr.csulb.edu>
Message-ID: <372E551F.7CD3B607@engr.csulb.edu>
Source record: 70588

I am totally new to HAM radio and I am very curious to what exactly a wire antenna is. Is it exactly what it says? A Wire? Can one use a wire antenna on his/her HT? What are the procedures to makinga wire antenna for a 2 meter hand held, if that is possible. Any input is grately appreciated
Thank you
73 Joseph

you can e-mail me, if youd like, at

jmerfale@engr.csulb.edu

4684. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <VTBW$VAVJiL3Ew$3@ifwtech.demon.co.uk>
Source record: 70589

Gary Coffman wrote:

[Good advice about power rating and removing the magnetic shunts]
>
>>One end of the HV winding is always connected to mass (earth)
>
>Yes. That's a good safety feature, but it can be a nuisance if
>you want to use a current metering shunt in the low side of
>the HV supply. There are a couple of easy ways to deal with
>this. One is to mount the transformer on an insulating material.
>The other way is to do minor surgery on the transformer to
>disconnect the lead from the transformer frame and bring it out
>in the ordinary way. Either method is satisfactory, but if you
>do decide to insulate the transformer, you have to enclose
>it in the HV cage to prevent accidental contact with it by
>the operator.
>
Connecting the inside of the secondary winding to the core/ground is mostly a feature of the circuit in which it was designed to be used, in which the magnetron itself acts as one diode in a voltage doubler. Unfortunately that is not applicable to power supplies for normal vacuum tubes.

The problem in using the transformer in the more common amateur rectifier circuits is that the inside end of the secondary is not significantly insulated, so you can't expect to be able to lift that connection off the core and use it in a full-wave bridge - the voltages involved are too high. (OK, you may be lucky, but don't plan on that.)

Using two identical transformers in a bi-phase (center-tapped) configuration is workable, but don't expect as much output current as you'd get from the same total weight of copper and iron in a single transformer. This is because each individual transformer is acting as a half-wave rectifier, with the rectified DC flowing through the secondary winding. This magnetises the core and increases the risk of saturation. It's not like a normal center-tapped winding on a single core, where the magnetization reverses on each half-cycle so there is no DC component.

For current metering in the negative lead, you should be using a large protection diode for the meter, and that will make sure that the voltage from the B-minus lead to chassis is always less than 1V. In those circumstances, it's perfectly OK to lift the inside end of the secondary winding, and leave the core grounded to the chassis.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

http://www.ifwtech.demon.co.uk/g3sek

4685. Re: sync detect

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: "Y." <soj@sympatico.ca>
Message-ID: <372CF086.7272@sympatico.ca>
Source record: 70662

Chuck Meyer wrote:
>
> PGH wrote in message <37153D6A.B74A3590@mail.capital.net>...
> >I would like to construct a sync detector to use to replace a diode in
> >a simple SW circuit. Is there any thing out there that uses a bal
> >mixer/PLL or whatever. The simpler the better.
> >
> > Thanks PGH
> >
> Communications Quarterly had an article on a sync detector 1-11/2 yrs. ago.
> Good Signals!
> -- Chuck

Regards!

I have used with success down to 10 Mhz a TV detector MC1330 which is
now obselete but some wholesalers still cary the part. This device has a
limiter and a multiplier. The limiter requires a resonant circuit at the
frequency of your IF. You can also make a good envelope detector with
any FM detectors like the CA3089 or similar IC's. The IF signal
must be applied to both the limiter input and the multiplier input
(also called product detector) The phasing between the limiter input and
the multiplier input must be in quadrature. Also, the signal to the
limiter must be stronger than the signal to the multiplier input. See RF
Design Magazine
July 1994 page 44. Good Luck! Ve2AUC

4686. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <372CFE18.37B0@powerup.com.au>
Source record: 70663

Angel Vilaseca wrote:
>
.
> > If "good=I made it myself" there are some transformer winding articles
> > way back in the archives of 73 that offer some ideas. There is also a
> > rumor that you can successfully "fix" a microwave oven transformer so
> > it won't saturate.
>
> What do you mean saturate? Can't you just use a microwave oven
> transformer off the mains? Why?

There are usually two magnetic shunts between the top and bottom
windings. They consist of bundles of laminations abt. +- 1cm sq.
and should be carefully knocked out with a pin punch or similar.
They are intended (I understand) to limit saturation. By this
they also limit the output.

Hope that's clear! :-) Look at one and you will see it
immediately. I missed it first time round until it was described
to me.
--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

4687. Amidon / Toroid / Ferrite information

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: tracy@bytemark.com
Message-ID: <372d0419.19065553@news.earthlink.net>
Source record: 70664

... can be found at

http://www.bytemark.com/amidon/content0.htm

Saw a few posts in DejaNews that were asking questions ...
Tracy Markham

4688. IF or AUDIO DSP for HF SSB XCVR - Pros & Cons RE High Noise Levels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: larry33414@aol.com
Message-ID: <19990502234843.16534.00001436@ng-ci1.aol.com>
Source record: 70665

Need to purchase two new HF Xcvrs for an EOC located in a waterplant (utility) with high RF noise levels.

Which DSP system is superior for noise suppression... IF or Audio?

Am looking at the ICOM 746 and Kenwood 570 models... any experience or advice?

Larry
KS4NB

4689. IC765 VCO coils?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: ppirotte@ulb.ac.be
Message-ID: <ppirotte-0305990829520001@rmnmac5.ulb.ac.be>
Source record: 70666

Does anybody know the characteristics of LB-135 and LB-206 VCO coils (IC765)?
What are their nominal values (is it respectively 0.135 nH and 0.206 nH)?
I'm also interrested by any technical information (characteristics) about
1SV50E and FC52M (varicap diodes).

As this kind of VCO work pretty well, I'd like to use a very similar
design in my homemade transceiver.

Thank you in advance

Pascal

4690. Assorted SMITH CHARTS on Ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Charles <celbel@ctesc.net>
Message-ID: <372D5176.658F@ctesc.net>
Source record: 70667

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=99090582

4691. Assorted SMITH CHART PAPER on Ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Charles <celbel@ctesc.net>
Message-ID: <372D526E.43DB@ctesc.net>
Source record: 70668

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=99090582

4692. Re: temp. comp. of an Xtal oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Arjen Raateland <Arjen.Raateland@vyh.fi>
Message-ID: <372D6092.30A@vyh.fi>
Source record: 70669

douglas dwyer wrote:
>
> In article <3729F767.1E9AFDCC@lsid.hp.com>, Tom Bruhns
> <tomb@lsid.hp.com> writes
> >Good advice (as usual) from Rick. Specifically, I know that you can get
> >AT-cut crystals rated at max +/-2ppm over a fairly wide temperature
> >range. Something like 0C to 55C sticks in my mind, but I may be wrong
> >about that. Check out International Crystal, esp.
> >http://icmfg.com/tech.html. Tight control of the angle of cutting the
> >crystal is required to guarantee low tempco, so expect to pay for it.
>
> AT cut crystals have cubic tempco symetrical about approx 27deg C so the
> best room temp performance would be to specify say +3ppm +-10C both
> sides of 27C.
> Really your best bet is to temperature control the crystal at just above
> the maximum ambient. If you plot the crystal freq from room to +60 and
> are lucky it may even be that the crystal will go through a turnover ie
> a point of zero temperature coefficient. That will be the best temp
> however it may be that the freq will be too far off to bring to nominal
> by trimmer. As already said the temperature coefficient of the logic osc
> circuit will be then worse than the crystal.
> PS Ive got some 16.384MHZ ovened crystal reference standard oscillators
> for sale uk pounds 50 , I bought them on the surplus market , they are

Thanks for all information supplied by several OM. I wasn't intent on spending more money, but just hoped to somewhat compensate the drift that occurs around room temperature using a simple home-brew scheme. I know I can order new TCXO's for a lot of money. The counter works to 3 GHz, but I won't go that high and my accuracy requirements are modest. My only calibration reference is short-wave reception of standard frequency stations anyway.

The counter module is a kit and has been designed with the oscillator in the PIC. I believe I could use an external oscillator, but in fact the seller/designer originally said that it would require reprogramming.

The time-base oscillator in my counter is 16.000 MHz. I do have a salvaged 4 MHz Xtal in it's own oven (octal base), but it's not operational and it cannot simply replace the 16 MHz oscillator, of course. A cheap 16 MHz TXCO would be nice ;-)

73,
--
Arjen Raateland
OH2ZAZ

4693. Re: Wanted - 4CX250K Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: brigode@ibm.net
Message-ID: <7gjr8viou1@nnrp1.dejanews.com>
Source record: 70670

In article <3725B8F7.DCAAEA94@rl.ac.uk>,
Mike Willis <"M.J.Willis "@rl.ac.uk> wrote:
>
>
> brigode@ibm.net wrote:
>
> > I am looking for sockets for 4CX250Ks
> > 73
> > wb8dbf
> >
>
> We have some over here.
>
> ok, now how do I contact you?
??

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4694. Re: Looking For Operating Manual for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: "Leo B." <leob@erols.com>
Message-ID: <372D9B53.3CE9@erols.com>
Source record: 70671
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

rick wrote:
>
> I am looking for a copy of an Operating Manual for Kenwood TS-830S .
> If anyone can help me you can E-MAIL Me @ address below.
>
> Thank You All,
>
> Rick Ramzy de K8RMR
>
> --
> E-MAIL @ kc8dmn@accinternet.com
> WEB PAGE @ www.accinternet.com/~kc8dmn

Try the following source.
73 - Leo - W3LEO

Vintage Manuals
http://www.sarrio.com/sarrio/rsman2.html

"...All US orders are shipped by airmail, the cost for shipping one
manual is $4.00. Each additional manual adds $1.00 to the cost of
shipping..."

Kenwood (OPR) TS-830-S Transceiver $18
Kenwood (Maint) TS-830-S Transceiver $22

4695. Re: Assorted SMITH CHART PAPER on Ebay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <372D9B16.DBA5EC56@teleport.com>
Source record: 70672

I wonder if you're aware that the Smith chart is copyrighted? The most recent copyright owner I'm aware of is Analog Instruments Co., New Providence, NJ.

Roy Lewallen, W7EL

Charles wrote:
>
> http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=99090582

4696. Kenwood/Icom power connectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: w4pqwhs@aol.com
Message-ID: <19990503092008.19588.00001656@ng-fx1.aol.com>
Source record: 70673

anyone have a good source for the six pin Molex connectors used with power cable for Kenwood and Icom ? awhile back I bought some connectors and pins,now I can`t find them advertised.. Thanks Harold W4PQW

4697. Re: Homemade antenna for aircraft band scanner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990503105427.16928.00001632@ng138.aol.com>
Source record: 70674

>
>I am a grounded pilot with a a handheld receiver. I would like to build an
>antenna to improve my reception. Does anyone have a design that I could
>build at a reasonable cost? Thank you.
>
>Please email: richas@pacbell.net
>Richard

Probably the simplest antenna would be made from a piece of RJ58 coaxial cable. Measure down about 21" from one end and make a mark. Start stripping the outer insulation back until you reach your line, being careful not to damage the inner shield braid. Carefully cut and remove the outer jacket piece. Next you need to fold the shield braid over itself, beginning at the end, until it covers the outer jacket BELOW the 21" point. This step is not easy, but it can be done. When you are finished, put some nail polish or bathtub calk on the spot where the inner wire emerges, and use plastic electrical tape over the shield braid to protect it from the weather. Tape the whole thing to a piece of wood or PVC pipe for support. The inner conductor is your antenna, and the shield braid becomes the counterpoise. Not surprisingly, it's called a "coaxial" antenna. It's similar to a ground plane but the "radials" end up folded all the way down.

Doug Moore

4698. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <375abb27.531827226@news.atl.bellsouth.net>
Source record: 70675

On Sun, 2 May 1999 23:21:51 +0100, Frank Dinger <frank.dinger@zetnet.co.uk> wrote:
>> > If "good=I made it myself" there are some transformer winding articles
>> > way back in the archives of 73 that offer some ideas. There is also a
>> > rumor that you can successfully "fix" a microwave oven transformer so
>> > it won't saturate.
>
>> What do you mean saturate? Can't you just use a microwave oven
>> transformer off the mains? Why?
>> Vy 73 de Angel HB9SLV
>====================
>Microwave oven transformers are meant to operate for relatively short
>periods only.

Up to at least 60 minutes at 1000 watts for most models. Some have
timers that allow them to operate for 99 hours and 99 minutes at full
power. That's longer than any but the most long winded ham should
be key down. The transformers in microwave ovens often benefit from
the fan cooling of the magnetron, but they are essentially CCS rated
for continous duty at the oven power level. So they make excellent
transformers for heavy duty amateur equipment up to 1 kW. (If you
want to run them at 2 kW PEP, you may have to watch the duty cycle
a bit.)

>The core laminations are welded together

No they aren't. If they were welded together, they wouldn't be
laminations any longer, and their eddy current limiting value
would be nil. (That's why transformer cores are laminated,
to break up the shorted turn they would otherwise form if
they had continuity with each other.)

>....eddy currents
>.........core gets hot if used for longer time
>First test transformer without load for say 30 minutes.

Or for 30 days for that matter. With no load, only the magnetizing
current is drawn, same as any other transformer. Every transformer
from the lowliest wall wart to the heaviest pole pig is designed to
operate at no load indefinitely. The magnetizing current should be
less than 10% of the full load current, and is usually much lower
than that. No unloaded transformer should get more than slightly
warm to the touch, no matter how long it is powered up.

The main difference between microwave oven transformers and
any other transformer is that they employ magnetic shunts to limit
the current to the magnetron in case of an arc-over. These shunts

allow part of the magnetic flux produced by the primary to bypass the secondary. Thus the primary will saturate at high current draw and limit the maximum current that the transformer will provide to a load. Most of these transformers have two shunts. They are held in only by the transformer varnish. You can tap them out with a pin punch and hammer, leaving the transformer to behave like any other conventional transformer of its size.

If you don't do this, while the transformer will be able to supply a 1 kW continuous carrier signal, it won't respond properly to the peak demands of a signal with a varying amplitude, IE full power SSB. It will current limit on peaks, which will cause the amp to flattop. Removing the shunts removes this limitation.

>One end of the HV winding is always connected to mass (earth)

Yes. That's a good safety feature, but it can be a nuisance if you want to use a current metering shunt in the low side of the HV supply. There are a couple of easy ways to deal with this. One is to mount the transformer on an insulating material. The other way is to do minor surgery on the transformer to disconnect the lead from the transformer frame and bring it out in the ordinary way. Either method is satisfactory, but if you do decide to insulate the transformer, you have to enclose it in the HV cage to prevent accidental contact with it by the operator.

These transformers are an excellent bargain. They can often be had for free from defunct microwave ovens. After you remove the magnetic shunts, they make fine power supply transformers for high power amplifiers. Microwave oven service is a much more demanding duty cycle than that of most amateur amplifiers, so these transformers serve admirably.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4699. Re: IF or AUDIO DSP for HF SSB XCVR - Pros & Cons RE High Noise Levels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <375bc4c2.534286182@news.atl.bellsouth.net>
Source record: 70676

On 3 May 1999 03:48:43 GMT, larry33414@aol.com (LARRY33414) wrote:
>Need to purchase two new HF Xcvrs for an EOC located in a waterplant (utility)
>with high RF noise levels.
>
>Which DSP system is superior for noise suppression... IF or Audio?

IF filtering is preferred because it is inside the AGC loop. But DSP isn't
the correct solution to impulse type noise problems. Late stage DSP is
usually ineffective against that sort of noise. For that, you need a blanker
that's before any narrow filtering in the receiver. Any narrow filters will widen
the noise impulse and cause much greater signal degradation when the noise
impulse is removed. So what you really want here is a receiver with a good
noise blanker located right after the first mixer and before any narrow filtering.
That's a separate issue from any filtering it may employ at the IF or at audio.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4700. FS: ECC-series Audio Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <372dd658.10524453@news.earthlink.net>
Source record: 70677
Cross-posted to: rec.audio.tubes,rec.radio.swap,rec.radio.amateur.homebrew

Great LOT OF 44 AUDIO TUBES

12AT7/ECC81
BULK - NIB - $4.00

12AU7/ECC82
AMPEREX/Holland - UIB - $4.00
BELL & HOWELL, JAPAN - UIB - $2.00
DUMONT - UIB - $2.00
GROOVE TUBE - NIB - $5.00
PHILCO - UIB - $1.00
STANDARD - UIB - $2.00
SYLVANIA - UIB - $2.00
TUNG-SOL - UIB $1.00
UNMARKED - UIB - $2.00

12AU7A/ECC82
BULK - UIB - $1.00
DUMONT - UIB - $1.00
DUMONT - UIB - (QTY 3) $2.00 Each
GENERAL ELECTRIC - NIB - $5.00
GENERAL ELECTRIC - UIB - $2.00
RCA - UIB - (QTY 2) - $2.00 Each
SYLVANIA - UIB - $2.00
WESTINGHOUSE - NIB - $6.00

12AX7/ECC83
BULK - NIB - $4.00
GENERAL ELECTRIC - UIB - (QTY 2) $2.00 Each
GROVE TUBE - NIB - $5.00
MATSUSHITA - UIB - $4.00
RCA - UIB - $2.00
SYLVANIA - NIB - $6.00
TUNG-SOL - UIB - $2.00

12AX7A/ECC83
BULK - NIB - (QTY2) $4.00 Each
CHANDLER - NIB - $5.00
MESA - UIB - $5.00
PM - UIB - $3.00
RCA - UIB - (QTY 5) $3.00 Each

7025
FENDER - UIB - $6.00
RCA - UIB - (QTY 2) - $6.00 Each

95-126-01 E. GERMANY NIB - $2.00

NIB = New In Box
UIB = Used In Box
Not all boxes match tubes

TOTAL of 43 Tubes
Total Price $135.00

or take ALL of the above tubes for $110.00 Shipped CONUS

E-mail for arrangements.

4701. Parts for sale!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <372ddaba.11646572@news.earthlink.net>
Source record: 70678
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.boatanchors

For Sale:
(Add shipping costs to all prices unless stated)

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Meters:

Weston Model 506 New in box. Round, black
For Tropical Climate / Navy use.
With scales:
0-200 mA P.A. Plate
P.A. Grid and Battery
Will sell for $5.00

Weston New in Box. Round, black
For Tropical Climate / Navy use.
0-1.5 mA DC
Will sell for $5.00

RCA / US Navy Classic 0-2.5 KV DC
Square front meter with rare 0.005 mF Faradon
bypass cap. 0-1 mA movement, with shunt information
for 2.5 kV operation. WIll sell for $4.00

Or take all three above meters for $12.00

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Heavy Duty Footswitch, with AC power cord and H.D.
connectors. Rated 20 Amps. Clipper 632D. Will sell for $15.00

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LOT # 8 of TUBES:
(Some new - others used, tested)

6V6GTA - National, New in box QTY 2 $8.00 each
6V6GTA - Mesa, New, no box $6.00
6V6GTA - No name, looks like new! $5.00
6V6GT - RCA, QTY 5 $4.00 each
6V6GT - Philco, used $3.00

Or take all of the above tubes for $40.00

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LOT # 7 of TUBES:
(Used, tested)

6X4 RCA $1.00

12BY7 G.E. $4.00
12BY7 RCA QTY 2 $5.00 each
12BY7 Sylvania $4.00
12BY7A UNK $4.00
12BY7 UNK QTY 2 $3.00

25Z6 Silvertone $2.00
35EH5 IEC Japan QTY 3 $2.00 each

35W4 UNK $1.00

50C5 QTY 4 $3.00 each

6197 Sylvania $CALL
6197 UNK $CALL

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Headphones with boom microphone.
Jensen Model JMP-41
Headset Response is 20 Hz - 20 kHz
6' Cord with mini stereo plug.
Microphone is Low-Z Condenser type with 2.2 k-ohm impedance.
Response 30 Hz - 16 kHz

Durable and comfortable design with padded ear-pieces, ideal for
communications applications.

Brand new in box. White color.
Great for mobile HF or VHF operating. Think SAFETY!
Also great for extended rag-chews, contesting etc.
No PTT, but has standard connectors - 1/8" mini-style.
Will also work well with computers. Normally $29.95
New in box $20.00 plus shipping

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Excellent low impedance dynamic BALL microphone - 600 ohms.
Recoton DMK-200 pro series dynamic microphone, unidirectionalwith
ball/screen type
end. Black metal finish. 80 Hz - 10 kHz response - has 10 foot cord.
Ideal for Communications or Vocalists / Public Address etc.

New In Box.

Will sell for $16.00 plus shipping
5 at $10.00 each
10 at $8 each
plus shipping

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Recoton Power Wave 110 AM/FM Amplified antenna
for use with stereo. Very fashionable looking

and low-profile. Brand new in box - will sell for $18.00
plus shipping

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Recoton Power Wave TV400R VHF/UHF/AM/FM Amplified antenna
for use with TV and/or stereo system. Very fashionable looking
and low-profile. Brand new in box - will sell for $19.00
plus shipping

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Recoton Power Wave TV500R VHF/UHF/AM/FM Amplified antenna
for use with TV and/or stereo system. Very fashionable looking
and low-profile. Brand new in box - will sell for $24.00
plus shipping

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Recoton V900SXR Video Sender/Receiver system. Runs on 900 MHz
band and sends/receives perfect TV signals anywhere in your house
and maybe beyond. Wends video signal plus stereo sound.
Looks like a small flying saucer on a stand about 4" diameter.
Excellent quality and top of the line! Brand new in box - will
sell for $59.00 plus shipping

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Capacitors - Lot #6

Transmitting caps:
0.027 uF at 600WV DC, 1200V pk, Sangamo type A2 with screw terminals
(qty 2) at $1.00 each

0.015 uF at 2500 WV DC, 5000V pk Sangamo type A2 with screw terminals
(qty 2) at $2.00 each

1000 pF at 5KV Doorknob capacitor (used) $2.00

820 pF postage stamp micas (used) QTY 4. WIll sell for 25c each.

Or take all of the above capacitors for only $8.00

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TUBES LOT #5 (New and used-tested mix)

807 G.E. NOS, no box $8.00
807 Sylvania Used, no box (QTY 3) $ 5.00 each
807 RCA (newer logo) Used, no box (QTY 2) $4.00 each
807 RCA (older logo) Used, no box $3.00
807 Unmarked (Same style as older RCA), used, no box $3.00
5933/807W Ruggedized 807 New in box (QTY 4) $10.00 each

Or take all of the above tubes for $65 plus shipping

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TUBES LOT #4
4-125 Eimac Used No box $25.00
828 Power Pentode RCA Used (I have 1; and may have 2) No box $12.00
ea.
12SN7GT Sylvania New in Box $2.00
6BG6B RCA Used, no box $1.00
25L6 G.E. Used in box $3.00
5Y3GT G.E. Used in box $4.00
6W4 Tung-sol used in box $2.00
6W4 Arcturus Used in box $2.00
6W4GT Mullard Used in box $3.00
6SN7GT CBS/Hytron New in box $5.00
6JZ6 Sylvania Used in box $8.00
6SN7GT Tung sol Used in box $2.00
6SN7GT Crosley Used in box $2.00
6SN7GT RCA Used in box QTY 6 $3.00 ea.
6SL7GT RCA Used in box $3.00
6AC7 RCA used in box $2.00
6AC7 G.E. used in box (QTY 2) $2.00 ea.
6H6 Ken-Rad used in box $1.00
6DE4 Philco Used in box $1.00
6H6 RCA used no box (QTY 2) $1.00 ea.
6X5 RCA used in box $0.50
37 RCA used in box $4.00
6AX4 Sylvania New in box $2.00
OC3 / VR-105 RCA NOS in Box QTY 7 $3.00 each
OA3 / VR-75 RCA NOS in box QTY 5 $3.00 each
OA3 / VR-75 G.E. NOS in box QTY 3 $3.00 each
OA3 / VR-75 Marshall Electronics in box $4.00
3AW2 Philco Used in G.E. box $0.50
Take all of the above tubes for only $90.00 plus shipping

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Bud Box, diecast, 4.5" X 3.5" X 2", new, no cover plate $4.00

Crystals (All FT-243):

6m & 2m AM and CW multipliers ($2.00 each except as noted)
5958.3
6000
6125
6210
6425 (QTY2)
6440 (QTY 2)
6529
6550
6650
6825
6900
6925 (QTY 2)

7800
8000
8002.6
8003.3
8240

Minimum order of $10 crystals
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CR-1/A case is 0.1" diameter pins 0.5" apart. Case is 1.1" wide and
1.25" tall
FT-241/A case is the same but with smaller diameter pins.

Antique and unusual Crystals:
1746 Kc. Bliley (signal corps) FT-171B $4.00
1.921 MC Philco FT-241/A $5.00
5684 kHz HI-POWER B-5 (Type LTCR) round $3.00
7010.47 CR-1/A $4.00
7011.9 kHz CR-1/A $4.00
7119.5 kHz M-9A (3-pin) holder McCoy $5.00
7270 kHz CR-1/A $4.00
8007.69 kHz CR-1/A (QTY 5) $2.00 each
8500 kHz CR-1/A $2.00
24.0 MC Channel 40 FT-241/A $1.00
24.3 MC Channel 43 FT-241/A $1.00
24.4 MC Channel 44 FT-241/A $1.00
27.3 MC Channel 73 FT-241/A $1.00
27.9 MC Channel 79 FT-241/A (QTY 2) $1.00 each
Unmarked FT-241/A (QTY 6) $0.50 each

Minimum order $10.00 of crystals
= = = = = = = = = = = = = = = =

Newer style metal can precision crystals - CR-18/U,
HC-17/U and HC-49/U etc.

1000 kc. CR-18/U = HC-6/U $5.00
1947.8 kHz. CR-18/U $5.00
1952.22 kHz. CR-18/U $5.00
3520.83 CR-18/U $4.00
3525 CR-18/U $4.00
3528.12 CR-18/U $4.00
3529.17 CR-18/U $4.00
3530.21 CR-18/U $4.00
3531.25 CR-18/u $4.00
3571 TCXO short leads $1.00
3579.545 CR-18/U (QTY 2) $1.00 each
3526 CR-18/U $4.00
3640 HC-17/U wire leads $4.00
3865.83 CR-18/U $3.00
3867.50 CR-18/U $3.00
8350 CR-18/U $2.00
8450 CR-18/U $2.00

29100 CR-18/U $5.00

4.194 MHz HC-49/U(?) mini w/ wire leads $2.00
7.15909 MHz HC-49/U(?) mini w/ wire leads (QTY 7) $1.00 each

Minimum order $10.00 of crystals
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Electrolytic Caps: (LOT #1)
(N. = New, U. = Used)

5800 uF / 40V Sprague Powerlytic Blue plastic cover
computergrade cap w/ radial screw terminals 3.125" X 1.5" U. $1.00

5500 uF / 40V Sprague Powerlytic Blue plastic cover
computergrade cap w/ radial screw terminals 4" X 1.5" N. (QTY 2)
$2.00 each

5500 uF / 25V Sprague Powerlytic Blue plastic cover
computergrade cap w/ radial screw terminals 3.125" X 1.5" N. $2.00

5500 uF / 40V Blue plastic cover Mallory computergrade cap
w/ radial screw terminals 4" X 1.5" U. $1.00

4700 uF / 35V Elna axial 2" X 7/8" N. $2.00

3000 uF / 30V Sprague axial 3.25" X 1" N. (QTY 3) $1.00 each

2500 uF / 15V G.E. radial 2" X 1.25" N. $1.00

2200 uF / 35V Nippon axial 1.5" X 3/4" U. (QTY 3) $0.50 each

2200 uF / 16V Ace axial 1.5" X 3/4" N. $0.75

1900 uF / 40V Sangamo axial 2.75" X 1" N. (QTY 4) $1.00 each

1700 uF / 30V Sangamo axial 2.75" X 1" N. (QTY 7) $1.00 each

1300 uF / 50V Sprague axial 3.125" X 7/8" N. $1.00

1390uF / 30V MEC radial 2.5" X 7/8" N. (QTY 2) $1.00 each

1275 uF / 20V MEC radial 1.5" X 1" N. (QTY 2) $1.00

1010 uF / 20V MEC radial 1.5" X 1" N. $1.00

1000 uF / 50V Rubicon axial 2" X 7/8" N. $0.50

1000 uF / 15V Sprague axial 2.25" X 7/8" N. QTY 2 $1.00 each

885 uF / 20V MEC radial 1.5" X 1" N. (QTY 2) $1.00

500 uF / 40V National Cap axial 1.5" X 5/8" U. (QTY 2) $0.50 each

40 uF / 450V Planet radial 2-7/8" X 1" U. $1.00

22 uF / 450V Xicon axial 1.25" X 5/8" QTY 2 N. $2.00 each

22 uF / 350V Nichicon axial 1.25" X 1/2" QTY 2 N. $2.00 each

20 uF / 450V Aerovox axial 2.25" X 1" U. $1.00

12 uF / 450V Beaver 1.75" X 0.75" QTY 2 U. $1.00 each

PAPER Capacitors: (Lot #1)
0.1 uF / 400V Sangamo Type 33, QTY 4, U. $0.50 each

Or take all capacitors in Lot #1 for $50.00

Electrolytic Capacitors (Lot #2)

8 + 8 uF / 475 V and 10 uF / 50V Philco Can 6" X 1-3/8" with bracket
U. $2.00

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ARRL Handbooks:
1973, 1975, 1978 at $10.00 each
All in excellent shape

National TMK-50 Variable capacitor New In Box $15.00
(Best 50 pF transmitting or receiving variable you will find!)

Plate variable transmitting capacitors:
50 pF 800V Hammarlund 1.5" deep, 1/4" shaft, clean used $5.00

140 pF 1000V MC-140M 1.5" deep 1/4" shaft New, unused $8.00

50 pF 500V Variable capacitor assembly, with link-coupled
tank circuit. 12 turns on a ceramic 1/2" form. 6" Coax link to Type N
connector. Capacitor has 3/8" bushing or screw mounted on base.
Includes antique knob and small bakelite panel. $2.00

35pF panel mounted variable with 1/4" shaft. Type HF50 with
two plates removed. Mounted with 3/8" bushing and nut on nice little
right-angle aluminum panel 1.3" wide and 2.0" tall. New $3.00

Automatic Brand type C6T air variable capacitor. Mounts with two
screws.
30 pF at 200V. WIth screw slot adjust. Has silver-plated 3.5 turn coil
for
2m attached and porcelain standoff. $1.50

80 pF air variable trimmer capacitor, two screw panel mounting.
Screw-slot adjustment. Used $1.50

0-250 pF Hammarlund transmitter plate variable, 1200V
New in Box - $18.00

4702. Re: A new ham that needs advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-03 00:00:00 UTC
From: Joseph Merfalen <jmerfale@engr.csulb.edu>
Message-ID: <372DEC65.170650B@engr.csulb.edu>
Source record: 70679

Yeah Bill I realize now that a savings in money is not reality. But like I mentioned ans as you also have mentioned the satisfaction of building your own is wonderful. I ordered the 2meter kit from Ten Tec. When I first started tolook into this whole kit business I noticed that saving money does not really happen. I am very excited to be building the kit. I appreciate your help and input Bill...73' joseph merfalen

4703. Re: IF or AUDIO DSP for HF SSB XCVR - Pros & Cons RE High Noise Levels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: larry33414@aol.com
Message-ID: <19990503202614.19593.00001778@ng-fx1.aol.com>
Source record: 70590

Hi Gary...

">So what you really want here is a receiver with a good noise blanker located right after the first mixer and before any narrow filtering. "

Unfortunately, there is so much machinery at the waterworks that I have no way of telling how much is impulse (ignition,etc) versus other noise (motor brushes, loose connections, etc.) I do know that our old TS430 noise blanker is totally INEFFECTIVE!

I'm in the processof trying to attack the problem by increasing antenna heights and relocating antennas.

There's so much machinery around that a widespread noise suppression program at the sources would be pretty costly, so I'm trying to pinpoint only the major noise generators for corrective action.

What HF xcvrs do you recommend for their superior noise blanker performance or combination NB + DSP results?

Larry, KS4NB

4704. HP 400 EL AC Voltmeter FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Ken Simpson <W8EK@usa.net>
Message-ID: <2prX2.922$9d4.58104@monger.newsread.com>
Source record: 70591

For Sale:

Hewlett Packard 400 EL, AC voltmeter. Mirrored scale.
Goes down to 0.001 volt full scale, and up to 300 V full scale.
BNC input connector.
Electrically appears to be in great shape. Cosmetically, it has
some paint and label markings on it from being owned by
an industrial company. $ 50 plus shipping from Florida.

Ken Simpson, W8EK
E-Mail to W8EK@fdt.net
http://www.gnv.fdt.net/~kenmar
Voice Phone (352) 732-8400

4705. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: n6kb@fix.net
Message-ID: <PxrX2.35$Z12.3307@news.callamer.com>
Source record: 70592

I did not read like a "rant" to me. Roy was quite courteous in
explaining how amateur radio operators use the term homebrew. Relax,
don't worry, have a homebrew!

squirrel@echelon.alias.net (The Beer Guy) wrote:

>I've got to hand it to you. I've seen some arrogant posts
>in my time, but you've got balls of brass, coming into a
>beer newsgroup and posting that little rant.

>Apparently, people ARE "looking to see". That's why
>a group with the word "homebrew" in its name is receiving
>posts about BEER. People look and see "homebrew", and
>they naturally think of BREWING (which means MAKING BEER)
>in the home (which means ... well, hopefully you get it).

>It's as though somebody named a newsgroup about bicycles
>"alt.bicycles.whaling" and then complained when
>"save the whales" posts started coming in. I have several
>solutions to your problem, all of which will work:

>1. Page down
>2. Learn to filter
>3. Rename your newsgroup

>Because it's hard to imagine that so many posts about
>beer are coming in that they're ruining your party.
>Of course, you've guaranteed with your little rant that
>you're going to get undesirable posts now, but you
>should have seen that coming, as you should have seen
>it coming when you (generic you, not you personally)
>gave your group that stupid-ass name.

>On Sat, 01 May 1999 18:43:13 -0700 Roy Lewallen <w7el@teleport.com> wrote:

>>There has been an increasing number of beer-related postings appearing
>>on rec.radio.amateur.homebrew lately. Apparently people are posting
>>and responding to messages without looking to see what groups they're
>>going to.
>>
>>"Homebrew" is a term used by radio amateurs to describe home-built
>>radios and radio equipment, and that's the subject of the
>>rec.radio.amateur.homebrew newsgroup. Although some of us also brew
>>beer, we'd prefer to look on the appropriate newsgroups for
>>beer-related topics, and the radio-related newsgroups for radio
>>topics.
>>

>>Please look at the groups your message will be going to before you
>>post.
>>
>>Thanks,
>>
>>Roy Lewallen (amateur radio W7EL)

4706. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7glias$b2v@news.Hawaii.Edu>
Source record: 70593
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Each and every follow-up to this topic is being cross-posted on
rec.radio.swap. Please eliminate rrs from your fol-ups, for:

Please accept this reminder of the following item which
appears in the rec.radio.swap FAQ/charter:

"PLEASE DO NOT POST DISCUSSION ARTICLES TO THIS GROUP. If you really must
post, please do so to the appropriate discussion group. Use email whenever
possible, especially if you feel someone has committed a breach of
etiquette."

(The full FAQ is posted by myself on the 15th of each month.)

For a smoother-running newsgroup, please abide by the charter.

Jeff KH6O (rec.radio.amateur working-group)

4707. FS: Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <372e6195.17107258@news.earthlink.net>
Source record: 70594
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

MORE CRYSTALS FOR SALE!

All are New and unused
CR-18/U Holder = HC-6/U

5945 kHz NIB QTY 6 at $1.00 each

3726.83 kHz NIB QTY 4 at $4.00 each

1000 kHz New QTY 17 available at $4.00 each

Or take all 27 of the above crystals for $70.00
Add shipping to all orders please

73

4708. FACT - Homebrew IS About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Tim Long <longt@empireone.net>
Message-ID: <372E6522.F5CB98E3@empireone.net>
Source record: 70595

> "Homebrew" is a term used by radio amateurs to describe home-built
> radios and radio equipment, and that's the subject of the
> rec.radio.amateur.homebrew newsgroup.

See the description "radio" in the newsgroup name? What do you think it means? Homebrew has meant home-built radios and radio equipment since before Charlie Pappazian was in diapers.

4709. 8950 Sylvania's FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990504004658.18446.00001812@ng-fd1.aol.com>
Source record: 70596

Hello, I have four of these, all have very light use, full output, shiny new-looking getters. price 70.00 for a pair, 130.00 for all four, includes shipping.

All are fully tested, be happy or return same condition immediately on arrival for refund, less shipping costs.
Thank you,
Joe Pratt, Tubecntral@aol.com

4710. PE1MGRs homepage is updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Erwin Cremers <ecremers@knoware.nl>
Message-ID: <372EA2F0.C32D381C@knoware.nl>
Source record: 70597
Cross-posted to: nl.radio.amateur,rec.radio.amateur.homebrew,rec.radio.shortwave,uk.radio.amateur,rec.radio.amateur.equipment

FYI,

I've updated my homepage. Its still unther construction, so not all the
section are working.
Please take a look around and let me know what you think.

The new lokation is:
http://come.to/TheTubeBug or via my old page
http://www.geocities.com/capecanaveral/4312

Looking forward to receive your comments.

Kindly greeting you from Holland,

PE1MGR
Erwin Cremers

4711. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <372EA947.2B5C1A98@asu.uswest.net>
Source record: 70598
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

What the hell does this have to do with amateur radio? Digression is one thing, but this is way over the top, ranting politivcal spam.

Mike Dickman wrote:
>

>
> *** average temperature 6 below ***
> sunrise 10:48 am sunset 2:44 pm
> giving 3 hours 56 minutes of possible sunshine
>
>
> Mike (KD4LLA)
>
> For the people who like peace and quiet: a phoneless cord <grin>!
>
> The longer Bill Clinton stays in office, the more we pay.
>
> Our justice system pays because he has opened the door for millions of
> us to play games with the notion of telling "the whole truth" under
> oath. Our military personnel pay because they have to carry out their
> duties while grappling with questions regarding the motives of their
> commander in chief. Our national intellect pays because, with his
> myriad verbal contortions and willful deceptions, the president has
> become little more than a walking, talking insult to our intelligence.
> Finally, the taxpayers pay because, in his efforts to keep "looking
> presidential" and "doing the work of the people," he is creating more
> new programs and growing the government.
>
> Haven't we paid enough already?
>
> See my web page at http://www.alaska.net/~mdickman/Index.htm

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4712. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <372EC299.4BB5372F@asu.uswest.net>
Source record: 70599

Think about it: if anything, the switch to aluminum from steel beer cans makes the beer-can vertical antenna more useful than ever, in two ways!

CommQuart wrote:
>
> Ever since they have gone over to aluminum cans,
> beercan verticals have gone the way of CW.
>
> Pete
>
> >
> >> I think beer is entirely on topic for this newsgroup. How else can one
> >> generate enough beer cans for the beercan vertical?
> >>
> >> :)
> >

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4713. AC Outlet Testing (was Re: Glowbugs & transformer-less power supplies)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <372EC776.1006A32F@asu.uswest.net>
Source record: 70600

Thanks, Roy, for the patient and thorough reply, and everyone else who responded. I am now thoroughly put off the cheapskate idea of trying to build my little glowbug projects sans transformers. The one-hand-in-back-pocket rule is one worth following in all cases.

Now, a more general and corollary question about AC house wiring: what is the proper method of testing outlets to determine if they are wired correctly, especially with respect to the third/ground wire? RS and other retailers sell an overpriced rinky-dink tester of dubious value. I'd rather learn something and save my money.

I am almost certain that with the right procedure and a good DMM (or a simple and inexpensive home-brewed tester) I should be able to get more information of a higher reliability, but the question remains: what am I looking for, and how to acquire that "what"?

Roy Lewallen wrote:
>
> Sure.
>
> Here's the problem. One side of the A.C. mains is connected to the
> Earth, and the other side is 120 volts or so relative to this. If your
> house is wired and grounded properly, the side connected to the wide
> slot of the socket is the one connected to the Earth ("neutral"). It
> should be safe to use a polarized plug (having one blade wider than
> the other so it can't be reversed in the socket), and connect the
> neutral wire (the one going to the wide blade) to the chassis of your
> radio. But it ISN'T safe, because there are a lot of houses out there
> which are NOT wired or grounded properly, or where an outlet has been
> added or replaced by someone who doesn't know how to do it properly.
> If you connect one side of the A.C. line to the chassis, and the
> wiring is reversed, the chassis is then at 120 volts relative to the
> Earth. Touching the radio while simultaneously touching any grounded
> object like a faucet, metal appliance with third-wire ground, etc., or
> while having any other electrical contact with the Earth can be fatal.
> If you have a three-wire system, you can get some protection by
> connecting the third, ground, wire to the chassis also. But then if
> the other two wires are reversed, you'll directly short-circuit the
> mains. And you have to be sure that the third wire is also correctly
> installed and connected.
>
> Some power supply configurations, like ones with a bridge rectifier,
> don't require a connection from either side directly to the chassis.
> But these result in a sizable voltage from the chassis to the Earth
> regardless of which way the plug is turned around (assuming one side

> of the output of the bridge or other circuit is connected to the
> chassis).
>
> There are a couple of ways of dealing with this. One way is to "float"
> the chassis, and not connect either side of the mains or the power
> supply output directly to it. This was frequently done with AC-DC
> radios. But it's very desirable to use the chassis for shielding and
> for an AC ground in the radio, so the mains wire was usually connected
> to the chassis through a capacitor. The idea is that the capacitor
> would be a good conductor for RF but have a high impedance at 60 Hz.
> One problem with this approach is capacitor reliability. It's common
> to have very high voltage spikes (well over 1 kV) appear on the AC
> mains, and the capacitor has to withstand these without its leakage
> current increasing significantly. Also, a capacitor that's effective
> as an RF conductor at the common IF of 455 kHz and at the lower end of
> the BC band doesn't have as high an impedance as you'd like at 60 Hz.
> Most people of my generation recall getting a "tingly" feeling when
> touching a radio if the plug was inserted one way, but not so much if
> it was turned around. (Most radios, as one poster mentioned, came in
> plastic boxes with plastic knobs to make it difficult to physically
> touch the chassis.) My first receiver was a Hallicrafters S-38D, which
> was a transformerless unit in a metal box. I nearly burned the house
> down by connecting the chassis to a good ground. When I turned the
> radio on, an arc formed across the power switch, which extinguished
> only when I raced down stairs and threw the circuit breakers (an event
> neither I nor my parents ever forgot).
>
> The best way around this is to connect the radio to the mains through
> a transformer. You can then safely connect one side of the transformer
> secondary to the chassis (or have it at any other potential relative
> to the chassis), connect the chassis to Earth via the mains third wire
> or a grounded antenna, and not worry about killing yourself from
> touching the chassis.
>
> One other word of advice for those of you playing with fire-fets: Keep
> one hand in your pocket when you're poking around in the radio's
> insides.
>
> Roy Lewallen, W7EL

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4714. Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <372ECA73.7FDF937A@asu.uswest.net>
Source record: 70601

I keep coming across the abbreviated voltage rating "V.C.T." with respect to the secondary/output of power transformers. Can someone please spell this abbreviation out for me and explain what it refers to?

Also, why are power ratings described in terms of volt-amps (V.A.) instead of watts in some components?
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4715. Re: ** Help identify a Capacitor **

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Colin Lowe <colinlowe@jet.es>
Message-ID: <7gl8pq$51t$1@lola.ctv.es>
Source record: 70602

OK thanks Pat for the advice, 73 de Colin.

pat <1126@nethawk.com> wrote in message <372CBDC8.E261BFA5@nethawk.com>...
If you can power the circut up see which way the voltage polarity is with a meter. Measure the voltage across the cap and see which side is pos and neg. If not able to power the circut up look for diode or transister polaritys in the surounding circut to give a clue.

4716. Re: Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Larry Gauthier <larryg@ismi.net>
Message-ID: <372eeb96@news.ismi.net>
Source record: 70603

Will:

V.C.T. stand for Volts Center Tapped, which means that the secondary of the transformer has a connection that is mid-way (electrically) between the two outputs. A transfmormer labeled 1000 vct has a secondary with three connections: 1000 volts end-to-end, or 500 volts from either side of the center tap.

Back in the days of vacuum tube rectifiers, the center tap was generally tied to ground, and two tubes provided full-wave rectification - one on each leg. That can still be done today with two diodes, or you can use a "full-wave bridge rectifier" four-diode combination which would ignore the center tap. Generally, a VCT transformer will provide you with more flexibility in designing the output voltage from a power supply (this may or may not be on any consequence to you...).

Regarding the terms V.A. - that term is far more prevalent in the electric and power industry circles, where industrial equipment is rated in VA of KVA (Kilo volt amps) terms. Why? Cause that's the way they've always done it... ;-)

-larry
wb8bgo

Will White wrote in message <372ECA73.7FDF937A@asu.uswest.net>...
>I keep coming across the abbreviated voltage rating "V.C.T." with respect to
>the secondary/output of power transformers. Can someone please spell this
>abbreviation out for me and explain what it refers to?
>
>Also, why are power ratings described in terms of volt-amps (V.A.) instead of
>watts in some components?
>--
>Will White, KD7BFX
>
>to reply, please click this link mailto:wcw@asu.uswest.net

4717. Old Sams Manuals for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: lburhenn@ria.net
Message-ID: <7gn0l8$974$1@nnrp1.dejanews.com>
Source record: 70604
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.basics,sci.electronics.repair

I have some old Sams manuals ranging from 648-1240 that I would like to sell. If you are interested in one or all of them email me and give me a price that you would give for them. Thankyou!

Lyle

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4718. Re: Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <372EFA17.C87FE337@erols.com>
Source record: 70605

Watts only equals VA when the voltage and current are in phase. VA (Volt Amps) is the apparent power delivered to the load while Watts is the true power. Because the nature of the load (and therefore the phase difference) is often unknown in power systems, the term VA is used.

The formula Watts = voltage times current only applies when the voltage and current are in phase but VA = voltage time current always applies.

4719. FS: GPS antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: kb9olm@hotmail.com
Message-ID: <7gn49hcjp1@nnrp1.dejanews.com>
Source record: 70606

For sale:
1. Small, non amplified microstrip patch antenna for
1575.42 MHz GPS band. No housing. Made of Alumina substrate.
You can put your amplifier for remote use or use it as is.
$10 plus shipping.
2. Small amplified microstrip patch antenna for
1575.42 MHz GPS band with housing. SMA connector for
antenna output and 6.0 v DC power in. $24 plus shipping.
3. Various 1575.42 MHz ceramic, 2-pole BP filters.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4720. 440 Mhz devices & chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: markus <anonymous@remarq.com>
Message-ID: <EfEX2.1917$4S.1237817@WReNphoon3>
Source record: 70607

I'm looking for information about chips / devices in the 440Mhz range for some
homebrew projects. I know there are car-keys, remote temperature sensors
and other devices out there.
These use low-cost transmitters and receivers and I'd like to find a supplier
for the chips used within for some applications.

Can somebody help me out with some company names of manufacturers of
such chips ?

Thanks Markus

**** Posted from RemarQ - http://www.remarq.com - Discussions Start Here (tm) ****

4721. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <372F53BC.B89948F4@bellsouth.net>
Source record: 70608

This whole deal brings up an important point..

We need to check the list of groups an article is being posted to before posting it -- *especially* if we're replying to an existing article. If that had been done in this case, I suspect only one or two of the beer-related postings would have ever made it to this group. I'm not picking on the beer people here, posters on the various rec.radio.amateur.* groups are about the worst I've seen about cross-posting.

When you (generic you) reply to a posting, check the To: line and get rid of any groups that don't seem relevant to what you're saying.

It would be great if newsreader software would refuse to post articles to multiple groups unless the user manually confirmed each group...
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4722. Re: wire antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <372F5583.78091665@bellsouth.net>
Source record: 70609

Joseph Merfalen wrote:
> I am totally new to HAM radio and I am very curious to what exactly a
> wire antenna is. Is it exactly what it says? A Wire?

Yes, that is exactly what it is!

It's really a generic term, which covers several types of antenna -
dipoles, long wires ("long" meaning a substantial fraction of a
wavelength), curtains, etc..

> Can one use a wire antenna on his/her HT? What are the procedures to makinga wire antenna
> for a 2 meter hand held, if that is possible. Any input is grately appreciated

Certainly. My first 2m antenna was a dipole, soldered directly to the
coax connector & lying flat on the kitchen table. Worked Buffalo, New
York on simplex (from Milwaukee!) on that antenna...

The simplest wire antenna for a HT would be a dipole. This is a flat
1/2wavelength piece of wire, cut in the center. Hook one side of the
cut to the center pin of a coax connector, and the other side to the
outer shell of the connector. (if you want, you can hook it to a length
of coaxial cable instead, and put the connector on the other end of the
coax) 1/2wavelength at 2 meters is roughly 38" -- I'd make it a bit too
long, and then snip identical amounts off each end until the SWR is
lowest. (or the radio's RF output meter tells you you're getting
maximum output power)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4723. Re: 440 Mhz devices & chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990504114131.06850.00001948@ng-cq1.aol.com>
Source record: 70610

>
>I'm looking for information about chips / devices in the 440Mhz range for
>some
>homebrew projects. I know there are car-keys, remote temperature sensors
>and other devices out there.
>These use low-cost transmitters and receivers and I'd like to find a
>supplier
>for the chips used within for some applications.
>
>Can somebody help me out with some company names of manufacturers of
>such chips ?

Try fttp://www.linxtechnologies.com

They have chips, boards, prototype systems, whatever you need. The chips use SAW technology, so are only available in certain frequencies, but it seems to me I saw one on 432Mhz.

Doug Moore KB9TMY

4724. Re: Looking For Operating Manual for Kenwood TS-830S

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Steve Forcht <stevef@interlog.com>
Message-ID: <372F2675.A8979428@interlog.com>
Source record: 70611
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

Send me your address and I will phocopy the TS830s manual for you

Steve VA3SF

Walt Davidson wrote:

> On Mon, 03 May 1999 08:49:23 -0400, "Leo B." <leob@erols.com> wrote:
>
> >73 - Leo - W3LEO
>
> Is this what is meant by "a little Leo"?
>
> ;-)
> 73 de G3NYY
>
> --
> Walt Davidson Email: walt@ surf-zone.co.uk

4725. using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Kelly <zeno.nospam@hotmail.com>
Message-ID: <372f2846@news1.us.ibm.net>
Source record: 70612

Please forgive me if this is a stupid question, I'm a homebrew newbie.

What would be the implications of using 3 small washers stacked instead of a toroid ferrite core? It seems that they would be *similar* in nature, but I am sure that there is a good reason for not doing this.

Any discussion would be welcome.

Thanks
Kelly.

4726. FS: DATRON/TRANSWORLD MANUALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: murphy@cts.com
Message-ID: <murphy-0405991051400001@murphy1.cts.com>
Source record: 70613
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

LIST OF DATRON/TRANSWORLD MANUALS AVALABLE AT:

http://209.239.34.153/murphyjunk/DATRON_TRANSWORLD_MANUALS

PRICED FROM $12 TO $125.

--
MURPHY'S SURPLUS http://www.maxpages.com/murphyjunk

401 N. JOHNSON AVE.
EL CAJON, CA. 92020

619 444 7717
FAX 444 6750

4727. WANTED: Russian/Soviet Vintage Homebrew Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: kwm2a@aol.com
Message-ID: <19990504135431.07847.00002057@ng-co1.aol.com>
Source record: 70614

if anyone has or knows of a vintage homebrew rig from cold-war soviet era built by russian ham, i am interested in buying. any type of rig, receiver, transmitter, or station accessory.

4728. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: troglodite@aol.com
Message-ID: <19990504141010.06833.00001919@ng-cq1.aol.com>
Source record: 70615

>
>Please forgive me if this is a stupid question, I'm a homebrew newbie.
>
>What would be the implications of using 3 small washers stacked instead of a
>toroid ferrite core? It seems that they would be *similar* in nature, but I
>am sure that there is a good reason for not doing this.
>
>Any discussion would be welcome.
>
>Thanks
>Kelly.

None of us were born knowing everything we know now. Most of us got our knowledge by asking a lot of questions. You are simply where we were before "enlightenment." You shouldn't be ashamed to ask any question, though you should be prepared for the occasional wisecrack answer.

Having said that - washers are made of steel. Ferrite and steel have little in common. Ferrite is a composite material having certain magnetic properties that make it unique. If you just want some ferrite cores to experiment with, give me an idea of the frequency range or application and I will send you some samples - no charge.

Doug Moore

4729. Re: 440 Mhz devices & chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <372F3BF0.B4706B05@pedinc.com>
Source record: 70616

markus wrote:

> I'm looking for information about chips / devices in the 440Mhz range for some
> homebrew projects. I know there are car-keys, remote temperature sensors
> and other devices out there.
> These use low-cost transmitters and receivers and I'd like to find a supplier
> for the chips used within for some applications.
>
> Can somebody help me out with some company names of manufacturers of
> such chips ?
>
> Thanks Markus
>

A couple of manufacturers of such things are;

RF Microdevices (receiver, transmitter and transceiver ICs) -- www.rfmd.com
RF Monolithics (receiver, transmitter and transceiver modules) -- www.rfm.com

Some are fixed-frequency (433.9 seems to be popular) and some are selectable with appropriate crystals/resonators.

--
Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4730. Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <372F3E4F.30343254@pedinc.com>
Source record: 70617

Where can I find info about the small antennas used in things like pagers? I know pagers work at VHF/UHF frequencies, but even so the antennas in them are quite small. I have need for very small antennas for a short-range (a few meters) wearable data link at 70cm, and haven't found much data on them so far.

Also, what sort of measuring equipment can I buy or build to tune these antennas? The commercial and homebrew directional couplers I've seen are huge by comparison to my circuit board and antenna, and the power is so low (a few mW) that I doubt I could get any readings anyway. Any suggestions are much appreciated.

--
Mark Nelson AJ2X

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4731. Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <372F3E32.133D39B9@pedinc.com>
Source record: 70618

Where can I find info about the small antennas used in things like pagers. I know pagers work at VHF/UHF frequencies, but even so the antennas in them are quite small. I have need for very small antennas for a short-range (a few meters) wearable data link at 70cm, and haven't found much data on them so far.

Also, what sort of measuring equipment can I buy or build to tune these antennas? The commercial and homebrew directional couplers I've seen are huge by comparison to my circuit board and antenna, and the power is so low (a few mW) that I doubt I could get any readings anyway. Any suggestions are much appreciated.

--
Mark Nelson AJ2X

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4732. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <372F43B6.93AECF35@teleport.com>
Source record: 70619

This would work reasonably well at 60 Hz or so, but would be very lossy at HF and above. The problem is due to eddy currents which are induced into the metal by the fields from the wire. Toroids for use at RF are usually made from one of two materials. One is powdered iron, which is just that. The particles are insulated from each other, to break the path for eddy currents. (This is the same reason power transformer cores are laminated, but it's on a much smaller scale for the higher frequency.) The other common material is ferrite, which is a magnetic ceramic material. This material can be made to be a poor electrical conductor, thereby reducing eddy currents, while having a high permeability.

Roy Lewallen, W7EL

Kelly wrote:
>
> Please forgive me if this is a stupid question, I'm a homebrew newbie.
>
> What would be the implications of using 3 small washers stacked instead of a
> toroid ferrite core? It seems that they would be *similar* in nature, but I
> am sure that there is a good reason for not doing this.
>
> Any discussion would be welcome.
>
> Thanks
> Kelly.

4733. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <372f41c4.1327892@news>
Source record: 70620

On 4 May 1999 18:10:10 GMT, troglodite@aol.com (Troglodite) wrote:

>>
>>Please forgive me if this is a stupid question, I'm a homebrew newbie.
>>
>>What would be the implications of using 3 small washers stacked instead of a
>>toroid ferrite core? It seems that they would be *similar* in nature, but I
>>am sure that there is a good reason for not doing this.
>>
>>Any discussion would be welcome.
>>
>>Thanks
>>Kelly.
>
>None of us were born knowing everything we know now. Most of us got our
>knowledge by asking a lot of questions. You are simply where we were before
>"enlightenment." You shouldn't be ashamed to ask any question, though you
>should be prepared for the occasional wisecrack answer.
>
>Having said that - washers are made of steel. Ferrite and steel have little in
>common. Ferrite is a composite material having certain magnetic properties that
>make it unique. If you just want some ferrite cores to experiment with, give me
>an idea of the frequency range or application and I will send you some samples
>- no charge.
>
>Doug Moore

I agree with Doug, don't feel bad about asking. Barring the occasional
internet sociopath, hams are traditionally helpful.

The big difference between a ferrite or iron core toroid and a stack
of washers is that the toroid is composed of minute particles that are
glued together with an insulating adhesive so there no conducting path
in the toroid much longer than the diameter of the particles. A washer
is a continous conductor and will act as a single turn transformer
shorted across your winding. It will make the inductor appear to be
shorted out, so the calculated inductance will be meaningless and the
losses will be very high.

Power transformers use steel cores, but the cores in those things are
composed of multiple thin sheets, called laminations, that are
arranged to be perpendicular to the direction that induced currents
would flow if the core were a single lump. Even so, core losses in
power transformers dominate the efficiency until the currents get up
near the ratings and I^2R losses get to be important.

Good ferrite or powered iron toroids are not expensive. They are pretty specific to power density and frequency range. Look at the Fair-rite web page, http://www.fair-rite.com, for some pretty good technical specs.

Good luck,

73

Dave
K1MBO

4734. Re: Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: "larry d. clark" <buddycl@onramp.net>
Message-ID: <372F45ED.C32F8234@onramp.net>
Source record: 70621

volt center tap

larry
kd5foy

Will White wrote:

> I keep coming across the abbreviated voltage rating "V.C.T." with respect to
> the secondary/output of power transformers. Can someone please spell this
> abbreviation out for me and explain what it refers to?
>
> Also, why are power ratings described in terms of volt-amps (V.A.) instead of
> watts in some components?
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

4735. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <372F6679.256EB98C@cig.mot.com>
Source record: 70622

CommQuart wrote:
>
> Geeezus. Roy's post was ultrapolite and to the point.
> I think "The Beer Guy" aka the "Squirrel" has sampling
> some bad brew..
>
> Pete

Here Here! Funny...it seems all this beer posts started within
the past year as I don't ever recall having seem them cross posted
here before then. It seems the beer group posters are doing postings
to all groups with "homebrew" in it. Isn't this a bit arrogant?

Chuck KD9JQ

> The Beer Guy wrote in message
> <2e3ac8446f691c196cb23f67d301b13e@anonymous.poster>...
> >I've got to hand it to you. I've seen some arrogant posts
> >in my time, but you've got balls of brass, coming into a
> >beer newsgroup and posting that little rant.
> >
> but you
> >should have seen that coming, as you should have seen
> >it coming when you (generic you, not you personally)
> >gave your group that stupid-ass name.
> >
> >On Sat, 01 May 1999 18:43:13 -0700 Roy Lewallen <w7el@teleport.com> wrote:
> >
> >>There has been an increasing number of beer-related postings appearing
> >>on rec.radio.amateur.homebrew lately. Apparently people are posting
> >>and responding to messages without looking to see what groups they're
> >>going to.
> >>
> >>"Homebrew" is a term used by radio amateurs to describe home-built
> >>radios and radio equipment, and that's the subject of the
> >>rec.radio.amateur.homebrew newsgroup. Although some of us also brew
> >>beer, we'd prefer to look on the appropriate newsgroups for
> >>beer-related topics, and the radio-related newsgroups for radio
> >>topics.
> >>
> >>Please look at the groups your message will be going to before you
> >>post.
> >>
> >>Thanks,
> >>

> >>Roy Lewallen (amateur radio W7EL)
> >
> >
> >

4736. FS: Plessey mixer & receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: kb9olm@hotmail.com
Message-ID: <7go0ko$6c2$1@nnrp1.dejanews.com>
Source record: 70623

For sale NOS:

1. Plessey SL6440 high level mixer ICs.
Package of two ICs is $10 plus shipping from
San Francisco Bay Area.
2. Plessey SL6601 complete FM receiver ICs
with PLL demodulator.
Package of two ICs is $10 plus shipping.

Please reply to Vlad at kb9olm@hotmail.com

-----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4737. Re: Plate Transformer Source(s)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Steve Robertson <robertsons@zzzsaic.com>
Message-ID: <372F842A.88D6E17F@zzzsaic.com>
Source record: 70624

Hi Lee,

There are a number of sources. In my opinion, Hammond in Canada makes about the widest range of trannies at the best prices. They don't sell direct, but they have a web site where you can check out all their wares (sorry, don't have the URL). Antique Electronic Supply at http://www.tubesandmore.com stocks most of the line and can order anything else that they don't stock. So can STF electronics (oops, don't remember their URL either), and their prices are a bit lower. Anyway, these are good starting points for you.

73 de Steve, KE4OH

-- To get my real email address, remove the characters 'zzz'.

Lee Scott wrote:

> Does anyone know of a good source for getting tube plate power supply
> transfomers?
>
> Leland C. Scott
> KC8LDO
> --
> "We learn in time that subjects are not controversial,
> but how we communicate about them and the
> elements of personal blame we add in anger. "

4738. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Thomas C Sefranek <tcs@cmcorp.com>
Message-ID: <372F7DEE.120BC9E2@cmcorp.com>
Source record: 70625

Kelly wrote:

> Please forgive me if this is a stupid question, I'm a homebrew newbie.
>
> What would be the implications of using 3 small washers stacked instead of a
> toroid ferrite core? It seems that they would be *similar* in nature, but I
> am sure that there is a good reason for not doing this.
>

The ferrite is an inductance amplifier, in some bizarre cases you might actually

get a steel washer set to work somewhat, but I wouldn't count on it.
You won't get the right inductance without using the RIGHT ferrite.

> Any discussion would be welcome.
>
> Thanks
> Kelly.

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

4739. Re: temp. comp. of an Xtal oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <372FB69C.377C624F@nettally.com>
Source record: 70626

A tried and true method would be to construct a crystal oven with a heater circuit. One circuit I saw a long time ago was used in a Pace Landmaster synthesized radio. It consisted of a small power transistor and load resistor attached to the oscillator crystal can. A circuit was devised that biased the transistor into conduction. The heat from the transistor and the load resistor warmed the crystal. A thermistor provided feedback to limit the conduction as the temperature rose. A foam cover should be placed over the crystal to contain the heat. It will be necessary to readjust the crystal frequency ponce the heater has stabilized.

Arjen Raateland wrote:

> douglas dwyer wrote:
> >
> > In article <3729F767.1E9AFDCC@lsid.hp.com>, Tom Bruhns
> > <tomb@lsid.hp.com> writes
> > >(SNIP)73,
> --
> Arjen Raateland
> OH2ZAZ

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

4740. Re: electronics training

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <372FE4BA.67926481@asu.uswest.net>
Source record: 70627

Bill,

I would recommend good old Heathkit, which has gotten out of the electronic kit business, but is still very active in electronics education. They offer a number of first rate correspondence courses. Check their website, http://www.heathkit.com

BUJIAJ8 wrote:
>
> I am a 48 year old hs teacher who is beginning to investigate after retirement
> options. I have always been intrigued by electronics and the repair of radio
> and television. I am trying to locate some type of on-line or correspondence
> course which would help me to train for a future avocation in electronics
> repair. If you can help out, please email me with info.
>
> tnx
> bill

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4741. FS: QQE06/40...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-04 00:00:00 UTC
From: ea <tsh@arrakis.es>
Message-ID: <372e85e4@news.arrakis.es>
Source record: 70628

Hello.
I have for sale 2 Philips QQE06/40 NOS...

eacosta@arrakis.es

4742. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: k6mhe@arrl.net
Message-ID: <372f9665.15056105@news.mcn.org>
Source record: 70480

On Tue, 04 May 1999 16:28:25 -0500, "Charles H. Reichert"
<reichert@cig.mot.com> wrote:

>
>
>CommQuart wrote:
>>
>> Geeezus. Roy's post was ultrapolite and to the point.
>> I think "The Beer Guy" aka the "Squirrel" has sampling
>> some bad brew..
>>
>> Pete
>
>
>Here Here! Funny...it seems all this beer posts started within
>the past year as I don't ever recall having seem them cross posted
>here before then. It seems the beer group posters are doing postings
>to all groups with "homebrew" in it. Isn't this a bit arrogant?
>
> Chuck KD9JQ
>
>
Contrary to what you may think to 99.58% of the population the term
"home brew" means beer. It seems a "reasonable" assumption.

Doing both "Amateur Radio Home brew" & " Home Brew" (read beer) I
don't have a problem, but others certainly will.

73

Danny, K6MHE & Home Brewer (Beer)

4743. IC-706 has no power out on FM...Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: tim <tvendt@kear.tds.net>
Message-ID: <01be96b0$55a5eae0$1b9347cc@default>
Source record: 70481

Greetings... I have an original IC706 that the FM has stopped tx'ing... if I key the mike the power jumps on the meter and then settles to almost nothing... If I listen to my sig (what there is of it) on a scanner, it sounds like @#$#@. I suspect the VCO/PLL is unlocked... without having to blow $$$ (many) and have to wait weeks (many) for a service manual, can someone tell me how to check and realign the voltage? I am a tech so I know how to use the stuff... I just don't know where the test points are etc etc etc... any help would be appreciated
Tim
tvendt@kear.tds.net

4744. Re: IC-706 has no power out on FM...Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: mojaveplan@aol.com
Message-ID: <19990504215204.19634.00002374@ng-cc1.aol.com>
Source record: 70482

sounds like the problem mine had, and every other original 706. i sent mine back to icom and they replaced some trimmer cap for free. they should do the same for yours. good luck.
73's jeff kd7dcy

4745. Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: swil265101@aol.com
Message-ID: <19990504222329.07813.00002287@ng-cs1.aol.com>
Source record: 70483

I am a college student that is new to the ham radio hobby. Does anyone reading this message know of a location to where I could pick up a multiband transceiver that is at "college student" prices. Old or new equipment would work. (I live in an upstairs apartment that will not allow an antenna). Does anyone have any suggestions?
Horsehaar@yahoo.com

4746. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: k6vkv@aol.com
Message-ID: <19990505010811.14219.00002223@ng-ft1.aol.com>
Source record: 70484

I worked at a tracking station site where some power supplies were in continuous use for more than twenty years with no failures. When the equipment was moved after twenty years, a number of electrolytic capacitor failures occured. I suspect the (relatively) long power down and (perhaps) mechanical shock triggered failures in the old capacitors.

4747. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <925891292.19833.0.nnrp-10.d4f06601@news.demon.co.uk>
Source record: 70485

Troglodite wrote in message
<19990504141010.06833.00001919@ng-cq1.aol.com>...
>>
>>Please forgive me if this is a stupid question, I'm a homebrew newbie.
>>
>>What would be the implications of using 3 small washers stacked instead of
a
>>toroid ferrite core? It seems that they would be *similar* in nature, but
I
>>am sure that there is a good reason for not doing this.
>>
>>Any discussion would be welcome.
>>
>>Thanks
>>Kelly.
>
>None of us were born knowing everything we know now. Most of us got our
>knowledge by asking a lot of questions. You are simply where we were before
>"enlightenment." You shouldn't be ashamed to ask any question, though you
>should be prepared for the occasional wisecrack answer.
>
>Having said that - washers are made of steel. Ferrite and steel have
little in
>common. Ferrite is a composite material having certain magnetic properties
that
>make it unique. If you just want some ferrite cores to experiment with,
give me
>an idea of the frequency range or application and I will send you some
samples
>- no charge.
>
>Doug Moore
>

When I was a student apprentice with English Electric-Leo Computers about 35 years ago, one of my jobs was testing ROM assemblies made from toroidal ferrite-cored pulse transformers. Each transformer had a plastic washer on top of it, and I was very puzzled by one unit that didn't work, but was wired correctly. I eventually found that it had been assembled with two plastic washers instead of the washer and ferrite toroid!

Leon, G1HSM

4748. FS: Various Accessories and parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <37302958.949914@news.earthlink.net>
Source record: 70486
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

For Sale:

(Add shipping costs to all prices unless stated)
= = = = =

Hallicrafters T.O. Keyer - Mint Condition
Includes original manual. Perfectfor keying any
tube transmitter. Will sell for $85.00

= = = = =

Meters:

Weston Model 506 New in box. Round, black
For Tropical Climate / Navy use.
With scales:
0-200 mA P.A. Plate
P.A. Grid and Battery
Will sell for $4.00

Weston New in Box. Round, black
For Tropical Climate / Navy use.
0-1.5 mA DC
Will sell for $3.00

RCA / US Navy Classic 0-2.5 KV DC
Square front meter with rare 0.005 mF Faradon
bypass cap. 0-1 mA movement, with shunt information
for 2.5 kV operation. WIll sell for $4.00

Or take all three above meters for $9.00

= = = = =

Pair of transformers for a 15-20 watt modulator
Driver and modulator transformer from SCR-522 transmitter
for use with Push-pull 6V6 tubes! Ideal for small
homebrew AM transmitter or as replacements.
Will sell the pair for $15.00

= = = = =

Heavy Duty Footswitch, with AC power cord and H.D.
connectors. Rated 20 Amps. Clipper 632D. Very good condition.
Will sell for $15.00

Smaller footswitch with cord. Flat style, very comfortable to use
for keying up amateur transmitter. Excellent conmdition.
Will sell for $10.00

= = = = =

LOT # 8 of TUBES:
(Some new - others used, tested)

6V6GTA - National, New in box QTY 2 $8.00 each
6V6GTA - Mesa, New, no box $6.00
6V6GTA - No name, looks like new! $5.00
6V6GT - RCA, QTY 5 $4.00 each
6V6GT - Philco, used $3.00

Or take all of the above tubes for $40.00

= = = = =

LOT # 7 of TUBES:
(Used, tested)

6X4 RCA $1.00
12BY7 G.E. $4.00
12BY7 RCA QTY 2 $5.00 each
12BY7 Sylvania $4.00
12BY7A Bulk $4.00
12BY7 Bulk QTY 2 $3.00
25Z6 Silvertone $2.00
35EH5 IEC Japan QTY 3 $2.00 each
35W4 Bulk $1.00
50C5 QTY 4 $3.00 each
6197 Sylvania $2.00
6197 Bulk $2.00

Or take all of the above tubes for $40.00

= = = = =

Neat little chassis - with tubes & transformers!
Looks professionally constructed - size 6" X 4" X 2"
It's clearly, well, a what's-it! Includes 12AT7, 12AX7, 6AL5, with
shields. Allen -Bradley potentiometer, UTC HQA13 potted Inductor,
a 1 uF / 600V DC Sangamo capacitor etc. Two really nice input
transformers, UTC type 89562A Will sell for $5.00

= = = = =

Headphones with boom microphone.
Jensen Model JMP-41
Headset Response is 20 Hz - 20 kHz
6' Cord with mini stereo plug.
Microphone is Low-Z Condenser type with 2.2 k-ohm impedance.
Response 30 Hz - 16 kHz

Durable and comfortable design with padded ear-pieces, ideal for
communications applications.

Brand new in box. White color.
Great for mobile HF or VHF operating. Think SAFETY!
Also great for extended rag-chews, contesting etc.
No PTT, but has standard connectors - 1/8" mini-style.
Will also work well with computers. Normally $29.95
New in box $20.00 plus shipping

E-mail for details or to make arrangements.

73

4749. WTB Lg Modulation Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: John P Russo <jprusso@acsu.buffalo.edu>
Message-ID: <373034E2.980FDD67@acsu.buffalo.edu>
Source record: 70487

Still looking for that 400 watt or larger modulation transformer to finish a homebrew project, multitap if possible. Will be driven by two 810's .

Thanks, John Russo KF2JQ

4750. Re: Bob Headrick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <7gpg43$4o$1@remarQ.com>
Source record: 70488
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Please excuse this intrusion but it IS necessary as Bob Headrick is not man enough to accept responses via E-mail to his rantings!! Bob felt it necessary to advise me as follows regarding my post of tubes for sale:

<Please do not spam. most of the groups you posted to are not sale groups.>

Hey Bob,
Every list I posted to has got items listed for sale, items of legitimate interest to the Amateur community! I am not a dealer and therefore cannot be accused of "Spamming" as you have stated. If you are the owner of one of these lists and wish me not to "partake" then say so however if you are just acting as a self appointed NG Cop then let me suggest that you "Get a Life!!"

Cordially (sic)

Steve

4751. Re: WTB:Cheap UHF FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990505092133.24149.00002160@ng-fu1.aol.com>
Source record: 70489

good luck, 440 mhz stuff is pretty expensive unless you find older used gear.

4752. Re: Looking for a Standard EPROM Burner (A3400)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7gpjmn$hi3$1@nnrp1.dejanews.com>
Source record: 70490

Bill, I have an A3400 burner, but I don't want to sell it. However, if you want me to erase and burn a new '2716' eprom, just send me an e-mail and we can discuss your needs. 73 de VE6INM (Glenn) In article <372f9394.0@209.128.1.3>, "Bill Crann" <bcrann@nf.sympatico.ca> wrote:

> I am looking for an EPROM Burner that will work for my Standard GX3000 VHF
> radio.
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4753. Re: Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Gerard Butler <gbutler@tcd.ie>
Message-ID: <7gpg6a$61m@web3.tcd.ie>
Source record: 70491

```
--
Dr. Gerard Butler CEng MIEE, EI0CH, WEMT
TELTEC Propagation Group, Trinity College, Dublin Ireland
Dublin+Wicklow Mountain Rescue Team
Will White <wcw@asu.uswest.net> wrote in message
news:372ECA73.7FDF937A@asu.uswest.net...

>
>Also, why are power ratings described in terms of volt-amps (V.A.) instead
of
>watts in some components?
>--
>Will White, KD7BFX

Volt-amps = max volts x max-amps without regard to the phase shift which
occurs for inductive or capacitive circuits.

Watts = volts x in-phase amps, resistive circuits only.
```

4754. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990505092929.24149.00002165@ng-fu1.aol.com>
Source record: 70492

Kelly,

The structure of a torroid is very different than washers. Torroids have a different "magnetic" effect than washers. They are usually made of Powdered Ferrite. Dont use washers because the laquer will chip off and washers conduct electricity, thereby causing a short. Ferrite on the otherhand wont do that , and ytou will have the desired effect of either a choke or just an inductor..

James KD6KOS

4755. Re: Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990505093203.24149.00002166@ng-fu1.aol.com>
Source record: 70493

Try the news group alt.ham-radio.marketplace. Try to avoid e-bay.
call a nearby Ham Radio Outlet store. Avoid Radio Shack at all costs. do a
search of news groups with " Ham Radio" in it..

good luck,

James KD6KOS

4756. News Group Cops!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <7gphsf$eq0$1@remarQ.com>
Source record: 70494
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Please excuse this intrusion but it IS necessary as Bob Headrick is not man enough to accept responses via E-mail to his rantings!! Bob felt it necessary to advise me as follows regarding my recent post of tubes for sale:

<Please do not spam. most of the groups you posted to are not sale groups.>

Hey Bob,
Every list I posted to has got items listed for sale, items of legitimate interest to the Amateur community! If you needed these tubes to get that favorite old piece back on line you would have nothing to say regarding the use of the Group would you? I am not a dealer and therefore cannot be accused of "Spamming" as you have stated. If you are the owner of one of these lists and wish me not to "partake" then take whatever steps you deem necessary however if you are just acting as a self appointed NG Cop then let me suggest that you "Get a Life!!"

Go Bother Someone Else!!
Steve

4757. Motorola GPS UT+ Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: oz9dr@post1.tele.dk
Message-ID: <3736690c.11792425@news.inet.tele.dk>
Source record: 70495

Hello
Where do I find the controller programs for
the UT+ module there are following type:

WinOncore
and
PC DOS Controller programme

thanks
regards
Ib

4758. Motorola GPS UT+ Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: oz9dr@post1.tele.dk
Message-ID: <373969cd.11985035@news.inet.tele.dk>
Source record: 70496

Hello
Where do I find the controller programs for
the UT+ module there are following type:

WinOncore
and
PC DOS Controller programme

thanks
regards
Ib

---
e-mail : oz9dr@post1.tele.dk

4759. Re: INFO NEEDED HEATH ?MATIC KEYER OR MANUAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Fred Ruckser <nospam@somewhere.com>
Message-ID: <7gpq1blmh1@mail.pl.unisys.com>
Source record: 70497
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,alt.ham-radio.vhf-uhf

According to the manual it is a 11 To 16VDC, 200mA source. 73 WB6IIQ
Arthur Moe wrote in message <372CAE0B.E3D0B81A@uswest.net>...
>Need to know what voltage goes in the back.
>

4760. Re: Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <373061BD.11A9E8C0@ibm.net>
Source record: 70498

Have yu heard of a hamfest ? Flea markets for ham radio (mostly)
and computers. Each state has several during the year.

SWil265101 wrote:
>
> I am a college student that is new to the ham radio hobby. Does anyone reading
> this message know of a location to where I could pick up a multiband
> transceiver that is at "college student" prices. Old or new equipment would
> work. (I live in an upstairs apartment that will not allow an antenna). Does
> anyone have any suggestions?
> Horsehaar@yahoo.com

4761. Re: News Group Cops!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <373073B1.4F64A48F@megsinet.net>
Source record: 70499
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Pinky & The Brain wrote:
> Please excuse this intrusion but it IS necessary as Bob Headrick is not man
> enough to accept responses via E-mail to his rantings!! Bob felt it
> necessary to advise me as follows regarding my recent post of tubes for
> sale:
>
> <Please do not spam. most of the groups you posted to are not sale groups.>
>
> Hey Bob,
> Every list I posted to has got items listed for sale, items
> of legitimate interest to the Amateur community! If you needed these tubes
> to get that favorite old piece back on line you would have nothing to say
> regarding the use of the Group would you? I am not a dealer and therefore
> cannot be accused of "Spamming" as you have stated. If you are the owner of
> one of these lists and wish me not to "partake" then take whatever steps you
> deem necessary however if you are just acting as a self appointed NG Cop
> then let me suggest that you "Get a Life!!"
>
> Go Bother Someone Else!!
> Steve

I suppose you go into churches on Sunday during services and interrupt
with a loud "TUUUUUUUUUUUUUUUUUUUUUUUUUUUBES FOR SALE!"

Some sociopaths will never learn about appropriate places for actions.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4762. Meaning of VA, was: Re: Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3730752b.0@news.netwalk.com>
Source record: 70500

Larry Gauthier wrote in message <372eeb96@news.ismi.net>...
>Regarding the terms V.A. - that term is far more prevalent in the electric
>and power industry circles, where industrial equipment is rated in VA of
KVA
>(Kilo volt amps) terms. Why? Cause that's the way they've always done it...
>;-)

There is a very sound reason for using VA for rating a transformer.

If you are using an entirely resistive load the current and voltage supplied by the transformer are in phase, so you can use ohms law: watts = volts times amps.

Now what happens in an AC power grid when you have lotsa motors and transformers? The load that the transformer is supplying is far from resistive and is usually highly inductive. Therefore the current and voltage are not in phase. Transformers are then rated at the rms voltage times the rms current.

To determine the actual power you need to know the phase angle between the current and voltage. Power companies sometimes put capacitors across the lines to keep the phase angle under control.

It has been almost 25 years since I had a Power Distribution class, so perhaps there are some power engineers on here that can explain it better.

Jim
N8EE

4763. Re: Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Martin Meserve <meserve@my-dejanews.com>
Message-ID: <373083B2.3F54BC7E@my-dejanews.com>
Source record: 70501

SWil265101 wrote:
>
> I am a college student that is new to the ham radio hobby. Does
> anyone reading this message know of a location to where I could
> pick up a multiband transceiver that is at "college student"
> prices. Old or new equipment would work. (I live in an upstairs
> apartment that will not allow an antenna). Does anyone have any
> suggestions?

Others have recommended Ham Radio Outlet stores, the
alt.ham-radio.marketplace, and hamfests. These are all good
suggestions and I would like to add mine.

You can get a listing of amateur radio clubs, in your area,
from the ARRL web site, "http://www.arrl.org". The clubs very
often have news letters, and the like, that list equipment
for sale. They may even have a loaner.

Also check with your school. It's very likely that there is
already a club there. If there is they might have a club station
where you can get access to equipment you may not be able to
afford.

Don't forget the great bulletin boards around campus. There is
a lot of people comming and going, all the time, and many are
trying to lighten their load.

Martin

--
Martin E. Meserve KB7EQS martin.e.meserve
Engineer, Program/Project Specialist AT
Lockheed Martin M&DS - Reconnaissance Systems lmco.com

I respond to news groups and E-Mail on my own time and therefore my
responses may not be as timely as you, or I, would like them to be. If
I seem to be ignoring you, send me another E-Mail to jog my memory.
Opinions are my own and do not reflect the opinions of my employer.

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4764. Re: Mods of FT-50(Only inside Japan version)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: valerie65@my-dejanews.com
Message-ID: <7gq6dj$3oa$1@nnrp1.deja.com>
Source record: 70502
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Anyone tried this Vlaski mod software? Does it work? Would it work with a series 8x version of FT-50?

In article <nZjU2.729$jo3.1749@news.megsinet.net>,
"Max Imo" <REMOVE@CAPS.net> wrote:
> Download the FT50 porogramming software from this site
> http://vlaski.virtualave.net/ The software should allow you to program the
> radio for USA, freeband or whatever.
>
> LOL
>
> Dongho Lee <leehur@unitel.co.kr> wrote in message
> news:3721B940.22A5CF6F@unitel.co.kr...
> > I got a FT-50N while I traveled in Japan, which is only for Japan inside
> > version. It has limited Rx/Tx frequency range. Only 144-146/430-440
> > rages are available for Tx and Rx. I believe the basic circuits are same
> > and only couple of configuration blocked Rx range.
> >
> > Is there any way to convert to FT-50R as US version of FT-50 ? Or is it
> > impossible to convert to expand Rx frequency range ?
> >
> > Thanks.
> >
> > - Dongho.
> >
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4765. Article on Converting UPS for Ham Use?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: windbrkr@erols.com
Message-ID: <MPG.119a5adbbf945727989712@news.erols.com>
Source record: 70503

I recall seeing an article on rescuing a defunct PC uninterruptible power supply (UPS) so that it could be put to use in the shack as an inverter, battery changer and DC power supply. I *thought* the article was in QST sometime last year, but my memory is apparently playing tricks on me (again). I can't locate the article in back issues of *any* ham/electronics magazine, not to mention QST.

Does anyone remember where/when such an article appeared? I don't think I just imagined it, although I am beginning to wonder a bit...

Thanks,
Bob K9CMR

4766. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Henry Pasternack <nobody@nobody.com>
Message-ID: <7gq4s6$19ja$1@rtpnews.raleigh.ibm.com>
Source record: 70504

Dan Richardson wrote in message <372f9665.15056105@news.mcn.org>...
>Contrary to what you may think to 99.58% of the population the term
>"home brew" means. It seems a "reasonable" assumption.

If the name of the group were "rec.homebrew", no one would have any
cause to complain about beer postings here.

-Henry

4767. Re: Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Robert Sheahan - remove the SPAM to reply <sheahanrob@prolinkSPAMsoftware.com>
Message-ID: <7gq61f$77d@news1.snet.net>
Source record: 70505

Larry Gauthier wrote in message <372eeb96@news.ismi.net>...
>Regarding the terms V.A. - that term is far more prevalent in the electric
>and power industry circles, where industrial equipment is rated in VA of
KVA
>(Kilo volt amps) terms. Why? Cause that's the way they've always done it...

There is a usefull side too - V.A. is a better indicator of current requirements of house wiring, fuses, extension cords, etc. than Watts if the equipment has a reactive component instead of just a resistive component. Watts tells you how much work it can do (heat + light + sound + radio waves), V.A. tells you how much current it will draw.

Robert Sheahan
KA1VYZ

4768. Re: AC Outlet Testing (was Re: Glowbugs & transformer-less power supplies)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990505155416.10942.00002825@ng-cm1.aol.com>
Source record: 70506

Will,

Please dont be put -off by the dangers of building and using an AA5 radio!!

Just be aware of them and keep your wits about you and I guarantee you'll have a project which, when done, will give you hours of listening pleasure and a feeling of accomplishment!

Even though you CAN use a transformer, why? If you can use the mains only for power,
all you really need to do is mount the chassis in
an acrylic box, etc.. and keep it away from any
small kids (like guns, huh?) if you want to really be safe.

I dont have kids and I'm the only one that messes with radios at home. I built an AM AA5
using the standard 9pin bottles and added an S-meter to boot. It is built on an aluminum chassis with an acrylic front panel so I do have to be careful about the way it's plugged in and also that I am the only one who uses it!

Rather than just copy an AA5 circuit, I decided to hit the books, and figured out the biasing needed so it is really home-brew! I wound my own bank-wound RF coil and oscillator coil on
acrylic rods using #36 magnet wire. Then, I
figured out a way to wind bank-wound IF coils on these same plastic rods so that I could adjust the distance between the primary and secondary for proper coupling. The only other transformer is the audio output. I had
calculated the proper inductance needed but
I added about 10% more wire for the coils to
compensate for any 'kentucky windage' which
turned out well because I did have to do a little adjusting for band coverage at the osc coil.

I did not shield the IF coils, I did not have cans big enough at the time and so constructed and tested it without shielding... As it turns out, with proper construction and attention to possible sources of feedback etc... you can contruct an IF strip at medium wave without the shielding.

I am using an RF amp, two IF amps, detector and audio output and mixer stage and NO
power xformer.

I had a LOT of fun and learned a heck of a
lot!

The little radio plays just great, like a commercial AM radio from 550 to 1700 Kc!

So, please don't be discouraged, just have fun
and be SAFE!!

Your radio pal, Tony

4769. Re: News Group Cops!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Dave Heil <K8MN@cats-net.com>
Message-ID: <3730A46E.1054@cats-net.com>
Source record: 70507
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Clifton T. Sharp Jr. wrote:
>
> Pinky & The Brain wrote:
> > Please excuse this intrusion but it IS necessary as Bob Headrick is not man
> > enough to accept responses via E-mail to his rantings!! Bob felt it
> > necessary to advise me as follows regarding my recent post of tubes for
> > sale:
> >
> > <Please do not spam. most of the groups you posted to are not sale groups.>
> >
> > Hey Bob,
> > Every list I posted to has got items listed for sale, items
> > of legitimate interest to the Amateur community! If you needed these tubes
> > to get that favorite old piece back on line you would have nothing to say
> > regarding the use of the Group would you? I am not a dealer and therefore
> > cannot be accused of "Spamming" as you have stated. If you are the owner of
> > one of these lists and wish me not to "partake" then take whatever steps you
> > deem necessary however if you are just acting as a self appointed NG Cop
> > then let me suggest that you "Get a Life!!"
> >
> > Go Bother Someone Else!!
> > Steve
>
> I suppose you go into churches on Sunday during services and interrupt
> with a loud "TUUUUUUUUUUUUUUUUUUUUUUUUUUUBES FOR SALE!"
>
> Some sociopaths will never learn about appropriate places for actions.

That's your opinion. If I see an ad and don't have need for the item, I cruise right by it. Why not read the items of interest to you and ignore the rest?

This isn't Sunday, isn't church, his post wasn't loud and you aren't in charge.

Dave K8MN

4770. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Karl Klingman <karl@mindspring.com>
Message-ID: <3730AAAB.3A3404EF@mindspring.com>
Source record: 70508
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

That's why we have CB radio.

Sir wrote:

> What if you wanted to play the flute, but a law required that you learn
> how to play the harp before you were allowed to play the flute?
>
> What if you didn't like the harp and only wanted to play the flute, and
> other flute players called you lazy for not wanting to waste time
> learning an instrument you had no intention of ever playing?
>
> Some people want to get into the hobby of radio to talk on the radio.
> They have no desire to use morse code. How silly it would be to waste
> the time to learn morse code, only to forget it once one has the license
> to go ahead and use voice.
>
> Only people who intend to USE morse code should learn it.

4771. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Jack C Empson Jr <empson@acsu.buffalo.edu>
Message-ID: <3731021D.1B1E6B11@acsu.buffalo.edu>
Source record: 70509
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

That's ok we can argue all we want about keeping the code test, but something needs to be done to bring people into amateur radio not keep them out. Soon enough all the brass pounders will be gone and then the FCC can sell of the rest of the ham spectrum. How soon we have forgotten about 220 MHz.

****
* Jack Empson Instructional Support Technician *
* State University of New York @ Buffalo *
* 10 Norton Buffalo, New York 14260 *
* Voice 716.645.3518 Fax 716.645.3198 *
****

186000 mps it's not just a good idea, it's the law!

4772. Re: Bob Headrick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <925964981.624.17@news.remarQ.com>
Source record: 70510
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Pinky & The Brain <odin@webspan.net> wrote in message
news:7gpg43$4o$1@remarQ.com...
> Please excuse this intrusion but it IS necessary as Bob Headrick is not
man
> enough to accept responses via E-mail to his rantings!! Bob felt it

I received no email from you. Please check your settings.

> necessary to advise me as follows regarding my post of tubes for sale:
> <Please do not spam. most of the groups you posted to are not sale
groups.>

I stand by my statement. You are spamming, and 60% of the groups are not
sale groups.

>
> Hey Bob,
> Every list I posted to has got items listed for sale,
items
> of legitimate interest to the Amateur community! I am not a dealer and
> therefore cannot be accused of "Spamming" as you have stated. If you are
the

You don't understand what spamming is.

> owner of one of these lists and wish me not to "partake" then say so
however
> if you are just acting as a self appointed NG Cop then let me suggest that
> you "Get a Life!!"

Get a clue.

>
> Cordially (sic)
>
> Steve

Steve -

I sent you a rather polite note suggesting that you should not spam the
rec.radio.* groups. Of the groups this was sent to only
alt.ham-radio.marketplace and rec.radio.swap are appropriate for sale
postings. While the others are becoming overrun with spammers like you that
does not make it right. REc.radio.amateur.equipment in particular has become
nearly useless for its intended purpose, the *discussion* of radio
equipment. Crossposting sale stuff to multiple inappropriate newsgroups is

spamming. Please see the charters for the groups, or see the "Guide to the rec.radio usenet groups" or some similar posted monthly by Jeffrey Herman on about the 15'th of the month. If you can't wait do a lookup at dejanews.

In the meantime, please use the groups for thier intended uses. In particular rec.radio.amateur.homebrew is a discussion group, as are most of the others you are posting to.

- 73 Bob W7OV

4773. Re: THIS IS NOT A SALE GROUP

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <925966003.794.45@news.remarQ.com>
Source record: 70511
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dave Heil <K8MN@cats-net.com> wrote in message
news:3730A46E.1054@cats-net.com...
> Clifton T. Sharp Jr. wrote:
> >
> > Pinky & The Brain wrote:
> > > Please excuse this intrusion but it IS necessary as Bob Headrick is
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> > > enough to accept responses via E-mail to his rantings!! Bob felt it
> > > necessary to advise me as follows regarding my recent post of tubes
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> > >
> > > <Please do not spam. most of the groups you posted to are not sale
groups.>
> > >
> > > Hey Bob,
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items
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> > > to get that favorite old piece back on line you would have nothing to
say
> > > regarding the use of the Group would you? I am not a dealer and
therefore
> > > cannot be accused of "Spamming" as you have stated. If you are the
owner of
> > > one of these lists and wish me not to "partake" then take whatever
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Cop
> > > then let me suggest that you "Get a Life!!"
> > >
> > > Go Bother Someone Else!!
> > > Steve
> >
> > I suppose you go into churches on Sunday during services and interrupt
> > with a loud "TUUUUUUUUUUUUUUUUUUUUUUUUUUUBES FOR SALE!"
> >
> > Some sociopaths will never learn about appropriate places for actions.

Bravo - usually use the analogy of calling CQ in CW on teh SSTV frequency,
but I like your's better.

> That's your opinion. If I see an ad and don't have need for the item, I
> cruise right by it. Why not read the items of interest to you and
> ignore the rest?
>
> This isn't Sunday, isn't church, his post wasn't loud and you aren't in
> charge.
>
> Dave K8MN

Maybe so, but the charters for these groups was set by a democratic process that involves a call for discussion, a discussion period, and then a vote, where there must be 100 more votes in favor than against, as well as a certain number of votes total to create a charter for the group. If you wish to change the charter feel free to go through the formal process to get things changed. Subscribe to news.groups if you would like to understand how the usenet groups are created.

The forsale folks filling up the rec.radio.* groups seem to fall into three general groups:

(50%) those who didn't know that rec.radio.swap is the place for sale items, who are happy to post to the right group when they are informed.

(25%) those who do know, but feel that whatever they are selling is such a good deal, or so interesting that it should be shouted in all the groups and

(25%) jerks who don't care about anything but peddling their stuff.

I'll leave it as an exercise for the reader to place "pink" in the proper bucket.

As for just skipping over the sale ads, this doesn't work. When the sale ads are 3x the discussions that the groups are designed for the discussors stop reading and discussing, because there is too much clutter to wade through. Rec.radio.equipment is an example; it is hard to find any discussion left there, but there are plenty of duplicates of rec.radio.swap postings.

Let's work together to keep the newsgroups litter free.

- 73 Bob W7OV

4774. Re: News Group Cops!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: zenith #1 <peitsch@concentric.net>
Message-ID: <7gqj1i$ao@journal.concentric.net>
Source record: 70512
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

AMEN!

Dave Heil wrote in message <3730A46E.1054@cats-net.com>...
>Clifton T. Sharp Jr. wrote:
>>
>> Pinky & The Brain wrote:
>> > Please excuse this intrusion but it IS necessary as Bob Headrick is not
man
>> > enough to accept responses via E-mail to his rantings!! Bob felt it
>> > necessary to advise me as follows regarding my recent post of tubes for
>> > sale:
>> >
>> > <Please do not spam. most of the groups you posted to are not sale
groups.>
>> >
>> > Hey Bob,
>> > Every list I posted to has got items listed for sale,
items
>> > of legitimate interest to the Amateur community! If you needed these
tubes
>> > to get that favorite old piece back on line you would have nothing to
say
>> > regarding the use of the Group would you? I am not a dealer and
therefore
>> > cannot be accused of "Spamming" as you have stated. If you are the
owner of
>> > one of these lists and wish me not to "partake" then take whatever
steps you
>> > deem necessary however if you are just acting as a self appointed NG
Cop
>> > then let me suggest that you "Get a Life!!"
>> >
>> > Go Bother Someone Else!!
>> > Steve
>>
>> I suppose you go into churches on Sunday during services and interrupt
>> with a loud "TUUUUUUUUUUUUUUUUUUUUUUUUUUBES FOR SALE!"
>>
>> Some sociopaths will never learn about appropriate places for actions.
>
>That's your opinion. If I see an ad and don't have need for the item, I
>cruise right by it. Why not read the items of interest to you and
>ignore the rest?

>
>This isn't Sunday, isn't church, his post wasn't loud and you aren't in
>charge.
>
>Dave K8MN

4775. Re: News Group Cops!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Mark Waldron <bogart@nationwide.net>
Message-ID: <37310B75.3B64783E@nationwide.net>
Source record: 70513
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I like it!

I'm gonna get all likkered up, not bathe, smell funny, wear parachute pants,
and do this!

>
> > I suppose you go into churches on Sunday during services and interrupt
> > with a loud "TUUUUUUUUUUUUUUUUUUUUUUUUUUUBES FOR SALE!"

4776. Looking for a Standard EPROM Burner (A3400)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-05 00:00:00 UTC
From: Bill Crann <bcrann@nf.sympatico.ca>
Message-ID: <372f9394.0@209.128.1.3>
Source record: 70629

I am looking for an EPROM Burner that will work for my Standard GX3000 VHF radio.

4777. Re: Meaning of V.C.T.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990505210621.02848.00001247@ngol08.aol.com>
Source record: 70514

In article <372ECA73.7FDF937A@asu.uswest.net>, Will White <wcw@asu.uswest.net> writes:

> keep coming across the abbreviated voltage rating "V.C.T." with respect to
>the secondary/output of power transformers. Can someone please spell this
>abbreviation out for me and explain what it refers to?
>
>Also, why are power ratings described in terms of volt-amps (V.A.) instead of
>watts in some components?

Hello Will,

As others have explained, "VCT" means "volts center tapped" and refers to the entire secondary voltage. It's a shorthand way of telling you the voltage of a secondary, plus the fact that it is center tapped.

VA means Volt Amperes. As others have explained, this term has to do with reactive loads. It is the product of the voltage and curent delivered, regardless of the phase angle involved.

If you are still puzzled by explanations involving phase angles, here's another way to look at it:

Suppose I have a transformer with a 10 volt secondary. If I connect a 10 ohm resistor across the secondary and turn on the power, the resistor will draw 1 ampere and dissipate 10 watts. The transformer must deliver 10 volts at 1 amp to the secondary, which means 10 watts.

Now suppose I replace the 10 ohm resistor with an (ideal) capacitor having 10 ohms reactance. (At 60 Hz that works out to 265 uF). The capacitor will draw 1 ampere - but that 1 ampere current will not be in phase with the voltage, and no power will be dissipated in the capacitor. (It's ideal). But the transformer still has to deliver 1 ampere at 10 volts. The fact that the current and voltage are not in phase means nothing to the transformer - it still has to deliver 10 volts and 1 ampere. 10 volt-amperes, in other words.

The same is true if a 10 ohm reactance ideal inductor is used, or various combinations of resistors and capacitors or inductors.

So the only realistic way to rate transformers is by their VA, because if you rate them by watts, it could be assumed that they will be unaffected by reactive loads - which is not the case.

73 de Jim, N2EY

4778. Censorship?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: bcarver@magiclink.com
Message-ID: <3730dce2.40561837@news.magiclink.com>
Source record: 70515

A few days ago, VERY early in the morning, I "lost it" and responded to one of those no-code messages that seem to blanket all the ham radio newsgroups periodically. I spent a very sleepless night thinking "I shoulda kept my big mouth shut and not risen to the bait".

Someone with a good sense of manners decided my message should go into the bit bucket. Thank you, whoever you are. There's nothing wrong with maintaining a focus on technical and building topics here.

Bill - W7AAZ

4779. Re: News Group Cops!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Gary - KJ6Q <davison7@gte.net>
Message-ID: <vb8Y2.606$pq1.30171@dfiatx1-snr1.gtei.net>
Source record: 70516
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Dave Heil wrote in message
>This isn't Sunday, isn't church, his post wasn't loud and you aren't
in
>charge.
>
>Dave K8MN

BRAVO!

Gary - KJ6Q

4780. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: konstans@one-eleven.net
Message-ID: <373120d8.232600688@nntp.one-eleven.net>
Source record: 70517
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Wed, 05 May 1999 22:44:45 -0400, Jack C Empson Jr
<empson@acsu.buffalo.edu> wrote:

>That's ok we can argue all we want about keeping the code test, but something
>needs to be done to bring people into amateur radio not keep them out. Soon enough
>all the brass pounders will be gone and then the FCC can sell of the rest of the
>ham spectrum. How soon we have forgotten about 220 MHz.

I hope you will endose my adding tot hese sentiments, the idea
of not only bring ing people in but treating them so they want to
stay. I think the number of new is just barely enough ifwe got them to
stay, but more would nice
>
>**
>* Jack Empson Instructional Support Technician *
>* State University of New York @ Buffalo *
>* 10 Norton Buffalo, New York 14260 *
>* Voice 716.645.3518 Fax 716.645.3198 *
>**
>
>186000 mps it's not just a good idea, it's the law!
>
>

Mark Morgan
kb9rqz.

Privacy of unsolicted email is not assured
Unsolictied email will be published forwared
or ourwise disclosed as I see fit.

sending unsolitcied Email will be
deemed aceptance of these terms

4781. Re: Bob Headrick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: tech <tech@dp.net>
Message-ID: <Pine.BSI.3.95.990506012158.27062A-100000@home.dp.net>
Source record: 70518
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

A whole lot of stuff snipped:

Bob and anyone else who reads this.... While I may agree with you for the most part, I must question something here.

USUALLY (95% or better) when I advertize something, I try to stick to Rec. Radio Swap. I'll admit, I may have screwed up a couple times and posted elsewhere, especially early on when I first started to advertize and feel my way around. BUT my point is, is that I seem to recall a time or two, when I posted on ONE news group and it automatically appeared on a couple others. I know this because, I'm too lazy to type it in twice. And too dumb to know how to reproduce it to more than one news group at a time. A computer whiz I'm NOT! I know enough to get by.

So, IF that is true (automatic crossposting), then I was not able to control that. Except not to have posted in the first place. IF that DOES happen, then how can one prevent a post from being cross posted to an unintended target?

I don't agree with a lot of what appears on on the news groups, out of context either, but I've seen MANY arguments about it, when folks tried to curb it. So, I just shoot by the ones I don't care to read, and move on to those I do. It's like trying to put out a forest fire with your urine. If no one is going to listen, why bother? It's like anything else, SELF CONTROL! There's very little of that anymore. Be it the ham bands, cb, computer, highways, etc.

Whatever the case, I STILL enjoy the newsgroups very much, and the chance to talk with you folks whether we whole heartedly agree or disagree.

Thanks in advance for any clarification you can give to my question regarding cross posting.

Lou/tech@dp.net

*NOT affiliated with DP.NET except by subscription.

> I stand by my statement. You are spamming, and 60% of the groups are not
> sale groups.
>
> I sent you a rather polite note suggesting that you should not spam the
> rec.radio.* groups. Of the groups this was sent to only
> alt.ham-radio.marketplace and rec.radio.swap are appropriate for sale

> equipment. Crossposting sale stuff to multiple inappropriate
newsgroups is

> spamming. Please see the charters for the groups, or see the "Guide to the

>
> In the meantime, please use the groups for thier intended uses. In
> particular rec.radio.amateur.homebrew is a discussion group, as
> are most of the others you are posting to.
>
> - 73 Bob W7OV

4782. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Marv Luse <mwluse@dimensional.com>
Message-ID: <373198C1.3FCB22E6@dimensional.com>
Source record: 70519
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Jack C Empson Jr wrote:

> That's ok we can argue all we want about keeping the code test, but something
> needs to be done to bring people into amateur radio not keep them out. Soon enough
> all the brass pounders will be gone and then the FCC can sell of the rest of the
> ham spectrum. How soon we have forgotten about 220 MHz.
>
> **
> * Jack Empson Instructional Support Technician *
> * State University of New York @ Buffalo *
> * 10 Norton Buffalo, New York 14260 *
> * Voice 716.645.3518 Fax 716.645.3198 *
> **
>
> 186000 mps it's not just a good idea, it's the law!

Jack,

Brass pounders will always be around, and in large numbers too. As for new blood in Amateur Radio, there is plenty of that too. Where did the notion that Amateur Radio is dying come from? At my extra class exam (recent) there were about 5 youngsters aged about 10 taking the 5 WPM code test. Come to think of it, there were kids testing at every one of the test sessions I attended.

I think we need to worry more about the F layer falling.

73,

Marv
AB0IO

4783. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: "H. Adam Stevens" <alien@jump.net>
Message-ID: <3731A839.B4DB2140@jump.net>
Source record: 70520
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Chicken Little is an old tale. No one learns. Seems folks are always the same.
Thank you for an independent observation.
I suspect the same small fraction of 13 year olds are still learning code. Like many things that require a little work up front, CW is worth it.
73
H.
de wa5igw

Marv Luse wrote:

> snip--

> Brass pounders will always be around, and in large numbers too. As for new blood in
> Amateur Radio, there is plenty of that too. Where did the notion that Amateur Radio
> is dying come from? At my extra class exam (recent) there were about 5 youngsters
> aged about 10 taking the 5 WPM code test. Come to think of it, there were kids
> testing at every one of the test sessions I attended.
>
> I think we need to worry more about the F layer falling.
>
> 73,
>
> Marv
> AB0IO

4784. Re: IF or AUDIO DSP for HF SSB XCVR - Pros & Cons RE High Noise Levels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7grv1t$gh6$1@news2.bit-net.com>
Source record: 70521
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You may actually want a device designed to remove
specific noises such as the MFJ noise canceller.

Otherwise if your primary mode is SSB and you wish
to fight noise I understand the NIR-12 to be preferred.
(I had a Timewave 599zx and it doesn't handle noise
terribly well. I have sold it and acquired a NIR-12
but have yet to test it.)

K1YP

> Need to purchase two new HF Xcvrs for an EOC located
> in a waterplant (utility) with high RF noise levels.
> Which DSP system is superior for noise suppression... IF or Audio?
> Larry KS4NB

4785. Plans for a 1.2 GHz CW transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: cmcdonld@thezone.net
Message-ID: <7gsaki$n2f$1@nova.thezone.net>
Source record: 70522

Any one have plans for a simple 1.2 GHz CW transmitter and reciver. I need it for a project I'm working on. I'm planing on building two or three 1.2GHz becons for a robot navagation system simlar to GPS. The becons will transmit my call sign every few secons and on board the robot there will be a high gain beam (6-10 directors) on a rotor that will tell the computer how many degrees off center each transmitter is and the the computer will calclate the location of the robot. I want to go with 1.2 Ghz or above because the wave lenght is so small I would be able to easyly build and mount the antenna on the robots "head".

So dose any one have a set of plans to build a simple 1.2 GHz transmitter and reciver or any Ideas for a simpler way of doing this.

4786. [WANTED] Plans for a VHF / UHF Ultra-Sensitive F.S. Meter<<==

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: msisco9939@aol.com
Message-ID: <19990506115942.08498.00000071@ng-ba1.aol.com>
Source record: 70523

Yep:

Will try and return the favor...as i am on the hunt for a Ultra-Sensitive Wide Band Field Strenght meter for T-Hunting....Anyone out there have anything?

Monty

4787. [Neat Item] Factory Motorola Rib Boxes / Plans for Cables too<<==

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: msisco9939@aol.com
Message-ID: <19990506120540.08498.00000072@ng-ba1.aol.com>
Source record: 70524

Yep:

If you are in the building mode, I have plans for most Motorola Radio Cables.

I would=> not<= recommed skimping on the Rib Box due to the possiblities of lunching your High End Radio. I have some Factory Motorola RLN40008B Rib Boxes that are still in the Anti-Static bag and comes with the Original Box and Instructions.

Asking $175.00+$8.00 for shipping and handling

Terms:

Acceptable PrePayment in the form of a Postal Money Order (If you wish immediate processing) or a Personal Check is A-OK too if you do not mind a short delay in Bank Processing time.

Monty

4788. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3731cc84.0@news.netwalk.com>
Source record: 70525

Pagers are used for receiving (well, most of them...there are some two way pages available) so they are not too concerned with matching the antenna.

It is very easy nowadays to make a receiver that is far more sensitive than what is needed, which allows the use of a lousy antenna. It also helps when you have a tall tower and can radiate several kW ERP.

What you are doing is quite a bit different. You want to have a compact portable transmitter. This means the package must be small and not weigh very much, which in turn means small batteries and a small antenna. You will not be able to put out much power, as you already mentioned.

Since you need only a few meters of distance I don't think you really need much of an antenna at all. You could try one of the compact rubber ducks designed for UHF or, as far as that goes, a full size rubber duck. After all, they are only about 3 or 4 inches long. You may also find that, over short distances, you don't need any antenna at all.

If I was you I would then adjust the transmitter for maximum receive signal.

Jim
N8EE

4789. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3731d358.0@news.netwalk.com>
Source record: 70526

Charles H. Reichert wrote in message <372F6679.256EB98C@cig.mot.com>...

[heavy snipping]
>
>Here Here! Funny...it seems all this beer posts started within
>the past year as I don't ever recall having seem them cross posted
>here before then. It seems the beer group posters are doing postings
>to all groups with "homebrew" in it. Isn't this a bit arrogant?
>

What do you expect, Chuck, from someone who boils rotting cattle feed and
then drinks the run-off? ;-)

4790. Re: Electrolytic Capacitor Life?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3771d517.774231106@news.atl.bellsouth.net>
Source record: 70527

On 5 May 1999 05:08:11 GMT, k6vkv@aol.com (K6VKV) wrote:
>I worked at a tracking station site where some power supplies were in
>continuous use for more than twenty years with no failures. When the equipment
>was moved after twenty years, a number of electrolytic capacitor failures
>occured. I suspect the (relatively) long power down and (perhaps) mechanical
>shock triggered failures in the old capacitors.

In our broadcast plant, equipment operates 24x7, sometimes for decades.
When the power company needed to change our underground service due
to some renovations we were making, we scheduled a power down so that
they could do it. When we brought the equipment back up (after carefully
confirming that line voltage was the same), literally dozens of pieces of
equipment had electrolytic capacitor failures. Some were in power supplies,
others were coupling or bypass capacitors. Our staff spent a busy couple
of days getting everything repaired.

It is a common experience that most electrolytic capacitor failures
occur at power on. This incident reconfirmed that. If the equipment
stays under power, the capacitors can last for decades, but turning
it on and off stresses the components. (Same thing with tubes, we
had to retube a number of monitors and scopes in this same incident,
emission didn't come back after the power down, or in some cases
filaments opened up when power was reapplied.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4791. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <3731DB63.A184A264@pedinc.com>
Source record: 70528

Jim wrote:

> Pagers are used for receiving (well, most of them...there are some two way
> pages available) so they are not too concerned with matching the antenna.
>
> It is very easy nowadays to make a receiver that is far more sensitive than
> what is needed, which allows the use of a lousy antenna. It also helps when
> you have a tall tower and can radiate several kW ERP.
>
> What you are doing is quite a bit different. You want to have a compact
> portable transmitter. This means the package must be small and not weigh
> very much, which in turn means small batteries and a small antenna. You
> will not be able to put out much power, as you already mentioned.
>
> Since you need only a few meters of distance I don't think you really need
> much of an antenna at all. You could try one of the compact rubber ducks
> designed for UHF or, as far as that goes, a full size rubber duck. After
> all, they are only about 3 or 4 inches long. You may also find that, over
> short distances, you don't need any antenna at all.
>
> If I was you I would then adjust the transmitter for maximum receive signal.
>
> Jim
> N8EE

It would seem like a simple link, wouldn't it? We started out with little transmitters (AM, on-off keyed) and receivers and 1/4-wave whips, which worked OK, but were inconvenient. The first thing we tried was just folding the antenna up and putting it inside the boxes (about pager sized). Signals on transmit were down about 20 dB right away (measured on the spectrum analyzer with a "reference" antenna), and presumably the same loss was had on the receive end. Radiation "pattern" went all to hell too, and the link success rate fell to as low as 20%. Little "rubber duckies" about inches long improved things, but there's a serious incentive to putting all the antennas inside the boxes (nothing to snag on), where of course there's hardly any room for air, never mind antennas. Ground plane on the PC boards is hardly worthy of the name.

So the requirements tend to militate toward the least-lossy small antennas we can fit in boxes about 2 inches on a side. Tuned loops of some sort, presumably as used in pagers, sound likely. A more sensitive receiver (FM this time!) is in the works, but in the meantime, I'm trying to make this system at least a bit more reliable.

Thanks for the help!
--

Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4792. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3731DFA9.12D7@ixpres.com>
Source record: 70529
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Marv Luse wrote:

> Brass pounders will always be around, and in large numbers too. As for new blood in
> Amateur Radio, there is plenty of that too. Where did the notion that Amateur Radio
> is dying come from? At my extra class exam (recent) there were about 5 youngsters
> aged about 10 taking the 5 WPM code test. Come to think of it, there were kids
> testing at every one of the test sessions I attended.
>
> I think we need to worry more about the F layer falling.
>
> 73,
>
> Marv
> AB0IO

Marv OM,

I agree with you. I don't see ham radio 'dying' at all. I operate in excess of 12 hours a week on the air, basically all CW. Over half of that is mobile CW. The CW bands have plenty of ragchewing going on all the time. I know, I am one of them. And I spend almost all my time on only one band: 40M. A while ago I worked a 16 year old in Phoenix who was running homebrew TUBE-TYPE gear he had made himself, from old handbook articles. Said he just wanted to play around with tubes is all. Have worked several newer hams, some in their teens, who started with codeless techs, then discovered (some to their total amazement) that CW is an excellent ragchewing mode, and works very well. Some are excellent CW ops, know procedure, know how to listen, with less than 2 years experience in ham radio. They try to spread their enthusiasm to some of their non-CW friends, often with no luck. So they go their own ways.
The message here? You are either interested or you are not. Nothing new going on here. CW will continue to be used by the many who find it enjoyable, that is, can attain reasonable skill at it. Apparently many non-cw ops think we are all WORKING to use it, writing stuff down, using straight keys, egad! Hey, it is just another language guys, if you are proficient, and is effortless to use. If you're not wired for it, there are many other modes to use. That is one of the beauties of ham radio.

73,
Don, W6JL

4793. PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <OPIY2.1559$6Z4.406@news-reader.bt.net>
Source record: 70530

Hello,
I've just been given two xtal controlled PMR/SRBR txers...
I've read that I can convert these into a 70cm rigs. There is a book I can buy but this is expensive so can anyone give me any help with this?

You will be rewarded in the next life (or next time I see you down the pub :o) HiHi)

David

4794. SMITH CHART

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: ik0ixi@arrl.net
Message-ID: <3731ee89.5111243@news.etruria.net>
Source record: 70531

HI !
I'm looking for a Smith Chart software that allows to simulate RF
matching solution. For Windows 95/98 only.

Please e-mail to: ik0ixi@arrl.net

Thanks you !

FABIO - IK0IXI

4795. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <PfPeQAAITfM3EwUE@falstaf.demon.co.uk>
Source record: 70532

In article <OPlY2.1559$6Z4.406@news-reader.bt.net>, Someone!
<pickards@zen.co.uk> writes
>Hello,
> I've just been given two xtal controlled PMR/SRBR txers...
>I've read that I can convert these into a 70cm rigs. There is a book I can
>buy but this is expensive so can anyone give me any help with this?
>
>You will be rewarded in the next life (or next time I see you down the pub
>:o) HiHi)
>
>David
>
>
Well, simple question - what are they?. There will be a name/type plate
or two on them. Also what do the controls look like?.

Quite often you can convert them but the yes/no and method depends
entirely on the answer to these questions.

Rgds

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4796. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Keith Lodahl <lodahlkh@internetwis.com>
Message-ID: <3731F9C5.824E1D25@internetwis.com>
Source record: 70533
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Don W6JL wrote:

> Marv Luse wrote:

SNIP

>
>
> If you're not wired for it, there are many other modes to use. That is one of the
> beauties of ham radio.
>
> 73,
> Don, W6JL

That is the point. There are many modes that don't use CW. Many that are interesting and satisfying that don't need knowledge of CW to use. The hobby is diverse and growing more so all the time. Yet there is truly only one test for suitability to belong to the club: knowledge of code.

I have the skill to pass the practical test (and have with the training software) through Advanced, yet I hold only a Tech ticket because of the code. I am still trying but I haven't found my method for learning code yet. I memorized the tapes, and have tried a couple of different computer tutor programs, but so far I have not been able to master CW. I will get it eventually, but it is not coming easy. I resent comments from other hams about being an "appliance user" or the comments on this list about code being a "moron filter." We all have assets in different areas. Learning the code is just plain a bitch for me, and is for others.

I see Techs filling key spots in many clubs, taking on important jobs in weather nets, coordinating public service activities and the like. Some of these folks will upgrade, and some will not. The code will be an obstacle for some, the practical test will be an obstacle for some, and some are content with what they can do with their current ticket. None deserve to be looked down upon because of lack of code speed.

--
Keith Lodahl
Mayville, Wisconsin

4797. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Someone! <pickards@zen.co.uk>
Message-ID: <zunY2.1595$6Z4.539@news-reader.bt.net>
Source record: 70534

Hello,
sorry. Motorolla CD-100
There are three rotary controls, Vol, Sq and what I believe to be a channell
selector (10 places). One of them has been converted to a single channel
use..perhaps to be a repeater. There is a switch postioned horizontally,
and it's not clear what that does, there is a conection for a mic, an ANT
and a power source

TTFN David
Robin Birch wrote in message ...
>In article <OPlY2.1559$6Z4.406@news-reader.bt.net>, Someone!
><pickards@zen.co.uk> writes
>>Hello,
>> I've just been given two xtal controlled PMR/SRBR txers...
>>I've read that I can convert these into a 70cm rigs. There is a book I
can
>>buy but this is expensive so can anyone give me any help with this?
>>
>>You will be rewarded in the next life (or next time I see you down the pub
>>:o) HiHi)
>>
>>David
>>
>>
>Well, simple question - what are they?. There will be a name/type plate
>or two on them. Also what do the controls look like?.
>
>Quite often you can convert them but the yes/no and method depends
>entirely on the answer to these questions.
>
>Rgds
>
>Robin
>____
>Robin Birch robin@falstaf.demon.co.uk
>
>M1ASU/2E0ARJ Old computers and radios always welcome

4798. Re: Bob Headrick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Glenn <glenn.hansen@usa.net>
Message-ID: <BUnY2.34$0K1.6096@news.uswest.net>
Source record: 70535
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Nice USENET police work Bob. My hat is off to you and the job you do.
Uh....your complaints are actually off topic Bob. Write yourself a Internet
Infraction Ticket. You need to leave a valid E-mail address so you can
receive your electronic summons for your appearance at the Judicial Chat
Room to receive your trail date.

Why not start a crusade against wasted bandwidth discussing what radio group
a radio item for sale should be posted in. You have caused more clutter
with your complaints than a single amateur item posted for sale in the wrong
radio group ever did.

rec.radio.swap is such a dirt whole of dealers, auctions and spam it is easy
to understand the temptation of an individual party to post in some of the
other NGs.

IMHO.....

Bob Headrick <bobh@proaxis.com> wrote in message
news:925964981.624.17@news.remarQ.com...
>
> Pinky & The Brain <odin@webspan.net> wrote in message
> news:7gpg43$4o$1@remarQ.com...
> > Please excuse this intrusion but it IS necessary as Bob Headrick is not
> man
> > enough to accept responses via E-mail to his rantings!! Bob felt it
>
> I received no email from you. Please check your settings.
>
> > necessary to advise me as follows regarding my post of tubes for sale:
> > <Please do not spam. most of the groups you posted to are not sale
> groups.>
>
> I stand by my statement. You are spamming, and 60% of the groups are not
> sale groups.
>
> >
> > Hey Bob,
> > Every list I posted to has got items listed for sale,
> items
> > of legitimate interest to the Amateur community! I am not a dealer and
> > therefore cannot be accused of "Spamming" as you have stated. If you are
> the
>
> You don't understand what spamming is.

>
> > owner of one of these lists and wish me not to "partake" then say so
> however
> > if you are just acting as a self appointed NG Cop then let me suggest
that
> > you "Get a Life!!"
>
> Get a clue.
>
> >
> > Cordially (sic)
> >
> > Steve
>
> Steve -
>
> I sent you a rather polite note suggesting that you should not spam the
> rec.radio.* groups. Of the groups this was sent to only
> alt.ham-radio.marketplace and rec.radio.swap are appropriate for sale
> postings. While the others are becoming overrun with spammers like you
that
> does not make it right. REc.radio.amateur.equipment in particular has
become
> nearly useless for its intended purpose, the *discussion* of radio
> equipment. Crossposting sale stuff to multiple inappropriate newsgroups
is
> spamming. Please see the charters for the groups, or see the "Guide to
the
> rec.radio usenet groups" or some similar posted monthly by Jeffrey Herman
on
> about the 15'th of the month. If you can't wait do a lookup at dejanews.
>
> In the meantime, please use the groups for thier intended uses. In
> particular rec.radio.amateur.homebrew is a discussion group, as
> are most of the others you are posting to.
>
> - 73 Bob W7OV
>
>
>

4799. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Don or Darla Arnold <DArnold@datasync.com>
Message-ID: <37321809.2096AFA7@datasync.com>
Source record: 70536
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

WELL SAID
don
kb5fhx

Keith Lodahl wrote:

> Don W6JL wrote:
>
> > Marv Luse wrote:
>
> SNIP
>
> >
> >
> > If you're not wired for it, there are many other modes to use. That is one of the
> > beauties of ham radio.
> >
> > 73,
> > Don, W6JL
>
> That is the point. There are many modes that don't use CW. Many that are interesting and
> satisfying that don't need knowledge of CW to use. The hobby is diverse and growing more
> so all the time. Yet there is truly only one test for suitability to belong to the club:
> knowledge of code.
>
> I have the skill to pass the practical test (and have with the training software) through
> Advanced, yet I hold only a Tech ticket because of the code. I am still trying but I
> haven't found my method for learning code yet. I memorized the tapes, and have tried a
> couple of different computer tutor programs, but so far I have not been able to master
CW.
> I will get it eventually, but it is not coming easy. I resent comments from other hams
> about being an "appliance user" or the comments on this list about code being a "moron
> filter." We all have assets in different areas. Learning the code is just plain a bitch
> for me, and is for others.
>
> I see Techs filling key spots in many clubs, taking on important jobs in weather nets,
> coordinating public service activities and the like. Some of these folks will upgrade,
and
> some will not. The code will be an obstacle for some, the practical test will be an
> obstacle for some, and some are content with what they can do with their current ticket.
> None deserve to be looked down upon because of lack of code speed.
>
> --

> Keith Lodahl
> Mayville, Wisconsin

--
OUR WEB PAGE UPDATED 17 April 99
http://www.geocities.com/Heartland/Valley/6430 Darla and Don's Website
http://hattiesburg.net/columns/darnold.shtml My online column

DARLA (dawn) ICQ# 7341931
Don (weathernut) ICQ# 14664294

Right now we are on the threshold of whatever comes next!!!
MAYBE!!

4800. Article on Converting UPS for Ham Use?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: windbrkr@erols.com
Message-ID: <MPG.119c0af326b71074989713@news.erols.com>
Source record: 70537

Thanks to Pete WA3NNA for pointing me to the QST article (Jan. 99, pg. 64) that I was looking for.

Bob K9CMR

4801. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: J W Schermerhorn <skemi@capital.net>
Message-ID: <37326EF2.7FB6@capital.net>
Source record: 70538
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

5/6/99

Except that novices have no phone privileges on the amateur HF bands
that most would want to use.

Don or Darla Arnold wrote:
>
> WELL SAID
> don
> kb5fhx
> >
> > > Marv Luse wrote:

> > > If you're not wired for it, there are many other modes to use. That is one of the
> > > beauties of ham radio.
> > >
> > > 73,
> > > Don, W6JL

4802. Looking to sell Tek scope collection...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <37325062.4CBB@pop.removethistomailme.net>
Source record: 70539

Just upgraded to a new DPO for the shack and need to sell some existing gear to make room. The following are available for inspection and pickup in Kirkland, Washington (Seattle area):

Item 1

Tektronix 434 analog storage oscilloscope, 25 MHz bandwidth. In excellent condition, fully operational, with original manual. Front panel and CRT like new.

$100.00 firm if picked up locally, or $150.00 plus shipping otherwise. The other scopes listed below must be picked up locally -- I don't want to ship them due to their size and fragility.

Item 2

Tektronix 7834 oscilloscope (400 MHz mainframe, variable-persistence analog storage) and 7603 analog (100 MHz mainframe, non-storage) oscilloscope, with the following plugins:

1 7A26 vertical amp (8-9 out of 10, works great)
1 7A12 vertical amp (cosmetically 6-7 out of 10, works great)
1 7A12 vertical amp (cosmetically 6-7 out of 10, works great but Ch1/Ch2/Alt/Chop/Add switch is a little balky, probably needs lubing)
1 7D15 225 MHz counter (near mint, w/manual on microfiche)
1 7B53 trigger (excellent)
1 7B92 trigger (near mint cosmetically, but every few minutes it'll skip a trace or two for some reason)
1 7A13 differential amp (excellent, w/manual on microfiche)
1 7D02 logic analyzer (no cables/probes, seems to boot OK in the 7603 but otherwise untested)
1 7D01 logic analyzer (no cables/probes, seems to boot OK in the 7603)

Both 7000-series mainframes and all plugins listed above for $350.00 firm. Includes original Tektronix manuals for 7834 and 7603 mainframes. Again, this gear must be picked up in Kirkland.

Item 3

Tektronix 454 oscilloscope (150 MHz portable), excellent cosmetic and operating condition. $75.00 firm, including original Tektronix manual (missing cover and some pages near front).

Or pick up all 4 scopes for $450.00. Start your collection today! :-)

Personal check OK. Email with any questions or to arrange an inspection
(note the spamproofed address). .JPG photos available on request.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

4803. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <926053641.474.13@news.remarQ.com>
Source record: 70540
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Glenn <glenn.hansen@usa.net> wrote in message
news:BUnY2.34$0K1.6096@news.uswest.net...
> Nice USENET police work Bob. My hat is off to you and the job you do.
> Uh....your complaints are actually off topic Bob. Write yourself a
Internet
> Infraction Ticket. You need to leave a valid E-mail address so you can
> receive your electronic summons for your appearance at the Judicial Chat
> Room to receive your trail date.

My email address is valid, and I have plenty of spam to prove it.

> Why not start a crusade against wasted bandwidth discussing what radio
group
> a radio item for sale should be posted in. You have caused more clutter
> with your complaints than a single amateur item posted for sale in the
wrong
> radio group ever did.

It wouldn't be a problem if there were only "a single amateur item posted in
the wrong radio group". Rec.radio.amateur.equipment has become completely
(> 70%?) overrun, and I see the spam spreading to the rest of the groups.
What would be so hard about using the groups for thier intended purpose?

- Bob Headrick W7OV

4804. '73 - '74 Pop. Elec. Mag.s ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Ed Ngai <engai@sprintmail.com>
Message-ID: <3732839B.5D7A6CFB@sprintmail.com>
Source record: 70541

Hi , I'm looking for some old magazines.
Popular Electronics issues from 'Jan 1973 to Dec 1974'.
Back then Ziff Davis was the Publishers.

Thanks
Ed,
KF6DZL

4805. Re: [WANTED] Plans for a VHF / UHF Ultra-Sensitive F.S. Meter<<==

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: &RETIRED0 <&retired0@hotmail.com>
Message-ID: <3731E845.25F62985@hotmail.com>
Source record: 70542

MSisco9939 wrote:
>
> Yep:
>
> Will try and return the favor...as i am on the hunt for a Ultra-Sensitive Wide
> Band Field Strenght meter for T-Hunting....Anyone out there have anything?
>
> Monty

How sensitive is "ultra-sensitive"?
How wide band is "wide band"?
What frequency range?

If there's a radio station, TV transmitter, Pager, Cellphone,
Ham band, Commercial band, Garage door opener, Cordless phone,
baby monitor, FRS radio, radar detector, airplane, remote controlled
toy, unshielded computer, (the list is endless) inside your definition
of wide band, an ultra-sensitive field strength meter will be all but
useless.

You could build a swept narrow-band field-strength meter,
normally called a spectrum analyzer, but they're typically not
ultra-sensitive.
mike
--
Big list of WANTS and FORSALES at link below.
Return Address is Bogus. Click below to reply
http://www.geocities.com/SiliconValley/Monitor/4710/
Or you can DELETE the & in the "from" address.

4806. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-06 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <71MpmKAU4gM3EwAK@falstaf.demon.co.uk>
Source record: 70543
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <zunY2.1595$6Z4.539@news-reader.bt.net>, Someone!
<pickards@zen.co.uk> writes
>Hello,
> sorry. Motorolla CD-100
>There are three rotary controls, Vol, Sq and what I believe to be a channell
>selector (10 places). One of them has been converted to a single channel
>use..perhaps to be a repeater. There is a switch postioned horizontally,
>and it's not clear what that does, there is a conection for a mic, an ANT
>and a power source
>
Ok,
I'm afraid that I don't know anything about motorola ones. I have cross
posted this to the uk news list. perhaps someone there will be able to
help.

Robin
>TTFN David
>Robin Birch wrote in message ...
>>In article <OPlY2.1559$6Z4.406@news-reader.bt.net>, Someone!
>><pickards@zen.co.uk> writes
>>>Hello,
>>> I've just been given two xtal controlled PMR/SRBR txers...
>>>I've read that I can convert these into a 70cm rigs. There is a book I
>can
>>>buy but this is expensive so can anyone give me any help with this?
>>>
>>>You will be rewarded in the next life (or next time I see you down the pub
>>>:o) HiHi)
>>>
>>>David
>>>
>>>
>>Well, simple question - what are they?. There will be a name/type plate
>>or two on them. Also what do the controls look like?.
>>
>>Quite often you can convert them but the yes/no and method depends
>>entirely on the answer to these questions.
>>
>>Rgds
>>
>>Robin
>>____
>>Robin Birch robin@falstaf.demon.co.uk

>>
>>M1ASU/2E0ARJ Old computers and radios always welcome
>
>

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4807. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <3733CFF7.D8A74E7E@mindspring.com>
Source record: 70430
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Don W6JL wrote:
>
> I myself cannot see where using "tapes" and "computers" is an
> effective learning method
> for learning to use the code conversationally, as we do in ham radio.
> First of all, it
> is boring, listening to basically boring content being sent. As you
> said, you eventually
> memorized the tapes.
>

Some software (e.g., Morse Tutor Gold) is pretty effective, in that it sends typical, but random, QSOs. Of course that may be boring (many qsos are!), but it is better than the old 5 element groups.

Phil

4808. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: JayCee <jaycee@nospam.demon.co.uk>
Message-ID: <08n8jRAMBiM3EwA6@midmarsh.demon.co.uk>
Source record: 70544

In article <372F3E32.133D39B9@pedinc.com>, Mark Nelson
<mnelson@pedinc.com> writes
>Where can I find info about the small antennas used in things like
>pagers. I know pagers work at VHF/UHF frequencies, but even so the
>antennas in them are quite small. I have need for very small antennas
>for a short-range (a few meters) wearable data link at 70cm, and haven't
>found much data on them so far.

At our local club we had an practical evening where we had to make a
small helical aerial for our handhelds for use with our 70cm repeater.

The aerial consisted of 8 very close wound turns of 16 swg wire over a
piece of plastic biro case. One end of the coil replaced the centre pin
of a BNC plug. The piece of biro was a tight fit in the end of the plug,
replacing the normal locking nut.
>
>Also, what sort of measuring equipment can I buy or build to tune these
>antennas? The commercial and homebrew directional couplers I've seen
>are huge by comparison to my circuit board and antenna, and the power is
>so low (a few mW) that I doubt I could get any readings anyway. Any
>suggestions are much appreciated.

We used two methods. A field strength meter and an AEA UHF anaylst.
Short pieces were nibbled from the open end of the coil until it
resonated about 1MHz lower than needed in the band. Then shrink wrap was
used to 'seal' the coil in place. The shrink wrap brought the resonance
up to the appropriate place in the band.

On the practical side of things this small (about 1 inch sticking up out
of the BNC plug x about 0.5 in dia overall) works very well. 700mW gets
a fully quietening signal into the repeater 4 miles away. Also when the
rig is stood in my kitchen my movements around the room have far less
masking effect on the received sigs than with either of the much longer
commercially made rubber duck type aerials I use.

Hope this may give an idea of a direction to try.

73 John M1BTR (Lincolnshire, England)
--
m1btr@midmarsh.demon.co.uk M1BTR@GB7SKG
QRV 6m 2m 70cm 3cm Member: BATC RIG RSGB UKRS

4809. Re: FS: Plessey mixer & receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: quatsein@island.net
Message-ID: <37323c68.2240175174@news.cr.island.net>
Source record: 70545

Seems to me the quantity you are selling indicates that these
chips may have been provided as Samples. Selling them
would be a unwelcome act in the eyes of Plessey Semi. I
dout anybody would buy them, as most people involved
with IC work have access to there own supply. I really
hope that this is not the case.

Steve Carlisle VE7AHL

On Tue, 04 May 1999 23:42:16 GMT, kb9olm@hotmail.com wrote:

>For sale NOS:
>
>1. Plessey SL6440 high level mixer ICs.
>Package of two ICs is $10 plus shipping from
>San Francisco Bay Area.
>2. Plessey SL6601 complete FM receiver ICs
>with PLL demodulator.
>Package of two ICs is $10 plus shipping.
>
>Please reply to Vlad at kb9olm@hotmail.com
>
>-----------== Posted via Deja News, The Discussion Network ==----------
>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4810. Re: FS: Plessey mixer & receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Steve Ratzlaff <sratzlaf@flash.net>
Message-ID: <37325545.58E7195C@flash.net>
Source record: 70546

I've bought a number of the SL6440's from Vlad. He's selling them at a very good price--try to find them somewhere else! It may not be completely obvious from his post, but Vlad has a lot more than just 2 IC's available.
Steve AA7U

4811. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01be983c$2b8a5ba0$abde04d0@p133>
Source record: 70547

What's biro, for those of us who speak American instead of English?

73 de KF4PV, Laszlo
--
To reply, remove the text spammenot from the e-mail address.

<snip>
> The aerial consisted of 8 very close wound turns of 16 swg wire over a
> piece of plastic biro case.
<snip>
>
> 73 John M1BTR (Lincolnshire, England)

4812. FS - 12BY7A's and 1620's

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990507000144.18762.00000361@ng30.aol.com>
Source record: 70548

I am selling five (5) 1620 RCA tubes, NOS in original boxes; $25 all

Also selling (5) 12BY7A tubes. Three (3) are RCA NOS in original boxes. One (1) is Sylvania, and one (1) is CBS (GE markings), and these two are used, but test like new, in white boxes; $25 all

Buy all 10 tubes for $50, and Ii¿½ll pay the shipping (US 48 only).

Please respond by email.

Regards,
Tom Mitchell
email - OvrReactor@aol.com

4813. "Lowfer" radios (Longwave Radios)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: njmedman@aol.com
Message-ID: <19990507001906.08233.00000380@ng-fe1.aol.com>
Source record: 70549

I'm looking for a good "Lowfer" or Longwave radio. Since most are home brewed,
I figured I'd check here. If you have any for sale (or free.. :)) or know where
I can get my hands on some decent kits that are easy to make, please email me!

njmedman@aol.com
Andy, KF4KHC

=-=-=-=-=
73's de KF4KHC (ex: HL9HCT)
Clarksville, TN USA
=-=-=-=-=

4814. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: "H. Adam Stevens" <alien@jump.net>
Message-ID: <37327996.3CB1BAAA@jump.net>
Source record: 70550
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Marconi vs Sarnoff

Bob Headrick wrote:
snip-

> My email address is valid, and I have plenty of spam to prove it.

oh I know that tune.......

> It wouldn't be a problem if there were only "a single amateur item posted in
> the wrong radio group". Rec.radio.amateur.equipment has become completely
> (> 70%?) overrun, and I see the spam spreading to the rest of the groups.
> What would be so hard about using the groups for thier intended purpose?
>
> - Bob Headrick W7OV

4815. Re: Plans for a 1.2 GHz CW transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <926056502.454.50@news.remarQ.com>
Source record: 70551

I can't help you with your xmitter, but I've heard of similar problems solved for autonomous model helicopters. I don't have a web reference for you, but you might start searching at Stanford and Georgia Tech. Some of the solutions used primitive inertial guidance; one used differential GPS. It seems to me ultrasonic audio would work just as well; I haven't a clue on the range and resolution you need, though. Granted, there's something anachronistic about Tobor's rotating parabolic dish.

Good luck.

Michael.

Chris Mcdonald <cmcdonld@thezone.net> wrote in message news:7gsaki$n2f$1@nova.thezone.net...
> Any one have plans for a simple 1.2 GHz CW transmitter and reciver. I
> need it for a project I'm working on. I'm planing on building two or
> three 1.2GHz becons for a robot navagation system simlar to GPS. The
> becons will transmit my call sign every few secons and on board the
> robot there will be a high gain beam (6-10 directors) on a rotor that
> will tell the computer how many degrees off center each transmitter is
> and the the computer will calclate the location of the robot. I want
> to go with 1.2 Ghz or above because the wave lenght is so small I
> would be able to easyly build and mount the antenna on the robots
> "head".
>
> So dose any one have a set of plans to build a simple 1.2 GHz
> transmitter and reciver or any Ideas for a simpler way of doing this.
>

4816. Re: Bob Headrick

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <373289C4.1C5F59E3@megsinet.net>
Source record: 70552
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Glenn wrote:
> Nice USENET police work Bob. My hat is off to you and the job you do.
> Uh....your complaints are actually off topic Bob. Write yourself a Internet
> Infraction Ticket. You need to leave a valid E-mail address so you can
> receive your electronic summons for your appearance at the Judicial Chat
> Room to receive your trail date.

Metadiscussion of the type Bob is doing is on topic in any newsgroup whose
charter does not prohibit it specifically. You really need to spend some
time in news.newusers.

> rec.radio.swap is such a dirt whole of dealers, auctions and spam it is easy
> to understand the temptation of an individual party to post in some of the
> other NGs.

...so that he can help make them the same kind of dirtholes.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4817. FS: Power Triodes, more...

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: ovrreactor@aol.com-nospam
Message-ID: <19990507034111.21076.00000422@ng-ca1.aol.com>
Source record: 70553

I just updated my "online garage sale" website. I lowered a few of my asking prices, and added a few "new" items...like;

A quad of Mullard EL84's (NOS)

and

A sleeve (5) ECC81 (NOS)

There are also some power transmitting triodes. Please stop by my site and see what I'm liquidating (there's a LOT of stuff posted). I'm NOT a professional tube seller. I'm just trying to thin out my excess stuff. Feel free to haggle! I just want to get some cash so I can go buy MORE junk at the next TRW Hamfest (don't tell my wife).

Regards,
Tom Mitchell
website - http://members.aol.com/Reactor001

4818. Re: Plans for a 1.2 GHz CW transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <3732D9A1.F7319542@gate.net>
Source record: 70554

Chris,

There are a number of all mode scanners available which will receive 1.2 G. The AOR8000 has been posted on the swap group lately.

Now transmitting COULD be an easier proposition, since you are looking for a CW beacon. Consider using a lower IF strip, and a varactor for varactor multiplying. An FM unit can be converted to a transmit converter by modifying the final amplifier to act as a mixer.

A varactor multiplier is a very efficient device, relatively. Efficiencies in the 50 - 60% range can be achieved. It also does not need a DC supply, so one can be mounted right at the antenna. One limitation is they produce sever distortion on SSB, so are only usable on CW, which fits your application.

One scheme would be to use a varactor tripler in conjunction with the transmitter strip from a commercial 420 MHz FM transceiver.

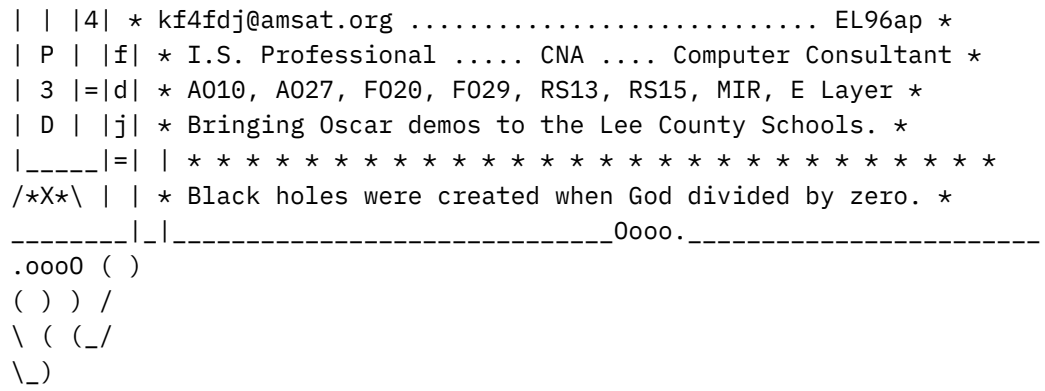
A company called Microwave Modules has produced these units in the past.

I hope this helps a little, and will maybe generate some more brainstorming for you.

73, Mike

Chris Mcdonald wrote:
>
> Any one have plans for a simple 1.2 GHz CW transmitter and reciver. I
> need it for a project I'm working on. I'm planing on building two or
> three 1.2GHz becons for a robot navagation system simlar to GPS. The
> becons will transmit my call sign every few secons and on board the
> robot there will be a high gain beam (6-10 directors) on a rotor that
> will tell the computer how many degrees off center each transmitter is
> and the the computer will calclate the location of the robot. I want
> to go with 1.2 Ghz or above because the wave lenght is so small I
> would be able to easyly build and mount the antenna on the robots
> "head".

__\/__
| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 .... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 .... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *


| | |4| * kf4fdj@amsat.org ..... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
_____|_|_____Oooo._____
.oooO ( )
( )) /
\ ((_/
_)

4819. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: jpos <jpos@mobilemark.com>
Message-ID: <6XBY2.14542$wE1.8262@nntp0.chicago.il.ameritech.net>
Source record: 70555
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I just finished giving my seven year old his code lesson. He's learning the code to earn a award in his Tiger Cub Scout group. He is a seven year old that came to me to learn the code, and has no interest in radio, I would think that anyone who is interested in radio should stop crying about it and donate the 15 minutes a night for 2 weeks, and learn it.

No one complains about having to learn how to use windows before they can surf the net....

Jerry N9DKQ
not a Brass Pounder.....

Marv Luse wrote in message <373198C1.3FCB22E6@dimensional.com>...
>Jack C Empson Jr wrote:
>
>> That's ok we can argue all we want about keeping the code test, but something
>> needs to be done to bring people into amateur radio not keep them out. Soon enough
>> all the brass pounders will be gone and then the FCC can sell of the rest of the
>> ham spectrum. How soon we have forgotten about 220 MHz.
>>
>> **********
>> * Jack Empson Instructional Support Technician *
>> * State University of New York @ Buffalo *
>> * 10 Norton Buffalo, New York 14260 *
>> * Voice 716.645.3518 Fax 716.645.3198 *
>> **********
>>
>> 186000 mps it's not just a good idea, it's the law!
>
>Jack,
>
>Brass pounders will always be around, and in large numbers too. As for new blood in
>Amateur Radio, there is plenty of that too. Where did the notion that Amateur Radio
>is dying come from? At my extra class exam (recent) there were about 5 youngsters
>aged about 10 taking the 5 WPM code test. Come to think of it, there were kids
>testing at every one of the test sessions I attended.

>
>I think we need to worry more about the F layer falling.
>
>73,
>
>Marv
>AB0IO
>

4820. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: VINCENT COPPOLA <vinyc@snet.net>
Message-ID: <3732E58A.7BDD@snet.net>
Source record: 70556

It's like the antenna bible, the author is KRAUSS(spelling?), and I
can't remember the title. I worked on a 930 mhz pager project once and
that book was referred to.

I just hope you are very up on advanced math. It's not like reading an
ARRL manual.

As far as test equipment goes, we used the very state-of-the-art HP
analyzers and it did the job. But the prices were $$$$$K. However, hams
can achieve good success on much less.

de Vince,
N1VC

Mark Nelson wrote:
>
> Where can I find info about the small antennas used in things like
> pagers? I know pagers work at VHF/UHF frequencies, but even so the

>
> Also, what sort of measuring equipment can I buy or build to tune these
> antennas? The commercial and homebrew directional couplers I've seen
> are huge by comparison to my circuit board and antenna, and the power is
> so low (a few mW) that I doubt I could get any readings anyway. Any
> suggestions are much appreciated.
>
> --
> Mark Nelson AJ2X
>
> A collector of TV signal boosters and UHF converters -- God help me!
> http://www.geocities.com/TelevisionCity/Set/6312/

4821. Re: SMITH CHART

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: jpos <jpos@mobilemark.com>
Message-ID: <w1CY2.14543$wE1.8008@nntp0.chicago.il.ameritech.net>
Source record: 70557

Fabio,

Look into winSMITH 2.0 by Noble Publishing. I think they have a web site but
I don't know the ADR. Or you can give them a call at US 770 908-2320.

I've been using this package for about 6 monthes now and it works great. It
allows you to add all the common circuit elements to achive a match.

Jerry N9DKQ

IK0IXI wrote in message <3731ee89.5111243@news.etruria.net>...
>HI !
>I'm looking for a Smith Chart software that allows to simulate RF
>matching solution. For Windows 95/98 only.
>
>Please e-mail to: ik0ixi@arrl.net
>
>
>
> Thanks you !
>
>FABIO - IK0IXI

4822. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <3732ECD8.936C6613@ix.netcom.com>
Source record: 70558
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Marconi vs Sarnoff"
You said it perfectly in those few words, Adam.

Fluid pricing via networked auction is the wave of the future
in many, many areas- not just in radio stuff.
Hams are into it early because (contrary to cynical popular myth)
most hams are progressive people.

The charge of "clogging up the newsgroups" is nonsense.
Those who wish to participate in the new market can do so.
Those who do not can set the filters on their browsers
and they will never even see the deals go by,
leaving them with the "pure" version they claim to desire.

Bandwidth charges are equally nonsense. The binary groups
distributing graphic files and programs take up
thousands of times the bandwidth of the ham groups
with lots to spare, thank you. If we tripled the
number of radio ads here, we'd still not be a speck
on the bandwidth map.

It is useless and senseless to protest against this new market,
especially when every modern browser is capable of
deleting messages some people claim they don't want to
see before they ever see them.
You don't read every word in a newspaper, either.
I don't see anyone calling their newspaper and
complaining "you print some things I don't want to read!"
That would be silly. It's equally silly to protest
against newsgroup articles they don't want to read
when they have the means to simply *not see them*
right at their fingertips.

People need to stop claiming they are somehow being harmed
by the sale posts. It just isn't true.
They're harming themselves by not setting filters
that were put there for that purpose.
Same as someone who refuses to wear a seat belt-
he has no one to blame for his bruised forehead but himself.

Steam engine makers and tube manufacturers protested, too.
And the future --just-- --kept-- --coming.
You can stay behind if you wish.
But don't damn those who choose to progress,
especially since they are not harming you in any way.

73 DE Dave Stinson AB5S
arc5@ix.netcom.com

4823. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990507094929.07988.00000327@ng-cl1.aol.com>
Source record: 70559

Oh, blow it out your self-righteous ass already...if you don't want to read a certain header, DONT click on it...you're pissin' in the wind bitchin about this anyway...I could get on top of Mt. Everest and YELL I don't like nosy people, but that wouldn't STOP it, would it???Lighten up and go out and GET LAID or something...Jesus.....
JOE

>Bob Headrick wrote:
>snip-
>
>> My email address is valid, and I have plenty of spam to prove it.
>
>oh I know that tune.......
>
>> It wouldn't be a problem if there were only "a single amateur item posted
>in
>> the wrong radio group". Rec.radio.amateur.equipment has become completely
>> (> 70%?) overrun, and I see the spam spreading to the rest of the groups.
>> What would be so hard about using the groups for thier intended purpose?
>>
>> - Bob Headrick W7OV
>
>
>
>
>
>
>
>
>

4824. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Pinky & The Brain <odin@webspan.net>
Message-ID: <926085959.834.70@news.remarQ.com>
Source record: 70560

Bravo!!! Nuff said!!!

TUBECNTRAL wrote in message
<19990507094929.07988.00000327@ng-cl1.aol.com>...
>
>Oh, blow it out your self-righteous ass already...if you don't want to read
a
>certain header, DONT click on it...you're pissin' in the wind bitchin about
>this anyway...I could get on top of Mt. Everest and YELL I don't like nosy
>people, but that wouldn't STOP it, would it???Lighten up and go out and GET
>LAID or something...Jesus.....
> JOE

4825. Re: Plans for a 1.2 GHz CW transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <3732FC5C.B2542FE6@pedinc.com>
Source record: 70561

Chris Mcdonald wrote:

> Any one have plans for a simple 1.2 GHz CW transmitter and reciver. I
> need it for a project I'm working on. I'm planing on building two or
> three 1.2GHz becons for a robot navagation system simlar to GPS. The
> becons will transmit my call sign every few secons and on board the
> robot there will be a high gain beam (6-10 directors) on a rotor that
> will tell the computer how many degrees off center each transmitter is
> and the the computer will calclate the location of the robot. I want
> to go with 1.2 Ghz or above because the wave lenght is so small I
> would be able to easyly build and mount the antenna on the robots
> "head".
>
> So dose any one have a set of plans to build a simple 1.2 GHz
> transmitter and reciver or any Ideas for a simpler way of doing this.

For a transmitter, why not use one of the local oscillator circuits for the 1.6 GHz ISTM (?) television receivers of a decade or so ago? I used to have one (it may still be in the junk box), and as I recall, it was just a tuned line oscillator on a PC board, using an MRF901. Not all that stable, of course, but it may suffice for short-term OOK use. An LO chain for a WEFAX satellite receiver might be another good place to look.

--
Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4826. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37334588.12FCE20A@bellsouth.net>
Source record: 70562

I am by no means opposed to auctions (at least for tangible equipment --
spectrum auctions are another story!) But as for advertising them in
places other than groups whose charters allow advertising...

David Stinson wrote:
> The charge of "clogging up the newsgroups" is nonsense.
> Those who wish to participate in the new market can do so.
> Those who do not can set the filters on their browsers
> and they will never even see the deals go by,
> leaving them with the "pure" version they claim to desire.

Filters are a smoke-screen, which I refuse to use, either in my
newsreader or my mailer.

The problem is, that your computer must still download the header of the
message in question before your filters can act on it. Not really a big
deal for *most* American users, who don't pay per-minute connect charges
and who have fast modems. Quite possibly a serious problem for users in
some foreign countries, who can't get unlimited-time Internet accounts.
(and also possibly a serious problem for Americans in more rural areas
who have to pay long-distance telephone charges to reach the Internet)

Why should DX3DX have to spend his money to download and immediately
reject headers of messages that, by group consesus, should never have
existed in that forum? This is why there is a separate group for sale
items: if DX3DX is shopping for equipment and *wants* to read sale ads,
he knows where to look -- if he's shopping for technical advice, he
knows to look in a different place.

(I must wonder if this is why the proportion of DX amateurs
participating in the rec.radio.* newsgroups is MUCH lower than the
proportion of DX amateurs in the hobby in general)

Unfortunately, you're probably right that the sale posts will never be
eradicated from non-sale groups, just as spam will never disappear from
our email boxes. Sure doesn't make it right.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

4827. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: jubal@my-dejanews.com
Message-ID: <7gv2r9$ec3$1@nnrp1.deja.com>
Source record: 70563

Replacement 1900mHz cell phone antennas about 1" long are available.

Russ

In article <3731DB63.A184A264@pedinc.com>,
mnelson@pedinc.com wrote:
> Jim wrote:
>
> > Pagers are used for receiving (well, most of them...there are some two way
> > pages available) so they are not too concerned with matching the antenna.
> >
> > It is very easy nowadays to make a receiver that is far more sensitive than
> > what is needed, which allows the use of a lousy antenna. It also helps when
> > you have a tall tower and can radiate several kW ERP.
> >
> > What you are doing is quite a bit different. You want to have a compact
> > portable transmitter. This means the package must be small and not weigh
> > very much, which in turn means small batteries and a small antenna. You
> > will not be able to put out much power, as you already mentioned.
> >
> > Since you need only a few meters of distance I don't think you really need
> > much of an antenna at all. You could try one of the compact rubber ducks
> > designed for UHF or, as far as that goes, a full size rubber duck. After
> > all, they are only about 3 or 4 inches long. You may also find that, over
> > short distances, you don't need any antenna at all.
> >
> > If I was you I would then adjust the transmitter for maximum receive signal.
> >
> > Jim
> > N8EE
>
> It would seem like a simple link, wouldn't it? We started out with little
> transmitters (AM, on-off keyed) and receivers and 1/4-wave whips, which worked
> OK, but were inconvenient. The first thing we tried was just folding the
> antenna up and putting it inside the boxes (about pager sized). Signals on
> transmit were down about 20 dB right away (measured on the spectrum analyzer
> with a "reference" antenna), and presumably the same loss was had on the
receive
> end. Radiation "pattern" went all to hell too, and the link success rate fell
> to as low as 20%. Little "rubber duckies" about inches long improved things,
> but there's a serious incentive to putting all the antennas inside the boxes
> (nothing to snag on), where of course there's hardly any room for air, never
> mind antennas. Ground plane on the PC boards is hardly worthy of the name.
>
> So the requirements tend to militate toward the least-lossy small antennas we

> can fit in boxes about 2 inches on a side. Tuned loops of some sort,
presumably
> as used in pagers, sound likely. A more sensitive receiver (FM this time!) is
> in the works, but in the meantime, I'm trying to make this system at least a
bit
> more reliable.
>
> Thanks for the help!
> --
> Mark Nelson
>
> A collector of TV signal boosters and UHF converters -- God help me!
> http://www.geocities.com/TelevisionCity/Set/6312/
>
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4828. UK radio rallies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7gv957kqi1@plutonium.btinternet.com>
Source record: 70564

Does anyone know where on the net I can find details of radio rallies in the UK? I subscribed to a service which used to email me with dates of radio rallies and computer fairs, but the emails stopped coming for some reason. Best wishes, John Cunningham.

4829. Pye westminster/cambridge

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7gv958kqi2@plutonium.btinternet.com>
Source record: 70565

I am looking for information on the Pye Westminster and Cambridge radiotelephones. If anyone can help, no matter how basic the info, please email me.
Thanks, Best wishes from John Cunningham.

4830. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: JayCee <jaycee@nospam.demon.co.uk>
Message-ID: <vMT6vAAeeyM3Ewhn@midmarsh.demon.co.uk>
Source record: 70566

In article <01be983c$2b8a5ba0$abde04d0@p133>, Laszlo I. Morocz
<kf4pv@spammenotlmorocz.com> writes
>What's biro, for those of us who speak American instead of English?

Sorry, I thought a Biro was of American origin ;)
- cheap ball point pen. No matter what the make, always called biros
here.

73 John M1BTR

--
m1btr@midmarsh.demon.co.uk M1BTR@GB7SKG
QRV 6m 2m 70cm 3cm Member: BATC RIG RSGB UKRS

4831. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <373339B4.579F@ixpres.com>
Source record: 70567
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

>
> I have the skill to pass the practical test (and have with the training software) through
> Advanced, yet I hold only a Tech ticket because of the code. I am still trying but I
> haven't found my method for learning code yet. I memorized the tapes, and have tried a
> couple of different computer tutor programs, but so far I have not been able to master CW.
> I will get it eventually, but it is not coming easy.
>
> --
> Keith Lodahl
> Mayville, Wisconsin

Hi Keith OM,

Thanks for the thoughtful response.
In WWII, the military taught Morse code to literally thousands of people from all kinds
of backgrounds and abilities. Many of them were not doing it voluntarily, either!
I myself cannot see where using "tapes" and "computers" is an effective learning method
for learning to use the code conversationally, as we do in ham radio. First of all, it
is boring, listening to basically boring content being sent. As you said, you eventually
memorized the tapes. That should be a clue that that is not the way to learn the
code. Why not listen to something interesting instead?
To become comfortable with CW, you have to 'USE IT' for some purpose. Listening to real-live
conversations on the air is what made CW take off quickly for me. Fortunately, in those days
there was no distracting temptation to somehow 'use a computer' (a distinct advantage, from
what I can see). Second of all, it does nothing to teach you how to listen to REAL
WORLD signals off the air, while at the same time, you are internalizing what is being said.
This is what worked for me. It has been music to my ears ever since, and is definitely my
preferred mode for ragchewing on the air, compared to using voice. When you are otherwise
just wasting time (ex: while driving), sound out everything you see

written: street signs,
license plates, etc etc. Make the sounds of CW very familiar to
yourself, so that
you associate those sounds immediately with the letters and numbers and
punctuation.
This all requires zero investment in $$, and can be done anywhere,
anytime. Lastly,
listen ON THE AIR to real CW QSO's, as much as you can, to all kinds of
fists, in various
conditions of in the clear to buried in the QRN/QRM. Watch out! You
might suddenly
become hooked; that is a risk you take. If that happens, you will
suddenly see yourself
on the other side of the perennial code argument, and can't for the life
of you figure
out what all the fuss is about; it has happened to many others, HI.
Lastly, like anything else, CW is not fun for EVERYONE. Some people
just do not take to it.
But that is a very small group indeed, I think. Especially at the
moderate speeds required.
After all, 5 WPM you can practically look up real time. 13 WPM actually
requires that you
know and can respond almost immediately to the characters. This does
not seem to much
to ask, for a large number of us. I believe it is an essential part of
one's education
to become a ham and to use HF (the 'real' ham radio to me).
You can do it.

73 and GL,
Don, W6JL

4832. Homebrew Noise Cancelling Headphones?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3733399b.0@news.netwalk.com>
Source record: 70568

Some of you may not be aware that a loudspeaker (permanent magnet type) can also be used as a microphone---a sound wave will vibrate the speaker cone and induce a current in the coil. They are not 'great' microphones but work reasonably well.

Depending on the type of element used I would expect headphone elements to have the same property. What I am considering is using this phenomena to build a small box for converting regular headphones to electronic noise canceling, to be used on board small aircraft. It could also be used in other applications.

The expensive ones use a separate microphone inside the ear cups for sensing the sound inside the cup. This is then applied to a circuit which makes sure that the sound in the cup is as close as possible to the output of the radio, effectively canceling ambient noise.

My idea is this: The current in the cord going to the headset consists of two components, the desired audio from the radio and a current produced by the ambient noise. If this current was subtracted from the signal from the radio, inverted, added to the signal from the radio, and then applied to the headset it should cancel the ambient noise.

Has anyone tried this, and how well does it work? It certainly would be less expensive than the $400+ ENR headsets.

Any other thoughts on this?

--
Jim
N8EE
jbolinger@Nloisnptaemk.com
Remove the letters 'N o s p a m' to reply directly

4833. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37333EFE.5D71@ixpres.com>
Source record: 70569
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> Keith Lodahl
> Mayville, Wisconsin

Keith,

I forgot one other important point in my post. DON'T WRITE STUFF DOWN. Copy it in your head; that is how you will be using it for ham radio ragchewing. Writing it down is an (unnecessary and limiting) habit that you don't want to get into if you can avoid it. I sometimes run into ops on the air who ask me (as I am working mobile CW) "how do you write it down?". Egad.

73,
Don, W6JL

4834. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Trevor Day <Trev@southwestuk.demon.co.uk>
Message-ID: <cRoqkFAlY0M3EwHy@southwestuk.demon.co.uk>
Source record: 70570
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <71MpmKAU4gM3EwAK@falstaf.demon.co.uk>, Robin Birch
<robin@falstaf.demon.co.uk> writes

A long shot Robin; are you anything to do with the IC240 Birch scanner?
Trev ...-.-
--
Trevor Day G3ZYY

4835. Books F/S Dayton Hamvention

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Paul Washa <w0tok@email.msn.com>
Message-ID: <#AvfjsMm#GA.279@cpmsnbbsa05>
Source record: 70571

Paul Washa, W0TOK , will be at Dayton in the flea market, Spaces: 2615, 2616, 2617 with almost two tons of books, be sure to stop by so we do not have to take them home, all related to electronics, metal working, antique radios, telegraph keys, crystal sets, antennas, latest and greatest ARRL books and CD roms, some old electronics books bought up during the past year at garage sales, etc. Stop by, we are near the Hara rear entrance and the food. Paul Washa 73

4836. Re: Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Dave Eckhardt <dave_eckhardt@hp.com>
Message-ID: <37335313.705D@hp.com>
Source record: 70572

SWil265101 wrote:
>
> I am a college student that is new to the ham radio hobby. Does anyone reading
> this message know of a location to where I could pick up a multiband
> transceiver that is at "college student" prices. Old or new equipment would
> work. (I live in an upstairs apartment that will not allow an antenna). Does
> anyone have any suggestions?
> Horsehaar@yahoo.com
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> <<<<<<<<<<<<<<<<<<<<<<<<<<

rec.radio.swap is also a good newsgroup for what you are looking
for.

4837. Having trouble with your tower about your tower?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: "H. Mark Nadel" <hmnadel@banet.net>
Message-ID: <373366BB.9AFC1B7@banet.net>
Source record: 70573

If you live on Long Island, NY and are having difficulty with your local town and need some help getting approval to install you antenna tower check out the R.A.D.I.O., Inc. home page listed here.

http://www.qsl.net/w2ufo/radioinc.html

4838. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <3733921D.7A80BC3D@megsinet.net>
Source record: 70574
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Stinson wrote:
> The charge of "clogging up the newsgroups" is nonsense.
> Those who wish to participate in the new market can do so.
> Those who do not can set the filters on their browsers
> and they will never even see the deals go by,
> leaving them with the "pure" version they claim to desire.

Only a spammer would call spamming "the new market".

> Bandwidth charges are equally nonsense. The binary groups
> distributing graphic files and programs take up
> thousands of times the bandwidth of the ham groups
> with lots to spare, thank you. If we tripled the
> number of radio ads here, we'd still not be a speck
> on the bandwidth map.

You're wrong, and it's been explained before.

> It is useless and senseless to protest against this new market,

There is no market here. Go away.

> especially when every modern browser is capable of
> deleting messages some people claim they don't want to
> see before they ever see them.

It is not our job to delete them. It is the job of newsgroup participants
not to post them where charter forbids them.

> You don't read every word in a newspaper, either.
> I don't see anyone calling their newspaper and
> complaining "you print some things I don't want to read!"

As a matter of fact, newspaper switchboards are overloaded with such calls.

> That would be silly. It's equally silly to protest
> against newsgroup articles they don't want to read
> when they have the means to simply *not see them*
> right at their fingertips.

If you can't play nice with others, go somewhere else.

> People need to stop claiming they are somehow being harmed
> by the sale posts. It just isn't true.

Flat statement without substantiation. Typical spammer tactic.

> They're harming themselves by not setting filters
> that were put there for that purpose.

But we do. They usually take the form "Provider, please stifle your spammer."

> Same as someone who refuses to wear a seat belt-
> he has no one to blame for his bruised forehead but himself.

A completely inappropriate analogy.

> Steam engine makers and tube manufacturers protested, too.
> And the future --just-- --kept-- --coming.
> You can stay behind if you wish.
> But don't damn those who choose to progress,
> especially since they are not harming you in any way.

You'll pardon us if we keep fighting to keep things the way they're meant
to be, and work to get spammers off the 'net. Or you won't pardon us, but
we'll keep doing it anyway.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

4839. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <373392A9.47A591FA@megsinet.net>
Source record: 70575

TUBECNTRAL wrote:
> > Oh, blow it out your self-righteous ass already...if you don't want to read a
> certain header, DONT click on it...

How about if you don't put it there in the first place?

> you're pissin' in the wind bitchin about
> this anyway...I could get on top of Mt. Everest and YELL I don't like nosy
> people, but that wouldn't STOP it, would it???Lighten up and go out and GET
> LAID or something...Jesus.....

Most mammals don't shit where they eat. But you wouldn't know about that.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4840. WTB: Altair 680 or IMSAI 8080

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Alan <alan.diaz@snet.net>
Message-ID: <7h03bu$sg2@news1.snet.net>
Source record: 70576
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.swap,rec.radio.swap

I would like to buy an Altair 680, IMSAI 8080, or other Altair/IMSAI from that era. I want to add one of these units to my collection of items from this era. You may contact me directly at chipsndips@snet.net.

Alan

4841. Re: News Group Cops!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@email.msn.com>
Message-ID: <OQVCjRQm#GA.244@cpmsnbbsa03>
Source record: 70577
Cross-posted to: alt.ham-radio.marketplace,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Please, please do it in my town!

Mark Waldron wrote in message <37310B75.3B64783E@nationwide.net>...
>I like it!
>
>I'm gonna get all likkered up, not bathe, smell funny, wear parachute
pants,
>and do this!
>
>
>>
>> > I suppose you go into churches on Sunday during services and interrupt
>> > with a loud "TUUUUUUUUUUUUUUUUUUUUUUUUUUBES FOR SALE!"
>

4842. Qrp for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <3733D842.515A@earthlink.net>
Source record: 70578

I have a Heathkit HW-8 for sale along with 60 other items at
http://home.earthlink.net/~docky look under for sale thanks KØIMJ

4843. F.S. Mics

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-07 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <3733D6FC.1C6@earthlink.net>
Source record: 70579

I have 13 mics for sale from some rare to a Silver Eagle see at
http://home.earthlink.net/~docky they are at the bottom of the list and
there are more than 60 item I have for sale so have fun and thanks KØIMJ

4844. Re: FS: Plessey mixer & receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: quatsein@island.net
Message-ID: <37337ec9.2322715910@news.cr.island.net>
Source record: 70431

My reply to the original post was really not worded properly.
here goes again, and my opologies to anyone that was offended.

Seems to me the quantity you are selling indicates that these
chips may have been provided as Samples. Were they originally
provided as Samples. If so ,then selling them would be a unwelcome
act in the eyes of companies that supply samples. I dout anybody would
buy them, as most people involved with IC work have access to there
own supply. If these chips were not supplied as samples, I do not
think any of the opinions I have expressed, would apply to you.

Steve Carlisle VE7AHL

On Fri, 07 May 1999 01:11:05 GMT, quatsein@island.net (Steve Carlisle)
wrote:

>Seems to me the quantity you are selling indicates that these
>chips may have been provided as Samples. Selling them
>would be a unwelcome act in the eyes of Plessey Semi. I
>dout anybody would buy them, as most people involved
>with IC work have access to there own supply. I really
>hope that this is not the case.
>
>Steve Carlisle VE7AHL
>
>
>
>On Tue, 04 May 1999 23:42:16 GMT, kb9olm@hotmail.com wrote:
>
>>For sale NOS:
>>
>>1. Plessey SL6440 high level mixer ICs.
>>Package of two ICs is $10 plus shipping from
>>San Francisco Bay Area.
>>2. Plessey SL6601 complete FM receiver ICs
>>with PLL demodulator.
>>Package of two ICs is $10 plus shipping.
>>
>>Please reply to Vlad at kb9olm@hotmail.com
>>
>>-----------== Posted via Deja News, The Discussion Network ==----------
>>http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own
>

4845. (help) Injecting audio into mic plug--strange result--input impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: nx7u@primenet.com
Message-ID: <37337fc1.4404132@news.primenet.com>
Source record: 70432
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I wanted to run my IC-551 thru some audio paces, so I dug out a trusty HP-651 audio sig gen which is calibrated in mV and has a 600 ohm output.
Supposedly the IC-551 wants a 600 ohm (or thereabouts) microphone, so that should work, right?
Rigged up a cable, BNC (from the HP-651) to 4-pin mic plug.
Fired it up, and tapped off the sig gen with a BNC "tee" to an audio voltmeter to monitor the actual applied voltage.
With the sig gen initially set to 1 volt (!), all I got out to the mic plug was 1.4mV (that's milli).
I verified the sig gen was OK by placing a 610 ohm resistor across its 600 ohm output; sig gen and outboard audio meters matched up.
This would tell me that the input impedance of the mic jack is <0.5 ohms!!!
Did I do the measurement wrong, or is my audio stage whacked, or is this actually the nominal result?
PS When I hook up a mic and monitor with another receiver, the audio sounds fine. I would think if the audio input impedance was really 0.5 ohms, there would be little mic output to speak of (pun not intended...)
Any observations? Thanks in advance!

Scott Townley
nx7u@primenet.com
Gilbert, AZ

Collector of:
Stoddard Aircraft EMI/RFI receivers and accessories
Big Parts for that Big Linear Amp
70's era RF test equipment HP/GR/Tek
Radio-related technical reference material 1940+
http://www.primenet.com/~nx7u (someday might have useful info!)

4846. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990507222931.23115.00000805@ng124.aol.com>
Source record: 70433

>
>How about if you don't put it there in the first place?
>

BITE ME

4847. Re: Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Dan Starkenburg <dan.starkenburg@cwix.com>
Message-ID: <3733D8B4.E41E8959@cwix.com>
Source record: 70434

> Avoid Radio Shack at all costs.

AMEN!! My HTX-202 has been at their "Service Center" for over a month now,
just to get the antenna connection repaired. It came back damaged twice, the
first time so severely that the battery pack would not even slide on the unit!

Dan Starkenburg -- kc0eao

4848. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: maddog@io.com
Message-ID: <3733c1c7.19882653@news.io.com>
Source record: 70435
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Fri, 07 May 1999 12:29:02 -0700, Don W6JL <W6JL@ixpres.com> wrote:
> I forgot one other important point in my post. DON'T WRITE STUFF
>DOWN. Copy it in your head; that is how you will be using it
>for ham radio ragchewing. Writing it down is an (unnecessary and
>limiting) habit that you don't want to get into if you can
>avoid it. I sometimes run into ops on the air who ask me
>(as I am working mobile CW) "how do you write it down?". Egad.

Hi Don!

Hmmm... I've heard this admonishment before, and I really don't understand it. I've been operating almost exclusively CW for over 30 years, and I've always written it down. It feels natural to me. It goes in my ears, it comes out my hand. It's not particularly legible above 30 wpm, mind you, but I can refer back to my notes in a ragchew and remind myself of what was said. (I can't recall a 10 minute monologue, but I can if it's written in front of me). Later on (2 or 3 qsos late), I can jot down a note or two in the log if I want. My wife can look over my shoulder if she wants. When visitors come over, they can see that the process actually works... morse in, words out. Above 35 wpm or so, I'll put the pencil down and copy entirely in my head, but if somebody throws a long unfamiliar and non-phonetic word out there at 45 wpm, I'll probably miss it, and I've found that's usually the case for people that "only copy in their head", even at slower speeds. And speaking of slower speeds, people that copy only in their heads have difficulty with copying 10 wpm qsos... I think you forget what was sent at the beginning of the word at that speed... hi.

Besides the practicalities, I think it's easier and faster to learn code while writing it down. As you decipher a letter aurally, you write it down, see it with your eyes, and it connects you with the part of your brain that already knows how to read and write.

Hey, different strokes for different folks, but I think it's a lot easier and more practical to learn code while writing it down, and make the transition to head-only copy later on if you need or want to. Am I the only one in hamdom that thinks so?

73,
monty N5FC

4849. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: maddog@io.com
Message-ID: <3733c649.21037207@news.io.com>
Source record: 70436
Cross-posted to: rec.radio.amateur,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

On Fri, 7 May 1999 12:35:56 -0500, "BD" <bodu@pobox.com> wrote:

>2 weeks?? ;) It took me, a 35yr old, almost 4mnths to learn it...

I know what you mean... I took up the piano at 45...

monty N5FC

4850. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <3733C635.BC4C761E@ix.netcom.com>
Source record: 70437
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Clifton T. Sharp Jr." wrote:
> Only a spammer would call spamming "the new market".
Funny how the definition of "spammer" seems to change
with the control freak and self-appointed net cop
who's throwing it around.

> You're wrong, and it's been explained before.
You sound like a child on the school ground.
"You're wrong! So there! Naaa!"
Please enlighten me, oh wise one.
Correct my poor ignorance.
On second thought, don't. I hear enough BS on CSPAN.

> There is no market here. Go away.
No.

> It is not our job to delete them.
Translation:
"It's your fault that I'm too lazy to set my filters!"
I'll bet you blame the bank when you bounce a check
and yell at your kids when you drop the milk.

>It is the job of newsgroup participants
> not to post them where charter forbids them.
Please quote the passage in the charter of this group
that forbids sale postings.
(silence)....... uh, huh... That's what I figured.

> As a matter of fact, newspaper switchboards
>are overloaded with such calls.
Childish horse manure.
Kindly cite your sources for this ridiculous spluttering.

> If you can't play nice with others, go somewhere else.
If you can't curb your egoist urges to be net-cop-in-charge,
you should perhaps go back to grade school where manners were
supposed to have been taught to you.
I'll meet you there and perhaps we'll both learn something!

>> People need to stop claiming they are somehow being harmed
>> by the sale posts. It just isn't true.
> Flat statement without substantiation.
Word game providing a phoney retort when a real one is not possible.
Please define "flat statement" and the process by which
one substantiates same.

>Typical spammer tactic.
Since the definition of "spammer" appears to depend on who's
using it to manipulate, bully and insult others,
I propose that there is no "typical" spammer.

> > They're harming themselves by not setting filters
> > that were put there for that purpose.
> But we do. They usually take the form
>"Provider, please stifle your spammer."
Gosh--- I wonder why those providers don't run all those "spammer"
for-sale posters off? Could it be that the people
whining about the ads are (*GASP!*)
FULL OF CRAP??? hmmmmmm!

> > Same as someone who refuses to wear a seat belt-
> > he has no one to blame for his bruised forehead but himself.
>
> A completely inappropriate analogy.
Talk about your unsubstantiated "flat statements."
I'll pass my blue ribbon to you.
You clearly surpass me in this area.
Congrats, Champ!

> You'll pardon us if we keep fighting to keep things
> the way they're meant to be, and work to get spammers off the 'net.
I fully expect that anal-retentive control freaks will continue
to blame others for their moronitudes*, attempt to bully people
and demand that things go "their way."

I also expect they will continue to FAIL.... heh heh heh....

72 1/2,
Dave Stinson AB5S

*moronitudes: n, moronic attitudes. Attitudes taken or
opinions expressed without forethought or out of childish pique.

4851. Re: Diagram for Hallicrafters HT-33 Amp or PL172/8295 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: W5IDX <W5IDX@worldnet.att.net>
Message-ID: <7h0ir6cev1@bgtnsc03.worldnet.att.net>
Source record: 70438

Dudley I Have A Schematic And Manual Along With The Hallicrafters HT-33B It
Runs A PL-172
What Do You Need I Am In Houston, Texas
Not Far From 512 Area Code.
73's W5IDX

4852. Re: [WANTED] Plans for a VHF / UHF Ultra-Sensitive F.S. Meter<<==

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37335d3a.1650641064@news.online.no>
Source record: 70439

On Thu, 06 May 1999 12:06:45 -0700, &RETIRED0 <&retired0@hotmail.com>
wrote:

>MSisco9939 wrote:
>>
>> Yep:
>>
>> Will try and return the favor...as i am on the hunt for a Ultra-Sensitive Wide
>> Band Field Strenght meter for T-Hunting....Anyone out there have anything?
>>
>> Monty
>
>How sensitive is "ultra-sensitive"?
>How wide band is "wide band"?
>What frequency range?
>
AD8307 may be ultra sensitive? Will work up to 900MHz with some
limited performance

4853. Re: Homebrew Noise Cancelling Headphones?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Joe Leikhim <jleikhim@nettally.com>
Message-ID: <3733D4B0.D5BA342D@nettally.com>
Source record: 70440

Sounds like it might be difficult to use the loudspeaker for both functions simultaneously. I am not up on control circuits but I think you would end up having the thing fight itself without cancelling the ambient noise.

By the way Sony has a real neat set of noise cancelling ear phones that really work well. I have also seen a retrofit kit for a David Clark set in one of the "Private Pilot" mags.

Jim wrote:

> Some of you may not be aware that a loudspeaker (permanent magnet type) can
> also be used as a microphone---a sound wave will vibrate the speaker cone
> and induce a current in the coil. They are not 'great' microphones but work
> reasonably well.
> (SNIP)
> --
> Jim
> N8EE
> jbolinger@Nloisnptaemk.com
> Remove the letters 'N o s p a m' to reply directly

--
Joe Leikhim K4SAT (EX KE4TZH)
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

4854. checking transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <3733FC45.B50956D4@asu.uswest.net>
Source record: 70441
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I picked up 5 power transformers at a hamfest a month ago. Only one is marked at all (has leads tagged '110,' '290,' and 'Fil'), the others I don't know a thing about (but I got them very cheap). I need to know how to check unknown transformers for voltages, polarity, which side is primary, and of course, whether they are good (not open or shorted) to begin with. How do I determine each of these parameters (and current rating, if possible), safely and accurately?

All I have in the way of test gear is a good RMS DMM, a cheap analog VOM, a 7.5A variac, and a couple of non-variable, non-metered 13.8 VDC power supplies.

In addition to the info above, can someone tell me how, if possible, to check transformers at hamfests with a DMM or other handheld instrument, at least to see that they are good?

Thanks for all replies.
--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4855. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <xFsrqCARwAN3EwLj@falstaf.demon.co.uk>
Source record: 70442
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <cRoqkFAlY0M3EwHy@southwestuk.demon.co.uk>, Trevor Day
<Trev@southwestuk.demon.co.uk> writes
>In article <71MpmKAU4gM3EwAK@falstaf.demon.co.uk>, Robin Birch
><robin@falstaf.demon.co.uk> writes
>
>A long shot Robin; are you anything to do with the IC240 Birch scanner?
>Trev ...-.-
Fraid not, wot is it?.

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4856. Re: Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37341887.6F842BFA@asu.uswest.net>
Source record: 70443

In addition to the other resources mentioned in reply to your post, might I suggest joining an amateur radio club in your area? You will find some knowledgeable folks who are (most of the time) eager to help new hams, making wise and frugal radio purchases and in other radio-related matters. Someone in the club, if it is of any size, is bound to have one or more rigs surplus to his needs that you might get a fair deal on.

SWil265101 wrote:
>
> I am a college student that is new to the ham radio hobby. Does anyone reading
> this message know of a location to where I could pick up a multiband
> transceiver that is at "college student" prices. Old or new equipment would
> work. (I live in an upstairs apartment that will not allow an antenna). Does
> anyone have any suggestions?
> Horsehaar@yahoo.com

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4857. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <37341D4A.65DD4ADD@asu.uswest.net>
Source record: 70444

"Egad" is an archaic contraction of "Ye Gods!", more or less "oh my god," or some similar emphatic expression. It would be a good one to add to the CW vocabulry, I think ;)

Walt Davidson wrote:
>
> On Fri, 07 May 1999 12:29:02 -0700, Don W6JL <W6JL@ixpres.com> wrote:
>
> > Egad.
>
> What is the meaning of the term "Egad", with which you have concluded
> most of your recent postings, Don?
>
> Is it something along the lines of "Bleaghhhhh!!!!" ?

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

4858. Re: checking transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <37345072.6B5C@nbnet.nb.ca>
Source record: 70445
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Howdy Will....I know there's all kinds of sophistocated ways to check transformers (you know...proper!)....but I to have the sort of gear that you have and this is how I do 'em. First of all, at the fleamarket table, if you wanted to just do a rough test with a VOM/DMM...Keep in mind that the MOST likely combinations of windings are:

1. 2 lead windings - both primary and secondary
2. 3 lead center tapped windings ....secondary (power xfmrs or primary
on say interstage audio etc.
3. Multiple tapped windings....usually with some taps placed close to
one end of the winding in question....primary (power xfmrs) or
secondary on special units such as used for tube testers and other
test gear.

Of course the above is not exhaustive but represents the majority of units....Now...for power xfmrs (your lot)....there may be a single primary winding or possibly 2 (the 2 are used in series for 240 vac operation and only 1 will be used for 120 vac typically). Look for any commonality as to color coding of wires and tracers for example GREEN, GREEN/YELLOW, GREEN which might indicate that this winding has a center tap at the GREEN/YELLOW wire. Use the wire guage as a clue as to commonality..especially if you can see the stub of the actual winding. Simple DC continuity test with your VOM/DMM will prove continuity and your DMM, if good resolution on low ohms, can give you a rough idea of relative size of the winding (for example...low reading and heavy wire its NOT LIKELY to be HV). Next check continuity from any wires to the core...looking for shorts to the core. From there its lug-it-home time and onto your test bench. (Don't forget to use your smell and a good visual of the XFMR at the fleamarket as a guide also!!!).

Home in your shack.....Get that VARIAC out....experience will help as you go along (you'll either know or suspect that its a power transformer for example). Dial down your variac to a low voltage level...say 3 or 6 volts....and begin by seperating and marking all windings as common that you determined with your VOM/DMM......apply voltage to each winding in turn and note the resulting voltage on the other windings....this will give you a clue as to the AC transformation ratio.....from there, with experience and armed with your other clues (wire size and color) you'll begin to get a picture of what you have. If the VA rating is marked on the case you can then get an idea of the current capability of the

unit...roughly for example if say its marked as 60va then assuming a 120vac primary that tells us that the primary (or any winding) can only handle 60va (volts * amps) which would be .5 amps. Now extrapolate that to the secondary windings.....if you see a 10:1 ratio between what you've determined to be a possible primary and a secondary, you'd see that the secondary would be able to handle no more than 5 amps and 1/10th the voltage of the primary....12 vac at 5 amps....You can confirm usuability at 5 amperes by placing a resistance across the secondary and AC ammeter in series to verify that this will meet your needs at the current.

Testing for multiple tapped windings takes a bit of experience but you can get a rough idea from your DC ohmmeter testing (if low ohms resolution is good) AND by applying very low AC voltage to the various combinations of 2 leads in that multi-tap winding.....and measuring the resulting volage across THE REMAINDER OF THE SAME WINDING's leads. These multi-tap primarys are used, of course, to make minor adjustments to compensate for high line (primary) voltage or low line (primary) voltages which might exist in different parts of a country.

All the above is not exhaustive and there are some pitfalls..... Remember the "apply low AC voltage" thing.....if you apply 120vac for example to a 12 vac secondary, there will not be enough TURNS PER VOLT to allow the winding to safely run even unloaded and you'll get a huge bang and either trip your cct breaker or ruin a winding. WATCH OUT FOR HIGH VOLTAGE even when testing with low AC voltage applied.....remember that you are determining turns ratio's and might be applying 6 volts to a 5 volt secondary winding on a XFMR which might have a 240 vac or higher primary.....could be a lot of voltage now appearing across the primary!!!! (I know!).

Check older copies of the Radio Amateur's Handbook and other publications for typical transformer wire color codes which, while not conclusive, may give you a clue as to useage......for example BLACK wires are often (but not always) primary's.....GREEN wires might be low voltage secondary's......Yellow might be low voltage 5 volt secondaries.....RED was often high voltage....(several hundred).... For all these examples there are a hundred contradictions so be CAREFUL, RESPECT OPEN TWISTED CONNECTIONS but HAVE FUN!

73 - Keep on Tinkering......THAT....is REAL HAM RADIO.

Gord - VE1AJF

4859. Re: (help) Injecting audio into mic plug--strange result--input impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Max Imo <REMOVE@CAPS.net>
Message-ID: <3OWY2.584$oq5.3173@news.megsinet.net>
Source record: 70446
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

May we assume you have checked the integrity of the cable(s) and connector for any shorts or opens?

May we assume you calculated the input impedance of your rig based on your test results, rather than measuring it? Have you measured at least the ohmic value at the mike input?

73

Scott Townley <nx7u@primenet.com> wrote in message news:37337fc1.4404132@news.primenet.com...
> I wanted to run my IC-551 thru some audio paces, so I dug out a trusty
> HP-651 audio sig gen which is calibrated in mV and has a 600 ohm
> output.
> Supposedly the IC-551 wants a 600 ohm (or thereabouts) microphone, so
> that should work, right?
> Rigged up a cable, BNC (from the HP-651) to 4-pin mic plug.
> Fired it up, and tapped off the sig gen with a BNC "tee" to an audio
> voltmeter to monitor the actual applied voltage.
> With the sig gen initially set to 1 volt (!), all I got out to the mic
> plug was 1.4mV (that's milli).
> I verified the sig gen was OK by placing a 610 ohm resistor across its
> 600 ohm output; sig gen and outboard audio meters matched up.
> This would tell me that the input impedance of the mic jack is <0.5
> ohms!!!
> Did I do the measurement wrong, or is my audio stage whacked, or is
> this actually the nominal result?
> PS When I hook up a mic and monitor with another receiver, the audio
> sounds fine. I would think if the audio input impedance was really
> 0.5 ohms, there would be little mic output to speak of (pun not
> intended...)
> Any observations? Thanks in advance!
> ------------
> Scott Townley
> nx7u@primenet.com
> Gilbert, AZ
> ------------
> Collector of:
> Stoddard Aircraft EMI/RFI receivers and accessories
> Big Parts for that Big Linear Amp
> 70's era RF test equipment HP/GR/Tek
> Radio-related technical reference material 1940+
> http://www.primenet.com/~nx7u (someday might have useful info!)

4860. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Trevor Day <Trev@southwestuk.demon.co.uk>
Message-ID: <rGVXxCAXuDN3Ew5S@southwestuk.demon.co.uk>
Source record: 70447
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <xFsrqCARwAN3EwLj@falstaf.demon.co.uk>, Robin Birch
<robin@falstaf.demon.co.uk> writes
>>A long shot Robin; are you anything to do with the IC240 Birch scanner?
>>Trev ...-.-
>Fraid not, wot is it?.

It is an add on scanning unit for the old IC240 2m FM transceiver. It
was around a fair few years back circa 1978 AFAICR. I did note your
relatively new call, but then not everyone with an interest in the hobby
holds a call-sign!
Thanks anyway, Trev ...-.-

--
Trevor Day G3ZYY

4861. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: barryo@fastlink.com.au
Message-ID: <3734414c.8662449@genenews.acay.com.au>
Source record: 70448
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Stinson <arc5@ix.netcom.com> wrote:

:"Marconi vs Sarnoff"
:You said it perfectly in those few words, Adam.
:
:Fluid pricing via networked auction is the wave of the future
:in many, many areas- not just in radio stuff.
:Hams are into it early because (contrary to cynical popular myth)
:most hams are progressive people.
:
:The charge of "clogging up the newsgroups" is nonsense.
:Those who wish to participate in the new market can do so.
:Those who do not can set the filters on their browsers
:and they will never even see the deals go by,
:leaving them with the "pure" version they claim to desire.
:
:Bandwidth charges are equally nonsense. The binary groups
:distributing graphic files and programs take up
:thousands of times the bandwidth of the ham groups
:with lots to spare, thank you. If we tripled the
:number of radio ads here, we'd still not be a speck
:on the bandwidth map.
:
:It is useless and senseless to protest against this new market,
:especially when every modern browser is capable of
:deleting messages some people claim they don't want to
:see before they ever see them.
:You don't read every word in a newspaper, either.
:I don't see anyone calling their newspaper and
:complaining "you print some things I don't want to read!"
:That would be silly. It's equally silly to protest
:against newsgroup articles they don't want to read
:when they have the means to simply *not see them*
:right at their fingertips.
:
:People need to stop claiming they are somehow being harmed
:by the sale posts. It just isn't true.
:They're harming themselves by not setting filters
:that were put there for that purpose.
:Same as someone who refuses to wear a seat belt-
:he has no one to blame for his bruised forehead but himself.
:
:Steam engine makers and tube manufacturers protested, too.

:And the future --just-- --kept-- --coming.
:You can stay behind if you wish.
:But don't damn those who choose to progress,
:especially since they are not harming you in any way.

In the future there will be just one newsgroup, alt.everything,
and there will be no charges of off topic or crossposting.
Each of us will set our filters so that we see only what we are
interested in. Of course by then the net will be so clogged with
spam and commercial postings that nothing of interest will get
through. Then people will abandon usenet and the spammers will
have no one to spam. They will give up and the newsgroup will
be empty, which will encourage the real users to return. The
cycle will then repeat itself, unless we can get some sense
into the system before then.

10-4 good buddy.

Barry
==========
Please send me an email copy if you reply to this post.
Web page: http://www.acay.com.au/~barryo

4862. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: barryo@fastlink.com.au
Message-ID: <373442f5.9087558@genenews.acay.com.au>
Source record: 70449
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Stinson <arc5@ix.netcom.com> wrote:

:
:"Clifton T. Sharp Jr." wrote:

:> You'll pardon us if we keep fighting to keep things
:> the way they're meant to be, and work to get spammers off the 'net.
:I fully expect that anal-retentive control freaks will continue
:to blame others for their moronitudes*, attempt to bully people
:and demand that things go "their way."
:
:I also expect they will continue to FAIL.... heh heh heh....

Do you expect to get a loyal following by posting where you are
not wanted and by insulting potential customers?

Barry
==========
Please send me an email copy if you reply to this post.
Web page: http://www.acay.com.au/~barryo

4863. Battery Charge Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: "Daniel J. Velez" <dvelez@citizen.infi.net>
Message-ID: <7h1fgo$h7a$1@nw001t.infi.net>
Source record: 70450

We've been getting sealed lead-acid batteries from various hospitals in the area and I've accumulated a few with no good way to properly charge and discharge them. Can anyone point me to a controller circuit that will let me use my ASTRON power supply to provide charge and trickle (float) charges to these things? I don't want to build a power supply and charger, I'd just like to use a controller on the power supply's output.

Thanks,
Dan
W4DJV

4864. Re: (help) Injecting audio into mic plug--strange result--input impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: maddog@io.com
Message-ID: <373454a3.57483875@news.io.com>
Source record: 70451
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Scott: I wonder if it's possible your had the frequency of your
signal generator at some frequency much lower than voice frequecies.
Perhaps the input stage is transformer coupled, such that the input
impedance is very low at low frequencies. I've done this before...
had the band switch to Hz instead of KHz, and ended up with 1Hz out
instead of the intended 1 KHz. Just an idea...

monty N5FC

On Sat, 08 May 1999 00:11:33 GMT, nx7u@primenet.com (Scott Townley)
wrote:
>I wanted to run my IC-551 thru some audio paces, so I dug out a trusty
>HP-651 audio sig gen which is calibrated in mV and has a 600 ohm
>output.
>Supposedly the IC-551 wants a 600 ohm (or thereabouts) microphone, so
>that should work, right?
>Rigged up a cable, BNC (from the HP-651) to 4-pin mic plug.
>Fired it up, and tapped off the sig gen with a BNC "tee" to an audio
>voltmeter to monitor the actual applied voltage.
>With the sig gen initially set to 1 volt (!), all I got out to the mic
>plug was 1.4mV (that's milli).
>I verified the sig gen was OK by placing a 610 ohm resistor across its
>600 ohm output; sig gen and outboard audio meters matched up.
>This would tell me that the input impedance of the mic jack is <0.5
>ohms!!!
>Did I do the measurement wrong, or is my audio stage whacked, or is
>this actually the nominal result?
>PS When I hook up a mic and monitor with another receiver, the audio
>sounds fine. I would think if the audio input impedance was really
>0.5 ohms, there would be little mic output to speak of (pun not
>intended...)
>Any observations? Thanks in advance!
>------------
>Scott Townley
>nx7u@primenet.com
>Gilbert, AZ
>------------
>Collector of:
> Stoddard Aircraft EMI/RFI receivers and accessories
> Big Parts for that Big Linear Amp
> 70's era RF test equipment HP/GR/Tek
> Radio-related technical reference material 1940+
> http://www.primenet.com/~nx7u (someday might have useful info!)

4865. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <373460da.97259690@news.gv.net>
Source record: 70452

troglodite@aol.com (Troglodite)
shared these priceless pearls of wisdom:

If you just want some ferrite cores to experiment with, give me
->an idea of the frequency range or application and I will send you some
samples
->- no charge.

Rarely in this day and age have I seen such "fellow ham" spirit. Mr.
Moore, I have no idea who you are, but I admire and thank you for your
generosity.

Jim
Jim Weir, VP Eng. RST
A&P, CFI, and other good alphabet soup

4866. Re: WANTED: Russian/Soviet Vintage Homebrew Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: exray@caribe.net
Message-ID: <7h1shc$pj1$1@nnrp1.deja.com>
Source record: 70453

Buzz, buzz, chirp, chirp - Good luck in your search - there must be thousands hiding out there somewhere! I had some old UA magazines in the 70's and there was a 'copy' of the KWM2 for homebrewing. Bet you'd like that one!

See ya,
Bill Meacham WX4A

In article <19990504135431.07847.00002057@ng-co1.aol.com>,
kwm2a@aol.com (KWM2A) wrote:
> if anyone has or knows of a vintage homebrew rig from cold-war soviet era built
> by russian ham, i am interested in buying. any type of rig, receiver,
> transmitter, or station accessory.
>

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4867. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <1yganBAi0HN3Ew4n@falstaf.demon.co.uk>
Source record: 70454
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <rGVXxCAXuDN3Ew5S@southwestuk.demon.co.uk>, Trevor Day
<Trev@southwestuk.demon.co.uk> writes
>In article <xFsrqCARwAN3EwLj@falstaf.demon.co.uk>, Robin Birch
><robin@falstaf.demon.co.uk> writes
>>>A long shot Robin; are you anything to do with the IC240 Birch scanner?
>>>Trev ...-.-
>>Fraid not, wot is it?.
>
>It is an add on scanning unit for the old IC240 2m FM transceiver. It
>was around a fair few years back circa 1978 AFAICR. I did note your
>relatively new call, but then not everyone with an interest in the hobby
>holds a call-sign!
>Thanks anyway, Trev ...-.-
>
Fair comment on the recent call. I've actually been an occasional SWL
since about 1972 when I would have been 13 or 14.

Cheers

RObin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

4868. Re: Battery Charge Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Bob Headrick <bobh@proaxis.com>
Message-ID: <926189394.489.101@news.remarQ.com>
Source record: 70455

Daniel J. Velez <dvelez@citizen.infi.net> wrote in message
news:7h1fgo$h7a$1@nw001t.infi.net...
> We've been getting sealed lead-acid batteries from various hospitals in
the
> area and I've accumulated a few with no good way to properly charge and
> discharge them. Can anyone point me to a controller circuit that will let
> me use my ASTRON power supply to provide charge and trickle (float)
charges
> to these things? I don't want to build a power supply and charger, I'd
just
> like to use a controller on the power supply's output.

I've had good results using gel cells floated across an Astron power supply,
with a diode for isolation. Keep the supply voltage low enough to keep the
battery voltage at 13.8V max so as not to overcharge the battery.

- 73 Bob W7OV

4869. Re: checking transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <fF0Z2.193$vR5.28282@news3.voicenet.com>
Source record: 70456
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

A long time ago, I obtained a Marx model railroad transformer. I set it's output at 11.5 volts and use it as a source for testing transformers. It's internal impedance is so high that it will only get a little warm even with the output shorted. It's maximum voltage output is not more than 20 volts or so in any case. The toy train transformer that I use is around 5 inches by 3 inches by 2 inches. The output contriol is a lever. Modern toy transformers may have a lot more capacity so check your's out first

You find which leads are connected together using an ohmmeter and you can usually figure out the primary even when there is no color coding on the transformer leads. From there, it's a matter of connecting the model train transformer to what you think is the primary and setting the output to 11.5 volts. Check the other leads to find out what there output voltage is and multiple the results by 10 to get the real voltages with 115 VAC in.

Good luck, Harry, W3IIT

Will White wrote in message <3733FC45.B50956D4@asu.uswest.net>...
>I picked up 5 power transformers at a hamfest a month ago. Only one is marked
>at all (has leads tagged '110,' '290,' and 'Fil'), the others I don't know a
>thing about (but I got them very cheap). I need to know how to check unknown
>transformers for voltages, polarity, which side is primary, and of course,
>whether they are good (not open or shorted) to begin with. How do I determine
>each of these parameters (and current rating, if possible), safely and accurately?
>
>All I have in the way of test gear is a good RMS DMM, a cheap analog VOM, a
>7.5A variac, and a couple of non-variable, non-metered 13.8 VDC power supplies.
>
>In addition to the info above, can someone tell me how, if possible, to check
>transformers at hamfests with a DMM or other handheld instrument, at least to
>see that they are good?
>
>Thanks for all replies.
>--
>Will White, KD7BFX
>

>to reply, please click this link mailto:wcw@asu.uswest.net

4870. FS: Experimenter Items

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: ldaniel102@aol.com
Message-ID: <19990508164424.08809.00000801@ng-ck1.aol.com>
Source record: 70457

For Sale: The following hard to find items to play with:

NIB Complex Sounder Chip SN 76477N
NIB Voice Synthesizer Chip
UV-Erasable EPROM 2716
TOP Octave Synthesizer Chip 50240
Schottky IC Decade Counter
Schottky 1 of 8 decoder

$20 all. Any interest? Larry

4871. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFBFLnK.5v@netcom.com>
Source record: 70458

In article <01be983c$2b8a5ba0$abde04d0@p133>,
Laszlo I. Morocz <kf4pv@spammenotlmorocz.com> wrote:

>What's biro, for those of us who speak American instead of English?

A BiC pen.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

4872. Conversion of crystal transceiver to VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Robert Parker <rparker@sprint.ca>
Message-ID: <du2Z2.1158$r_1.844011@newscontent-02.sprint.ca>
Source record: 70459

I have an HF marconi ch150 solid state transceiver and i'm going to convert it to VFO by injecting the VFO signal into one of the crystal sockets. I was wondering if anyone has done this before and what there experience was. I realize the harmonics must be filtered before injection and therefore before I do anything, I will look at the O/P of the VFO on a spectrum analizer to determine the type of filtering required. If i'm lucky, no filtering will be required. This modification will be for both transmitting and receiving in order to give this rig more versitility. Marconi has made a very nice rig and I wish to have it on the air on nearly all the bands. Coverage of thie rig is from 2mhz-24mhz.
Second part of my query is: Does anyone know of any PC circuits that work to do the same thing as a VFO?
Perhaps a PC controlled function generator?

You comments and suggestions will be greatly appreciated.

73's
ROB
VE3RPF

4873. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <yK2PJIASpLN3Ewbe@ifwtech.demon.co.uk>
Source record: 70460

Mark Zenier wrote:
>Laszlo I. Morocz <kf4pv@spammenotlmorocz.com> wrote:
>
>>What's biro, for those of us who speak American instead of English?
>
>A BiC pen.

"Un bic" is the French term for a ball-point pen, named after the most popular brand. In Britain the original brand was "Biro", named after the inventor. I'm nearly sure his first name was Laszlo...

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4874. wtd - Weather station parts and info

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: hrbcrb@aol.com
Message-ID: <19990508190526.13374.00000729@ng21.aol.com>
Source record: 70461

Looking for information and parts on the Heath ID1590 weather station. Our controller is setup to interface with the Heath unit, but will consider other components.

Our organization is looking to add wind speed and direction to a repeater site. If anyone is parting out a weather station (Heath, Peet, Davis, others) we are interested in the anemometer and wind direction vane.

Thanks and regards, Hugh

4875. gps antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Jeremy Hopkins <jhopkins@toltbbs.com>
Message-ID: <3734D305.A1AE947A@toltbbs.com>
Source record: 70462

i'm looking for info on building gps antennas, any help would be greatly
appreciated
or dose anyone know of any external gps antennas in the 30-50 dollar us
price range

--
Jeremy W. Hopkins
KC8GWH
Toledo Ohio USA
http://www.toltbbs.com/~jhop

4876. Re: Idea for plate transformers....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Al Dolgosh <al.dolgosh@hamradio.org>
Message-ID: <3734E62E.7BFE3218@hamradio.org>
Source record: 70463

You might want to parallel the PRIMARY windings, and series the SECONDARY windings. Also, be sure to check the isolation of the secondary winding from core, after you lift the low side of the winding. It may be that they skimped on the insulation at that end of the winding, knowing it would be grounded. If you have access to a Hi-Pot tester, you could check the actual breakdown voltage.

I have heard somewhere that core saturation may be a problems. Perhaps someone with experience can address that issue.

Al - K8EUR

CATsysop wrote:

> I am building a power supply for my 50mhz amp. I need around 3000v for B+. I
> was talking with another ham, and electronics shop owner, and we kicked around
> using old microwave oven transformers for a plate supply. We would parallel
> the secondary windings, series the primary windings, and have about 4kv before
> rectification. Of course, you would have to lift one side of the secondary
> from the chassis (most are attached at the frame of the transformer), but it
> sure does seem do-able. Any thoughts, pro or con?
>
> Tom
> KC8KZY
>
> (P.S. The number of X-formers is 2)

4877. Help Identifing rf connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <cO5Z2.2136$h3.293810@news21.ispnews.com>
Source record: 70464

I just got ahold of a remote military antenna switch. It has connecters I have never seen before. They are approx 1/2 inch in diameter and the receptacle in the middle looks to expect a very fine wire or maybe the center conducter goes over these receptacles? I'm not sure. Can anybody help me identify this conecter?
Marty
N5KBP

--
Marty Duplissey
Lone Star Business Systems
Specializing in development for the credit report retrieval industry
Desktop, Networks, Intranets and Internet Delivery
http://www.lsbs.com

4878. ham band xtals F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <37350DD2.2094@earthlink.net>
Source record: 70465

Ham band xtals, including 2 meters and mars see at
http://home.earthlink.net/~docky look under for sale, I have about 70
other ham and test units for sale thanks KØIMJ

4879. Re: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-08 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19990508142738704 32@zetnet.co.uk>
Source record: 70466

> Sorry, I thought a Biro was of American origin ;)
> - cheap ball point pen. No matter what the make, always called biros
> here. 73 John M1BTR
==========
Perhaps ,it is useful to add that many of these ball point pens are
made of polystyrene, at least the part around which the helical is wound.

73 Frank , GM0CSZ / KN6WH

Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland UK
e-mail : gm0csz.kn6wh@ukrs.org

4880. Re: Experimenter Items

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37897c16.993079837@news.atl.bellsouth.net>
Source record: 70330

On 9 May 99 05:36:58 GMT, "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com> wrote:
>$20? Come on guys. If we're going to be sweeping our junk drawers onto the
>net, we ought to at least be charging junk prices. The reason these items
>are hard to find is because they're obsolete. They ought to be had for the
>cost of shipping (though taking them off someone's hands ought to count as
>enough of a public service that shipping should be free).
>
>73 de KF4PV

Actually, there is a demand for obsolete parts, as replacement parts for maintaining older equipment. Price often depends on scarcity, and how much the equipment needing it is worth. A company called Trailing Edge Technologies makes a good living supplying obsolete parts to industry to keep their old equipment going. They're always hunting for old parts to stock for their customers.

I needed some RTL gates to repair a steel bender controller for a customer, and Trailing Edge had them. They charged me $5 each for them, but they were worth it because the machine would cost over $60,000 to replace with one using more modern parts. (Of course the controller could be replaced by one built using a $2 PIC, but the customer didn't want to pay what I'd have to charge him to design and build a custom controller for the bender. He just wanted what he had fixed.)

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4881. Re: Help Identifing rf connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Tom KA4RKT <badger@telalink.net>
Message-ID: <4qgZ2.4843$9M1.4662@news4.atl>
Source record: 70331

Marty Duplissey <mduplissey@lsbs.com> wrote .....
> I just got ahold of a remote military antenna switch. It has connecters I
> have never seen before. They are approx 1/2 inch in diameter and the
> receptacle in the middle looks to expect a very fine wire or maybe the
> center conducter goes over these receptacles? I'm not sure. Can anybody
help
> me identify this conecter?

Hmmm. Without seeing it, cant say other than to guess. If it looks like a
larger
version of an N connector, then it may be a type HN these are threaded
around
the outside. If it looks like a BNC on vitamins and has bayonets on the
outside it may
be a type C connector. Both have smallish center pins in the connector and
both are
pretty much identical except for the way they fasten. (threaded versus
bayonet).

Anyone else out there with other guesses?

73

Tom KA4RKT

4882. Re: Newbie to ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990509104105.28562.00001017@ng63.aol.com>
Source record: 70332

Its true Dan,
If the service people are of the same caliber as the sales people, then the people that turn in their equipment to their service center will get treated the same way or worse =(Bad company no donut

4883. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990509104621.28562.00001020@ng63.aol.com>
Source record: 70333

"Stay tuned for the next exciting episode of 'As the Nety Turns' :Will Billy-Joe Bob Carter actually wake up and 'smell the coffee?? Did Country Boy Roy really spit in the Orange Juice? Tune in Next week for the next exciting episode.....

4884. Re: checking transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990509105208.28562.00001023@ng63.aol.com>
Source record: 70334

Gord,

Hats off to a real true bleu ham operator. I thank you for giving us all a great tutorial on Transformet testing. Kudos and Thank you agian

James KD6KOS

4885. FS: Copper Ground Strip

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: John Skapiak <jskapia1@twcny.rr.com>
Message-ID: <0LhZ2.9976$8m5.18564@newsr1.twcny.rr.com>
Source record: 70335
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Rolls of copper grounding strip .008" thk X 5.5" w X 150 ft. long. $150
per roll + shipping or can deliver to Dayton.

Can be reached at 315-677-5238 or e-mail jskapia1@twcny.rr.com

Thanks & 73,

John K2SY

4886. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: maddog@io.com
Message-ID: <3735ac50.47248483@news.io.com>
Source record: 70336

On Sun, 09 May 1999 15:36:03 +1000, Murray Kelly
<mkelly@powerup.com.au> wrote:

>I have used a fibre tap washer OK and last time, for an 80m
>oscillator I used a 'Lifesaver' after I sized it with PVA
>glue and coated the wound coil with PVC cement to waterproof it.

And just what is the permiability of a lifesaver, anyway?

73,
monty N5FC

4887. need help ts570s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Thomas Medlin <tcmedlinNOSPAM@concentric.net>
Message-ID: <3735BFCF.56FDCB23@concentric.net>
Source record: 70337
Cross-posted to:
rec.radio.amateur.equipment,uk.radio.amateur,rec.radio.amateur.homebrew,aus.radio.amateur.misc,rec.radio.amateur

I recently purchased a Kenwood ts570s. Great radio. I hooked up the remote din plug per the manual to key my homebrew grounded grid amplifier. My amp has a control line and when grounded it keys the amp.

Im using pins 2 and 4 on the din. At first it worked great and keyed the amp 4 or 5 times. Then it stuck in the on mode. It appears that I have approx 1 ohm resistance at all times across pins 2 and 4 which keeps the amp keyed. When keying the mic, it is keying the ts570 relay because I can see pins 2 and 5 opening and closing. I also see between pins 2 and 4 that it always has about 1 ohm but when I key it it reduces to about 1/2 ohm. This makes me believe the relay is working. On the diagram there is a 2200p capacitor (C286) across the relay contacts (pins 2 and4) My guess is that this capacitor has shorted showing the 1 ohm and when the relay keys, it keys across it reducing the resistance to 1/2 ohm.

The amp is a homebrew 813 (X3). The amp switching relay shows about 40 volts across the control line to ground. maybe this is too much voltage and shorted the small surface capacitor.

Any ideas? Can anyone send me a picture of where this 2200p cap C286 is located. I have looked on the board but cant identify it.

Please email me at tcmedlin@cris.com you will have to take the words "NOSPAM" out of my return address.

Thanks and 73,
Tom
--
Visit our homepage at http://www.cris.com/~tcmedlin

4888. FS Crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <3735C5AB.5953@sympatico.ca>
Source record: 70338
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I have a number of crystals for sale as follows - postage extra:

100kc frequency calibrator HCU $10.00

Amateur Frequency FT243 7125kc with a porcelain holder $5.00

Aprox. 40 HCU types that came with my SP600 up to 69mc. Im not going to list them. .50cts each. (yes I know the 600 only goes up to 53mc, but there are 10 the box over 53mc)Or all of them for $25.00

Aprox. 50 HC6 types mixed cb types, mostly HF types in the 8,10mc range, some cbs, and some over 30mc. $20.00 for all of them.

4889. WTB: Drake 1548 adapator for TR-7, R7, RV75

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990509134359.10095.00001155@ng-fy1.aol.com>
Source record: 70339

Have one adaptor but would like another. Allows simultaneous use of TR-7, R-7, and RV-75.

73

Evan

4890. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: rick@area.com
Message-ID: <7h4i13$7uo$1@vax.area.com>
Source record: 70340
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7h30aajro1@nnrp1.deja.com>, <oap1@my-dejanews.com> wrote:
>From your responce you sugest that the Harmony converter will not work with
>CGA, Vga nor EGA I am taking this to mean that the output is a composite
>signal and only if I have one of those cga monitors that also has a composite
>input could I use it? I am using an anolog C Band dish and am currently
>Orville Phillips

The Harmonic Research converter can be wired for sync on green, or separate composite synch (i.e. horizontal and vertical synch on a wire with no video), or separate horizontal and vertical synch wires. I used mine with a Conrac computer monitor with selectable synch rates using the RGB + composite synch setup. The Conrac synch settings were essentially CGA to make all this work.

Rick Karlquist
N6RK

4891. WTD: Copy of Heath IM-18 Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Tom Repstad <kb1cga@starc.org>
Message-ID: <3735F626.8045B2AB@starc.org>
Source record: 70341
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Hi Gang,

I've acquired an unbuilt IM-18 and am looking for a copy of the manual.
Will pay for postage and cost of copying if you have one.

--Tom
KB1CGA

4892. Re: Idea for plate transformers....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: mcalhoun@ksu.edu
Message-ID: <7h4ukm$jqg@fox.ksu.ksu.edu>
Source record: 70342

....
<<using old microwave oven transformers for a plate supply. We would parallel

<So these are about 2kV transformers. Off-load from a single transformer,
<you'd get about 2.8kV, but this is likely to sag down towards 2.5kV
<under even a moderate load. This is not good, because it will make your
<amplifier very liable to "flat-topping" and splatter on speech peaks.

<If you're determined to use these transformers, the best bet is a
<"center-tap" configuration with the insides of the secondaries connected
<together, and the primaries paralleled in opposite phases.
>.... Even so, the regulation will be poor
>because each transformer is in a half-wave rectifier circuit with a DC
>magnetizing current that will still cause early core saturation. Use
>plenty of reservoir capacitance (25-30uF) to help the voltage regulation
>as much as you can.

I had a long QSO with someone using two such transformers in an
amplifier (connected as described above), and his signal sounded just
fine to me. So much so, in fact, that I'm looking for old microwaves
right now!

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Professor Emeritus) "Barbershop" tenor. CDL(PTX) W0PBV (785) 539-4448
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

4893. FS: Boonton manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <9eoZ2.1931$AL5.2797@ndnws01.ne.mediaone.net>
Source record: 70343
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

```
Boonton "Q" meter, model 260-A excellent manual copy - $10 mailed
Boonton sweep generator, model 240-A original manual - $10 mailed
Boonton UHF Q meter, model 280-A original manual - $10 mailed
regards,
Chuck...K1KW
```

4894. Re: IF or AUDIO DSP for HF SSB XCVR - Pros & Cons RE High Noise Levels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: larry33414@aol.com
Message-ID: <19990509184537.16403.00001358@ng-cj1.aol.com>
Source record: 70344

Hi Gary...

Thanks for responding...

>That should help. You might want to look at AC line filtering too. Some of
>your
>noise is probably getting to the radio that way.
>
Have run the receiver on 12vdc battery and still have the noise... so I am sure it's coming mostly thru the ant system.

>Suppressing industrial sources can be difficult (and dangerous if you don't
>know what you're doing, enlist the aid of an industrial electrician).
>

I don't intend to do invasive rf snooping... just bringing a portable SW radio w/ s-meter into the machinery rooms to detect major noise sources.

RE XCVRS: I am trying to locate someone nearby that might bring over an ICOM 746... has an IFDSP and NB which appear adjustable. Will let you know the results.

73
Larry

4895. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373628A7.213F@sir.com>
Source record: 70345
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> I just finished giving my seven year old his code lesson. He's learning the
> code to earn a award in his Tiger Cub Scout group. He is a seven year old
> that came to me to learn the code, and has no interest in radio,

Well why not FORCE him to learn about radio before he can use morse
code? It is ok for him to want to learn Morse Code and not anything
about radio, but not the other way around?!

I would
> think that anyone who is interested in radio should stop crying about it and
> donate the 15 minutes a night for 2 weeks, and learn it.

If your son doesn't have to learn or like radio to enjoy Morse Code,
then people who want to use or like radio do not have to learn Morse
Code.

> No one complains about having to learn how to use windows before they can
> surf the net....

Of course not, no one complains about having to learn how to use a ham
radio before surfing the repeaters either, but what if you made them
learn Russian before they were allowed to use the internet? Then you
would get the same complaints.

4896. Re: IF or AUDIO DSP for HF SSB XCVR - Pros & Cons RE High Noise Levels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <37362BEF.D85389B0@gate.net>
Source record: 70346

Larry,

I have a JPS ANC-4 noise reduction unit which works quite well for locally generated noise. It senses and feeds the offending signal 180 degrees out of phase into the radio which effectively cancels noise. It allows me to work RS15 where there is a terrible noise from my computer monitor on parts of 10 meters.

73, Mike

LARRY33414 wrote:

>
> RE XCVRS: I am trying to locate someone nearby that might bring over an ICOM
> 746... has an IFDSP and NB which appear adjustable. Will let you know the
> results.
>
> 73
> Larry

--
__\/__
| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
||| | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X| | | * P.O. Box 763 ..... AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 ..... ARRL member #1781549 *
/ \ |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| | |4| * kf4fdj@amsat.org ..... EL96ap *
| P | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3 |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_____________________________Oooo._____________________
.oooO ( )
( )) /
\ ((_/
_)

4897. Re: FS: Boonton manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: ralph <crlane@erols.com>
Message-ID: <3736375B.75A92E6E@erols.com>
Source record: 70347
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I will take all three manuals if still avaiable
Ralph
crlane@erols.com

Chuck O'Neal wrote:

> Boonton "Q" meter, model 260-A excellent manual copy - $10 mailed
> Boonton sweep generator, model 240-A original manual - $10 mailed
> Boonton UHF Q meter, model 280-A original manual - $10 mailed
> regards,
> Chuck...K1KW

4898. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <37363938.123C@sir.com>
Source record: 70348
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Rich Mulvey wrote:
>
> On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> >No one complains about having to learn how to use windows before they can
> >surf the net....
> >
>
> Considering that I was "surfing the net" before it was even
> *possible* with MS-Windows, you might want to choose a different
> analogy. Sigh.

The best analogy would be having to learn Morse Code in order to use the internet, as Morse Code has as much to do with knowing how to operate and work the internet as it does with knowing how to operate and work a Ham radio.

4899. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <926304825.973.29@news.remarQ.com>
Source record: 70349
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I have great news for you! You CAN become a ham without learning Morse code. Looking at FCC Part 97, you can qualify for a Technician's license with only a written procedure and absolutely minimal theory test. No Morse code test!

It seems your wish has been granted, and quite some time ago at that. Run on over to your nearest VEC testing facility. There's no need to stop to thank me.

Michael.

Sir <sir@sir.com> wrote in message news:373628A7.213F@sir.com...
> If your son doesn't have to learn or like radio to enjoy Morse Code,
> then people who want to use or like radio do not have to learn Morse
> Code.

4900. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Dean Craft <w4ihk@mindspring.com>
Message-ID: <7h5n7v$5fd$1@nntp5.atl.mindspring.net>
Source record: 70350
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Sir wrote in message <37363938.123C@sir.com>...
>Rich Mulvey wrote:
>>
>> On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
>> >No one complains about having to learn how to use windows before they
can
>> >surf the net....
>> >
>>
>> Considering that I was "surfing the net" before it was even
>> *possible* with MS-Windows, you might want to choose a different
>> analogy. Sigh.
>
>The best analogy would be having to learn Morse Code in order to use the
>internet, as Morse Code has as much to do with knowing how to operate
>and work the internet as it does with knowing how to operate and work a
>Ham radio.

True enough; however, it has everything to do with the es-prit de corps of ham radio. Knowing that one has gone through, and survived, the identical trials and tribulations of his or her counterparts, builds a unique bond of dedication and purpose. The instant gratification crowd of today has no appreciation for that bond.

Dean Craft -- W4IHK

4901. 2 Johnson Vikings F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <3736744E.1FAA@earthlink.net>
Source record: 70351

a Johnson Viking Valiant $100 and a 6N2 6 and 2 meter rig for sale see
at http://home.earthlink.net/~docky Under for sale

4902. F.S. Heathkit HW-99

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <37367275.757@earthlink.net>
Source record: 70352

Heathkit HW-99 for sale along with 80 other items Ham and test equipment, a lot of Heathkit see at http://home.earthlink.net/~docky thanks KØIMJ

4903. 2 Heathkit scopes F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <37367597.4F9D@earthlink.net>
Source record: 70353

I have 2 Heathkit scopes for sale O-12 and a OM-3 both $45 see at
http://home.earthlink.net/~docky look under For Sale

4904. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: kh2d@my-dejanews.com
Message-ID: <7h5vi6$4es$1@brokaw.wa.com>
Source record: 70354
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Sir <sir@sir.com> wrote:

>The best analogy would be having to learn Morse Code in order to use the
>internet, as Morse Code has as much to do with knowing how to operate
>and work the internet as it does with knowing how to operate and work a
>Ham radio.

Now that sounds like a plan, a Morse code test to get on the internet
would keep some of you no-code peckerwoods out of the DX newsgroup
and about a half dozen other ones this 'discussion' doesn't belong in.

Is it REALLY necessary to post this crap to every ham newsgroup there
is ? Some of us have already learned Morse code, we aren't looking for
any good reasons not to....

73, Jim KH2D

4905. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFBJ1Hz.54v@netcom.com>
Source record: 70355
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7h30aajro1@nnrp1.deja.com>, <oap1@my-dejanews.com> wrote:
>From your responce you sugest that the Harmony converter will not work with
>CGA, Vga nor EGA

For different reasons, yes. A cheap CGA monitor doesn't have Analog RGB
inputs. VGA and EGA have different scan rates and won't properly display
at NTSC scan rates. Either the monitor won't run, or will burn out, or it
will display a side by side doubled picture.

>I am taking this to mean that the output is a composite
>signal and only if I have one of those cga monitors that also has a composite
>input could I use it?

The output of the Harmonic Research convertor is Analog RGB. If you
have a CGA monitor with a composite input, you don't need the converter.
Some monitors of that era did have both composite and RGB, and some
didn't. For example, the Zenith monitors for the Z-100 color machines
did, but (I think) the NEC Multisync didn't.

>I am using an anolog C Band dish and am currently
>feeding the composite output to my VCR and then to the TV antenae as the tv
>lacks a composite inputand wanted to know if the improvement in picture
>quality would be worth buying a new tv with composite inputs.

I'd suggest a short term rental of a newer TV and see what it looks like.
Most cheap TV's don't do much better than a VHS recording, so you won't
seen any real improvement until you spend some $$$.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

4906. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFBJ1I1.55I@netcom.com>
Source record: 70356

In article <3735ac50.47248483@news.io.com>,
Monty Northrup <maddog@io.com> wrote:
>On Sun, 09 May 1999 15:36:03 +1000, Murray Kelly
><mkelly@powerup.com.au> wrote:
>
>>I have used a fibre tap washer OK and last time, for an 80m
>>oscillator I used a 'Lifesaver' after I sized it with PVA
>>glue and coated the wound coil with PVC cement to waterproof it.
>
>And just what is the permiability of a lifesaver, anyway?

And if it's one of the flavors that flashes in the dark when you
break it (Wintergreen?), will it glow in the dark if it's energized
with RF?

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

4907. Marcone Xtal oven with 2 Xtals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Arjen Raateland <Arjen.Raateland@vyh.fi>
Message-ID: <373574B6.690E@vyh.fi>
Source record: 70357

Hello all,

I bought a surplus crystal oven of the type with an octal plug. It was made by Marconi and has sockets for two crystals. The oven has a plain aluminum cover which is marked on top:

Marconi
W.44530 ED.A

1. kc/s
2. kc/s

The oven came with two crystals marked:

4000 kc/s
MARCONI
Q01670A
XLC75C

6000 kc/s
MARCONI
Q01670A
20/75/30

The oven has a bimetal switch, I assume, and it appears to work well on 12 Vdc. I just connected the oven such that the switch is in series with the heater element. Heater current is about 500 mA at 12 V. I haven't measured the temperature inside, but the heater cycles on and off.

Looking in the literature it seems a crystal for use in an oven is usually cut such that the frequency goes down when the oven heats up. The frequency starts to go up again past a certain temperature, which is the temperature the oven should maintain.

Well, I measured the heating up characteristics of both crystals in this oven and found that the 4 MHz Xtal goes UP and the 6 MHz Xtal goes DOWN in frequency when the temperature rises from room temperature to the point where the oven starts cycling on and off. This behaviour seems strange. The difference in frequency is tens of Hertz.

My test oscillator is actually my FET dipmeter which I couple to the Xtal and adjust till it locks as seen on a frequency counter. In my setup the 4MHz Xtal is ca. 2 kHz high and the 6MHz ca. 2 kHz low. Strange ... my counter time base may be off a little, but not by that much.

While the oven cycles the frequency keeps going up and down a few Hertz. (I know the counter is just a garden variety, but the oven cycling is

rather quick and the counter sits in comparatively steady circumstances.) The Xtals in this oven don't seem to be such a good combination to me.

Does anybody reading this recognize this type of oven and it's Xtals perhaps? Any information is very welcome.

Could it be that the stability (0,3 ppm) indicated by the seller will be attained by adding or subtracting the two frequencies? (Originally only a 4MHz Xtal was supposed to be included, the 6MHz one was a 'bonus'.) I've never heard of such a scheme, but who knows, the temperature coefficients are clearly opposed in sign between room temperature and oven temperature.

Any information on this subject very welcome.

73,
Arjen OH2ZAZ
--
Arjen Raateland
Finnish Environment Institute
SAS Support
phone +358 9 4030 0350

4908. Help iimproving audio output circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: BarryG <bgNOSPAM@albany.net>
Message-ID: <7h2lbp$8kd$1@news.monmouth.com>
Source record: 70467

Would appreciate hearing from those with the passion and experience of reworking the receive audio circuitry of rigs to improve the audio quality. I loved the audio quality of my old TS930, and am switching over to an Omni 6+ which needs a little audio magic worked into it. I'll be replacing the Ten-Tec 2.4khz filters with Inrad 2.8's and have been eyeing the schematics for additional improvements.

The following is in the audio signal path:

5 polarized caps
4 op amp stages of the notch filter IC (all the time -not bypassed with a switch)
MC14066BCP analog switch IC
TDA2611A audio amp IC

If someone could point out the relative degradation (or lack of) caused by these components and perhaps suggest means of improvement, it would be gratefully received. BTW, I use a Heil Pro headset for listening, which sounds fine with the TS930.

Tnx & 73,
Barry N1EU

---
to reply via email, please delete "NOSPAM" from my reply address
(bee gee at albany dot net)

4909. Idea for plate transformers....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: catsysop@aol.comdiebot
Message-ID: <19990508205721.13037.00001120@ng-fv1.aol.com>
Source record: 70468

I am building a power supply for my 50mhz amp. I need around 3000v for B+. I was talking with another ham, and electronics shop owner, and we kicked around using old microwave oven transformers for a plate supply. We would parallel the secondary windings, series the primary windings, and have about 4kv before rectification. Of course, you would have to lift one side of the secondary from the chassis (most are attached at the frame of the transformer), but it sure does seem do-able. Any thoughts, pro or con?

Tom
KC8KZY

(P.S. The number of X-formers is 2)

4910. Re: checking transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Bill <billharx@flash.net>
Message-ID: <3734DE06.2026@flash.net>
Source record: 70469
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Don't browse here often but noticed Will White wrote:
>
> I picked up 5 power transformers at a hamfest a month ago. Only one is marked
> at all (has leads tagged '110,' '290,' and 'Fil'), the others I don't know a
> thing about (but I got them very cheap). I need to know how to check unknown
> transformers for voltages, polarity, which side is primary, and of course,
> whether they are good (not open or shorted) to begin with. How do I determine
> each of these parameters (and current rating, if possible), safely and accurately?
>
> All I have in the way of test gear is a good RMS DMM, a cheap analog VOM, a
> 7.5A variac, and a couple of non-variable, non-metered 13.8 VDC power supplies.
>
> In addition to the info above, can someone tell me how, if possible, to check
> transformers at hamfests with a DMM or other handheld instrument, at least to
> see that they are good?
>
> Thanks for all replies.
> --
> Will White, KD7BFX
>
> to reply, please click this link mailto:wcw@asu.uswest.net

You can find information on checking power transformers at:

http://www.flash.net/~billhar/tips.htm

Scroll down and click on Identifying Power Transformer Windings
--
****
* Bill Harris - Bill's Antique Radio Emporium *
* http://www.flash.net/~billhar *
* to email, remove the x in the id of the address *
****

4911. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: oap1@my-dejanews.com
Message-ID: <7h30aajro1@nnrp1.deja.com>
Source record: 70470
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

From your responce you sugest that the Harmony converter will not work with CGA, Vga nor EGA I am taking this to mean that the output is a composite signal and only if I have one of those cga monitors that also has a composite input could I use it? I am using an anolog C Band dish and am currently feeding the composite output to my VCR and then to the TV antenae as the tv lacks a composite inputand wanted to know if the improvement in picture quality would be worth buying a new tv with composite inputs.

Orville Phillips

----------== Posted via Deja News, The Discussion Network ==----------
http://www.dejanews.com/ Search, Read, Discuss, or Start Your Own

4912. MD-139 mixer ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Rod Preston <rpreston@netspace.net.au>
Message-ID: <37360A0B.2259@netspace.net.au>
Source record: 70471

Help !!!

I am trying to ascertain the specification (upper freq in particular)of
a component which I believe to be double balanced mixer type # MD-139.
I'm fairly sure that the logo is that of Anzac Electronics, but as I
can't locate their web page, I assume that they are no longer trading
under that name.

The package is 15mm x 15mm x 2mm (5/8"x 5/8" x 1/16") and has 10 pins.
LO is pin 6 and the RF/IF ports are pin 3/10.

Can any one assist ??

Thanks

Rod VK4KZR

--
Rod Preston VK4KZR
WWLOC = QG62LO
email: rpreston@netspace.net.au OR vk4kzr@amsat.org

4913. Re: Experimenter Items

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01be99dd$0a903e40$f5de04d0@p133>
Source record: 70472

$20? Come on guys. If we're going to be sweeping our junk drawers onto the net, we ought to at least be charging junk prices. The reason these items are hard to find is because they're obsolete. They ought to be had for the cost of shipping (though taking them off someone's hands ought to count as enough of a public service that shipping should be free).

73 de KF4PV
--
To reply, remove the text spammenot from the e-mail address.

LDaniel102 <ldaniel102@aol.com> wrote in article
<19990508164424.08809.00000801@ng-ck1.aol.com>...
> For Sale: The following hard to find items to play with:
>
> NIB Complex Sounder Chip SN 76477N
> NIB Voice Synthesizer Chip
> UV-Erasable EPROM 2716
> TOP Octave Synthesizer Chip 50240
> Schottky IC Decade Counter
> Schottky 1 of 8 decoder
>
> $20 all. Any interest? Larry
>

4914. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <37351EC3.476D@powerup.com.au>
Source record: 70473

I have used a fibre tap washer OK and last time, for an 80m
oscillator I used a 'Lifesaver' after I sized it with PVA
glue and coated the wound coil with PVC cement to waterproof it.

Still good a year later.

Kelly wrote:
>
> Please forgive me if this is a stupid question, I'm a homebrew newbie.
>
> What would be the implications of using 3 small washers stacked instead of a
> toroid ferrite core? It seems that they would be *similar* in nature, but I
> am sure that there is a good reason for not doing this.
>
> Any discussion would be welcome.
>
> Thanks
> Kelly.

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

4915. Re: Idea for plate transformers....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <37351F96.F30@powerup.com.au>
Source record: 70474

I'd be careful about the insulation but the magnetic shunts
(two bundles of laminations between the windings should be
removed with a pin punch (or similar). That's what causes the
core saturation AFAIK.

Cheers.Al Dolgosh wrote:

> I have heard somewhere that core saturation may be a problems. Perhaps someone
> with experience can address that issue.
>
> Al - K8EUR
>
> CATsysop wrote:
>
> > Of course, you would have to lift one side of the secondary
> > from the chassis (most are attached at the frame of the transformer), but it
> > sure does seem do-able. Any thoughts, pro or con?
> >
> > Tom
> > KC8KZY

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

4916. Re: Idea for plate transformers....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: catsysop@aol.comdiebot
Message-ID: <19990509014301.22407.00000992@ng-fu1.aol.com>
Source record: 70475

>You might want to parallel the PRIMARY windings, and series the SECONDARY
>windings. Also, be sure to check the isolation of the secondary winding from
>core, after you lift the low side of the winding. It may be that they
>skimped on
>the insulation at that end of the winding, knowing it would be grounded. If
>you
>have access to a Hi-Pot tester, you could check the actual breakdown voltage.
>
>I have heard somewhere that core saturation may be a problems. Perhaps
>someone
>with experience can address that issue.
>
>Al - K8EUR
>
>CATsysop wrote:
>
>> I am building a power supply for my 50mhz amp. I need around 3000v for B+.
>I
>> was talking with another ham, and electronics shop owner, and we kicked
>around
>> using old microwave oven transformers for a plate supply. We would
>parallel
>> the secondary windings, series the primary windings, and have about 4kv
>before

The reason for paralleling the secondary windings was the assumption the 4kv out would be 2kv if you series the primary windings. (IE: 55v at each primary vs 115v) Your last two points are good ones. I don't know about the core saturation, either. I hope someone may.

Tom
KC8KZY

4917. Re: Idea for plate transformers....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <ZFL1avAnLUN3Ewv5@ifwtech.demon.co.uk>
Source record: 70476

CATsysop wrote:
>I am building a power supply for my 50mhz amp. I need around 3000v for B+. I
>was talking with another ham, and electronics shop owner, and we kicked around
>using old microwave oven transformers for a plate supply. We would parallel
>the secondary windings, series the primary windings, and have about 4kv before
>rectification.

So these are about 2kV transformers. Off-load from a single transformer,
you'd get about 2.8kV, but this is likely to sag down towards 2.5kV
under even a moderate load. This is not good, because it will make your
amplifier very liable to "flat-topping" and splatter on speech peaks.

>Of course, you would have to lift one side of the secondary
>from the chassis (most are attached at the frame of the transformer), but it
>sure does seem do-able. Any thoughts, pro or con?

If you lift the inside of the transformer winding from the frame, what
about insulation? With a bridge rectifier, the inside of the secondary
winding will swing to 2.8kV. This is not a good idea for insulation that
was designed for zero voltage!

If you series-connect two secondaries, with the primaries in series too,
that doesn't achieve anything. It only increases the effective primary
and secondary resistances and makes the regulation poorer still.

If you're determined to use these transformers, the best bet is a
"center-tap" configuration with the insides of the secondaries connected
together, and the primaries paralleled in opposite phases.
Don't forget to knock out the magnetic shunt blocks between the
windings, which are designed to cause core saturation and limit the
current drawn by the magnetron. Even so, the regulation will be poor
because each transformer is in a half-wave rectifier circuit with a DC
magnetizing current that will still cause early core saturation. Use
plenty of reservoir capacitance (25-30uF) to help the voltage regulation
as much as you can.

Don't commit yourself to building an amp or even a power supply around
these transformers before you have tested their performance in a real
rectifier circuit with real loads.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4918. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37866e3c.989533244@news.atl.bellsouth.net>
Source record: 70477
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sun, 09 May 1999 03:44:10 GMT, oap1@my-dejanews.com wrote:
>From your responce you sugest that the Harmony converter will not work with
>CGA, Vga nor EGA I am taking this to mean that the output is a composite
>signal and only if I have one of those cga monitors that also has a composite
>input could I use it? I am using an anolog C Band dish and am currently
>feeding the composite output to my VCR and then to the TV antenae as the tv
>lacks a composite inputand wanted to know if the improvement in picture
>quality would be worth buying a new tv with composite inputs.

Going to direct video feed will likely offer a substantial improvement in
picture quality. You don't need to buy a new TV to get that, however. It
is a relatively easy modification to "jeep" a TV to accept direct video
input.

What you need to do is add a switch in the line between the demodulator
of your TV and the first video amplifier. This lets you select either demod
video or a direct video feed you add with a jack in the back. This is basically
how TVs with a direct video input work.

Note that there is a potential hazard to doing this if your TV is a transformerless
model. The chassis can be "hot", and connecting the external video cable shield
to it could present a shock hazard. But if your TV uses a transformer power supply,
even a switcher, it should work fine. If you know what you're doing, you can jeep
a hot chassis set successfully using isolated ground technique, but there is some
risk involved.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4919. Re: IF or AUDIO DSP for HF SSB XCVR - Pros & Cons RE High Noise Levels?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378771e0.990465631@news.atl.bellsouth.net>
Source record: 70478

On 4 May 1999 00:26:14 GMT, larry33414@aol.com (LARRY33414) wrote:
>Hi Gary...
>
>">So what you really want here is a receiver with a good noise blanker located
>right after the first mixer and before any narrow filtering. "
>
>Unfortunately, there is so much machinery at the waterworks that I have no way
>of telling how much is impulse (ignition,etc) versus other noise (motor
>brushes, loose connections, etc.) I do know that our old TS430 noise blanker
>is totally INEFFECTIVE!
>
>I'm in the processof trying to attack the problem by increasing antenna heights
>and relocating antennas.

That should help. You might want to look at AC line filtering too. Some of your
noise is probably getting to the radio that way.

>There's so much machinery around that a widespread noise suppression program
>at the sources would be pretty costly, so I'm trying to pinpoint only the
>major noise generators for corrective action.

Suppressing industrial sources can be difficult (and dangerous if you don't
know what you're doing, enlist the aid of an industrial electrician).

>What HF xcvrs do you recommend for their superior noise blanker performance or
>combination NB + DSP results?

I can't say much about new transceivers. I know one which *isn't* properly
designed. That's the IC-706. Its noise blanker pickoff is after the first narrow
filter, and doesn't work well at all. I modified mine to move the pick off to before
the first IF filter and it works better. My old IC735, which does have the pick
off before the first IF filter, works pretty well too. Ideally you want a radio which
has a front panel adjustment for the blanker sensitivity, and for blanker width
too. When the Russian Woodpecker showed up on the bands, there was a
good bit of interest in this topic, and some radios were built with adjustable
noise blankers to handle it. That seems to have been forgotten in recent
radios.

Audio level DSP can mask noise, but it has already done its dirty work by
pumping the receiver AGC, so that isn't a very satisfactory solution. DSP
at the IF level *should* be better, but that depends on the implementation.
I just don't know enough about recent IF DSP radios to comment on which
one does the best job against electrical noise.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4920. Re: AC Outlet Testing (was Re: Glowbugs & transformer-less power supplies)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <378874f1.991250250@news.atl.bellsouth.net>
Source record: 70479

On Tue, 04 May 1999 03:10:38 -0700, Will White <wcw@asu.uswest.net> wrote:
>Thanks, Roy, for the patient and thorough reply, and everyone else who
>responded. I am now thoroughly put off the cheapskate idea of trying to build
>my little glowbug projects sans transformers. The one-hand-in-back-pocket rule
>is one worth following in all cases.

Isolation transformers are cheap. Go ahead and build your AA5, but add an
isolation transformer for safety.

>Now, a more general and corollary question about AC house wiring: what is the
>proper method of testing outlets to determine if they are wired correctly,
>especially with respect to the third/ground wire? RS and other retailers sell
>an overpriced rinky-dink tester of dubious value. I'd rather learn something
>and save my money.
>
>I am almost certain that with the right procedure and a good DMM (or a simple
>and inexpensive home-brewed tester) I should be able to get more information
>of a higher reliability, but the question remains: what am I looking for, and
>how to acquire that "what"?

Well, the rinky dink testers work fine. The idea behind them is simple. They
measure the potential between the conductors, using neon bulbs and ballast
resistors. Between hot and neutral, there should be 110 VAC of course. Between
hot and safety ground, there should also be approximately 110 VAC. Between
neutral and safety ground there should be a very low potential. The testers
are configured as standard plugs, so they make sure that hot, neutral, and
safety appear on their proper pins. The bulbs tell the story.

As Roy said, the round pin is safety ground, the wide blade is neutral, and the
narrower blade is hot. The purpose of testing is to make sure that they're actually
wired that way. In practical terms, it usually doesn't matter much if safety and
neutral are swapped (though that's a Code violation, and could be a hazard if
the bond in the entrance panel were to open). But it matters a lot if hot is swapped
with either one of them.

The handiest tool I've found to test outlets is called the Volt Pen. It is a plastic
encased tool with a plastic blade sized to fit the hot slot on an outlet. You
hold it in your hand and insert the blade in the slot. A neon bulb inside glows
if the slot is hot (it uses hand capacitance to complete the circuit). It won't
glow when inserted into the neutral slot, or when brought next to the safety
ground (assuming that they're wired correctly). What makes this tool so handy
is that it also works when brought near a wire. Bring it near a hot wire and it glows,
bring it near a neutral or safety and it doesn't. This helps you identify hot wires
without having to actually contact them, and also lets you know whether a circuit

is hot or not before you work on it. Most electrical supply houses carry them.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

4921. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3736E94D.EB30B007@fallschurch.esys.com>
Source record: 70230

Bravo, Doug!! Would that it were so!
73 de W1AEL

4922. Re: Help for beginers.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3736E9F5.8F6D2AD0@fallschurch.esys.com>
Source record: 70231

CW is alive and well, thank you!
73 de W1AEL

4923. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990510103323.14103.00000103@ng-cf1.aol.com>
Source record: 70232

Actually about 5.1323 Mu

4924. Re: Homebrew Noise Cancelling Headphones?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: frussle@erols.com
Message-ID: <3737f321.2798120@news.erols.com>
Source record: 70233

On Fri, 7 May 1999 15:07:16 -0400, "Jim" <jbolinger@Nloisnptaemk.com>
wrote:
<snip>
>My idea is this: The current in the cord going to the headset consists of
>two components, the desired audio from the radio and a current produced by
>the ambient noise. If this current was subtracted from the signal from the
>radio, inverted, added to the signal from the radio, and then applied to the
>headset it should cancel the ambient noise.
<snip>
>Any other thoughts on this?

Issue #1: While frequency responses from speakers are designed to be
flat, I'm not sure the microphonic response will be the same
(excitation from the coil is not the same as the sound exciting the
cone and moving the coil). And since the microphone frequency and
phase response needs to be very well controlled and characterized, I
think it would be difficult getting this to work.

Issue #2: The output amplifier applies volts to the speaker, and the
microphonic response is measured in microvolts. If you can build a
differential microphone amplifier with the low noise and high dynamic
range required to handle these two extremes, you should apply for a
patent.

Get past these two design headaches and you might get somewhere, but I
doubt you'll improve on the performance of existing ANR headsets.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4925. Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: pdrunen@aol.com
Message-ID: <19990510115517.05071.00000245@ng-cg1.aol.com>
Source record: 70234

Hi

Does anyone know if there is a effort to put all the old Ham Radio
Mags onto CD? This was one of the better homebrew type mags around.

Paul

4926. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Mike not Mic <w5old@sonetcom.com>
Message-ID: <01be9a38$29e0d880$360231d1@default>
Source record: 70235
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I've been looking for some CW wav. files in this string of re.re.re.re so I
can upgrade. I guess talk is cheap or where the neck are my Elmers.
--
Howdy! I'm "Mike not Mic"!
You are in contact with Tornado Alley
I'm a Storm Spotter here in Lawton Oklahoma.
My call is W5OLD and all my radios smell like smoke!
Send all traffic to w5old@sonetcom.com

Phil Wheeler <w7ox@mindspring.com> wrote in article
<37368CC0.C4FF41D6@mindspring.com>...
: But Don did say he was operating mobile CW; best *not* write it down,
: methinks!
:
: I'm a bit in between; write down name, qth, rst, etc. -- but usually
: head-copy the rest.
:
: Phil
:
: Monty Northrup wrote:
: >
: > On Fri, 07 May 1999 12:29:02 -0700, Don W6JL <W6JL@ixpres.com> wrote:
: > > I forgot one other important point in my post. DON'T WRITE STUFF
: > >DOWN. Copy it in your head; that is how you will be using it
: > >for ham radio ragchewing. Writing it down is an (unnecessary and
: > >limiting) habit that you don't want to get into if you can
: > >avoid it. I sometimes run into ops on the air who ask me
: > >(as I am working mobile CW) "how do you write it down?". Egad.
: >
: > Hi Don!
: >
: > Hmmm... I've heard this admonishment before, and I really don't
: > understand it. I've been operating almost exclusively CW for over 30
: > years, and I've always written it down. It feels natural to me. It
: > goes in my ears, it comes out my hand. It's not particularly legible
: > above 30 wpm, mind you, but I can refer back to my notes in a ragchew
: > and remind myself of what was said. (I can't recall a 10 minute
: > monologue, but I can if it's written in front of me). Later on (2 or
: > 3 qsos late), I can jot down a note or two in the log if I want. My
: > wife can look over my shoulder if she wants. When visitors come over,
: > they can see that the process actually works... morse in, words out.
: > Above 35 wpm or so, I'll put the pencil down and copy entirely in my
: > head, but if somebody throws a long unfamiliar and non-phonetic word

: > out there at 45 wpm, I'll probably miss it, and I've found that's
: > usually the case for people that "only copy in their head", even at
: > slower speeds. And speaking of slower speeds, people that copy only
: > in their heads have difficulty with copying 10 wpm qsos... I think you
: > forget what was sent at the beginning of the word at that speed... hi.
: >
: > Besides the practicalities, I think it's easier and faster to learn
: > code while writing it down. As you decipher a letter aurally, you
: > write it down, see it with your eyes, and it connects you with the
: > part of your brain that already knows how to read and write.
: >
: > Hey, different strokes for different folks, but I think it's a lot
: > easier and more practical to learn code while writing it down, and
: > make the transition to head-only copy later on if you need or want to.
: > Am I the only one in hamdom that thinks so?
: >
: > 73,
: > monty N5FC
:

4927. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Kelly <zeno.nospam@hotmail.com>
Message-ID: <37371931@news1.us.ibm.net>
Source record: 70236

Kelly wrote in message <372f2846@news1.us.ibm.net>...
> A self admitted "dumb question"

With my first post to this news group, it went from a dumb question to the permiability of a lifesaver, all without being flamed by anyone, and one generous offer of off-line assistance. I've learned bunches about ferrite cores since then,

You guys are great!

Kelly.

4928. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37372823.A85@ixpres.com>
Source record: 70237

Will White wrote:
>
> "Egad" is an archaic contraction of "Ye Gods!", more or less "oh my god," or
> some similar emphatic expression. It would be a good one to add to the CW
> vocabulry, I think ;)

Will OM,

I use 'egad' whenever appropriate on CW, just as any other word.

73,
Don, W6JL

4929. Re: (help) Injecting audio into mic plug--strange result--input impedance?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: "Neal N." <nealn@alpha1.net>
Message-ID: <nTFZ2.388$dJ3.8780@news2.giganews.com>
Source record: 70238
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

A lot of the Icom radios use a condenser microphone and require some voltage to function. Most of the time this voltage is also sent up the audio lead. Maybe your signal generator is working against this DC level. Might try isolating the DC component with a capacitor?

73,

NE5AL

4930. F.S.4 Heathkit SSB monobanders

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <3737359D.22F9@earthlink.net>
Source record: 70239

```
4 200 watt ssb Heathkit monobander transceivers for sale look
http://home.earthlink.net/~docky look under for sale, lots of test
equipment too thanks KØIMJ
```

4931. F.S. tube tester

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <373736FA.13E5@earthlink.net>
Source record: 70240

Mercury tube tester with all the charts and manual in a carrying case
very nice see at http://home.earthlink.net/~docky look under for sale

4932. Re: HELP: TS520 INTERNAL digital display

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37372C08.3B10@ixpres.com>
Source record: 70241

Paul A. Elliott wrote:
>
> I recently bought a TS-520 that has an internal digital display !!
>
> I need a circuit diagram for the display board's.
>
> (I know they didn't make such a critter) however this one has the display
> and the Henry Radio receipt that was in the manual and is dated 12/11/75
> says (1) Kenwood TS520 DIGITAL. the receipt also says in the margin, Note:
> customer to return radio for modification after Jan 1, 1976 so I am assuming
> that Henry Radio provided this mod.
>
> The additional circuit board's are definitely not home grown.
>
> I have also emailed Henry Radio but after almost 25 years I figure most of
> the Henry employees would be gone and it is more likely that there is a ham
> out there that has info on this mod. Covering all the bases!
>
> The radio works fine but the display which has (4) led's is on but does not
> change reading while tuning.
>
> Any information would be appreciated.
> Thanks
>
> Paul N7IJB n7ijb@gte.net
"

Paul OM,
I have a TS820 (not the "S" model) which I have used for over 21
years, with no digital display. I have never found a real need for
one. I also have homebrew gear with no displays, same experience.

73,
Don, W6JL

4933. F.S. huge tank coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: KØIMJ <docky@earthlink.net>
Message-ID: <373737F6.383D@earthlink.net>
Source record: 70242

huge tank coils B&W I think see at http://home.earthlink.net/~docky look under For Sale thanks KØIMJ

4934. Re: checking transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7h7hr2jrr1@nnrp1.deja.com>
Source record: 70243
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

A couple of things to remember for testing transformers at hamfests --

It's a lot easier if you have clip leads (not probes) on your
pocket VOM, so you can get a better contact on old grungy wires.

You want a fairly sensitive VOM -- at least 20K ohms/volt -- so you can
tell if you're seeing a true open, a true short, or your own skin
resistance. Make sure it has a good battery.

In general, winding resistance is inversely proportional to voltage.
A 1 K-ohm winding is going to be a high voltage winding, a 0.5 ohm
winding is going to be a low-voltage winding. That, along with color
coding, will get you in the ballpark to guess what you've got.

You want NOT to use a continuity light for testing transformers. Why?
Consider what you have when you hook up a 3 volt light to a 5 volt
secondary on an old TV transformer. A circuit, right? Yeah, and
when you disconnect the light, you break the circuit and you release
the charge in the transformer. If you're touching the high-voltage
secondaries, I guarantee you'll know it. You would probably rather
go a few rounds with the ol' wouff hong.

When you bench-test a transformer, it's a good idea to put a 100-watt
light bulb in series with the primary. If you have a problem, the
light will come on. This will work through a variac, too -- problem
for some of us is that we don't have a variac.

You can use old car headlights in series/parallel to test low-voltage
windings for current. Add in more headlights to draw more current.
Junkyard headlights are typically 60 watt units, so if you're testing
a 12-volt winding, expect to see about 5 amps per headlight filament.
You'll have your max current rating when the output voltage starts to
sag.

73 N6OTQ

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

4935. Atlanta ham fest,

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: John Fearon <john@peach.negia.net>
Message-ID: <Pine.SOL.3.95.990510160604.8784D-100000@peach.negia.net>
Source record: 70244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

Please don't forget the Atlanta ham fest on June 5 and 6. It will be held at Miller Park, in Marietta, Ga. There will be room for seven thousand cars. There will be an active flee market. We have 180 commercial tables and many of them are already gone. If you are interested in commercial tables at $20.00 each then contact Ben Dasher, ke4yzx at bdasher@mindspring.com and if you are interested in flee market spaces at $10.00 each, contact Gars, P. O. box 88 Lilburn, Ga. 30048-0088. For other information, contact John Fearon w4wkp at john@negia.net. We hope that this ham fest will prove to be one of the best and most enjoyable fest we have had in recent years. By the way, the admission will be $5.00 each. There will be food on site. Come one come all. 73 John Fearon, w4wkp

4936. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <37374476.96F4350E@alliedsignal.com>
Source record: 70245

No, but it locks an oscillator at precisely 10.000000 mHz. ;)

Mark Zenier wrote:

> In article <3735ac50.47248483@news.io.com>,
> Monty Northrup <maddog@io.com> wrote:
> >On Sun, 09 May 1999 15:36:03 +1000, Murray Kelly
> ><mkelly@powerup.com.au> wrote:
> >
> >>I have used a fibre tap washer OK and last time, for an 80m
> >>oscillator I used a 'Lifesaver' after I sized it with PVA
> >>glue and coated the wound coil with PVC cement to waterproof it.
> >
> >And just what is the permiability of a lifesaver, anyway?
>
> And if it's one of the flavors that flashes in the dark when you
> break it (Wintergreen?), will it glow in the dark if it's energized
> with RF?
>
> Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

--

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| The opinions expressed here are my own, |
| and not necessarily those of my employer. |
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4937. Re: Homebrew Noise Cancelling Headphones?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <373749b9.0@news.netwalk.com>
Source record: 70246

Jake Brodsky wrote in message <3737f321.2798120@news.erols.com>...
>>Get past these two design headaches and you might get somewhere, but I
>doubt you'll improve on the performance of existing ANR headsets.
>

I'm not try to improve on existing ANR headsets, I'm trying to improve on existing non-ANR headsets without spending the $400+!!!

By the way, yours is the type of discussion I was looking for.

Jim
N8EE
(also a student pilot)

4938. Re: gps antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <37374a50.0@news.netwalk.com>
Source record: 70247

Jeremy Hopkins wrote in message <3734D305.A1AE947A@toltbbs.com>...
>i'm looking for info on building gps antennas, any help would be greatly
>appreciated
>or dose anyone know of any external gps antennas in the 30-50 dollar us
>price range

Try looking up 'Quadrafilar Helix'.

Jim
N8EE

4939. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <37374bc1.0@news.netwalk.com>
Source record: 70248

Lee Smith wrote in message <8huZ2.88$Np1.7023@news1.mts.net>...
>Hello Folks:
>
>Can anyone point me toward a source for white LED's?
>
>Thanks a million!
>
>Lee Smith
>VE4ANC
>
>

White LED???

Don't think I have ever heard of one.

The other post mentioned LEDs in a clear plastic dome, but the LED itself will still have some color. Because of how LEDs work (quantum physics stuff, which I won't go into here) they all have some color to them.

Many years ago the only thing available was red, since that is the easiest to make. Since then, those guys who stay awake at night worrying about such things have come up with ways to make many different colors.

If you really want 'white' one you could get several different colors and operate them at the same time, but it would be cheaper to get a plane ol' light bulb.

Jim
N8EE

4940. Re: AC Outlet Testing (was Re: Glowbugs & transformer-less power supplies)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3737517A.59041221@fallschurch.esys.com>
Source record: 70249

What Grogancat recommends is hazardous -- potentially lethal to an unsuspecting user if there is ANY possibility of somebody plugging it in wrong and then contacting the hot chassis. If one builds a potentially hot chassis instrument, the only responsible thing to do is to put it in an enclosure that completely prevents any contact with the chassis or anything connected thereto. Only an ablsolute hermit ham can hope to get away with the consequences of building a death-trap, and only if his memory does not fail!
Apart from that, it is obvious that Grogancat built a great learning project.
73 de W1AEL

4941. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: John Ryding <zionluth@southwind.net>
Message-ID: <37375A1A.B46AA4@southwind.net>
Source record: 70250
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

My understanding of why we still have morse code as a requirement is simply because of international agreements. In order to work DX, the ITU still requires a code proficiency. What speed varies with the country issuing the license, so the FCC could easily reduce the speed, but there would still be the minimum requirement.

I consider myself an "appliance operator" and haven't used code for a long time. I am one of those that would like to see it dropped as well. We are not preserving a tradition, trying to keep anyone out, or making ourselves an exclusive group. Amateur radio should advance the radio art, have a trained pool of operators for emergencies, and improve international relations. These can be done without CW, but until the ITU changes its policy, the FCC has no choice.

Rev. John Ryding
WW0H

4942. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <dgfFBJFAD.B2v@netcom.com>
Source record: 70251

In article <37374bc1.0@news.netwalk.com> "Jim" <jbolinger@Nloisnptaemk.com> writes:
>
>Lee Smith wrote in message <8huZ2.88$Np1.7023@news1.mts.net>...
>>Hello Folks:
>>
>>Can anyone point me toward a source for white LED's?
>>
>>Thanks a million!
>>
>>
>
>White LED???
>
>Don't think I have ever heard of one.
>
>The other post mentioned LEDs in a clear plastic dome, but the LED itself
>will still have some color. Because of how LEDs work (quantum physics
>stuff, which I won't go into here) they all have some color to them.
>

The white ones incorporate a red, green and blue chip on the same package,
with two leads. The white balance can vary a bit but it's usually OK for
casual usage.

I've never seen a 4-legged one with separate controls for red/green/blue,
but they do exist as I saw them in a moving-words sign at Disney that was
full color.

73 Dave WB0GAZ dgf@netcom.com

4943. ** FLEA at MIT ** Sunday May 16th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: w1gsl@mit.edu
Message-ID: <7h7lga$gio@senator-bedfellow.MIT.EDU>
Source record: 70252
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Subject: ** FLEA at MIT ** Sunday May 16th Cambridge MA
Summary: Buy Sell SWAP Ham Radio Electronics Computers 9AM - 2PM

This coming Sunday....

Sellers Season Passes will be still be sold however, NOW is the
time to send in your season pass applications if you want to be
in the prepaid line, which will be admitted first.

*** !!!! In our Traditional GARAGE and lot !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
Sunday May 16th 1999
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >2000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Separate lines will form prior to gate opening
for prepaid and nonprepaid vendors

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all

sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

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4944. F.S. Weston meters NIB

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: wa4uso@aol.com
Message-ID: <19990510190922.00258.00000248@ng156.aol.com>
Source record: 70253

40 Weston panel meters, type 301, open face
most are new old stock from the 1920's through
1940's Email me your needs and I will check to
see if I have one in stock.

TNX D Darby

4945. LOOKING FOR A DIAGRAMM OF UHF BEAM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Gervais Fillion <gfillio1@globetrotter.net>
Message-ID: <7h7trqfia1@news.quebectel.com>
Source record: 70254

hi all,
i am looking for a diagramm,a planc of yhf beam of 5 or 6 elements for RV
use.
we are planning a rideon vtt and we need a planc esasy to built.
so far no luck.so anyon that could help me i will appreciate ,i just kept an
old tv antenna for that purpose.

so thanks for any help!
73/s to all.
ve2ckn@rac.ca
gervais
bic,quebec

4946. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Brian <schousek@geocities.com>
Message-ID: <7h84sa$26k$1@jair.pressenter.com>
Source record: 70255

David Feldman wrote in message ...
>In article <37374bc1.0@news.netwalk.com> "Jim" <jbolinger@Nloisnptaemk.com>
writes:
>>
>>Lee Smith wrote in message <8huZ2.88$Np1.7023@news1.mts.net>...
>>>Hello Folks:
>>>
>>>Can anyone point me toward a source for white LED's?
>>>
>>>Thanks a million!
>>>
>>>
>>
>>White LED???
>>
>>Don't think I have ever heard of one.
>>
>>The other post mentioned LEDs in a clear plastic dome, but the LED itself
>>will still have some color. Because of how LEDs work (quantum physics
>>stuff, which I won't go into here) they all have some color to them.
>>
>
>The white ones incorporate a red, green and blue chip on the same package,
>with two leads. The white balance can vary a bit but it's usually OK for
>casual usage.
>
>I've never seen a 4-legged one with separate controls for red/green/blue,
>but they do exist as I saw them in a moving-words sign at Disney that was
>full color.
>
>73 Dave WB0GAZ dgf@netcom.com
>
Actually some of the white ones are a high intensity blue, with a phospor
coating. If you squint you can see the bluish tinge to the white, but it's
certainly closer to white than, say, an incandescent bulb.

kb9tbb

4947. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: CommQuart <commquart@erols.com>
Message-ID: <7h85a7$db9$1@autumn.news.rcn.net>
Source record: 70256

I just sent out a major portion of my HR collection for scanning.
The magazine is being put on CD at this moment. CQ
Magazine will be the CD's publisher.

Peter
Communications Quarterly Magazine

PDRUNEN wrote in message <19990510115517.05071.00000245@ng-cg1.aol.com>...
>Hi
>
>Does anyone know if there is a effort to put all the old Ham Radio
>Mags onto CD? This was one of the better homebrew type mags around.
>
>Paul

4948. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3737913F.7645@pop.valley.net>
Source record: 70257

Kelly wrote:
>
> Kelly wrote in message <372f2846@news1.us.ibm.net>...
> > A self admitted "dumb question"
>
> With my first post to this news group, it went from a dumb question to the
> permiability of a lifesaver, all without being flamed by anyone, and one
> generous offer of off-line assistance. I've learned bunches about ferrite
> cores since then,
>

Hello--
Not to muddy the waters, but I've seen samples of stamped-lamination
toroidal cores that consisted of washer-shaped plates, stacked and
wrapped in insulating tape to form a flattish toroid. I have no idea
what the end use of these cores would be-- probably somewhere cheap
and disposable<g>.
73,
Brad AA1IP

4949. Any ideas for a radio booster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Slip <slipnfall@waconet.org>
Message-ID: <7h81iu$1ff5@enews3.newsguy.com>
Source record: 70258

Hi there,
My appologies for the amateur question(well, I guess this *is* the amateur NG), but I would like to know how hard it would be to build a small radio booster. My home stereo is a Philips FW-316C to be exact. The antena input is an FM Aerial 300ohm T-type jack(two input jacks). Currently there's a 10' y-cable antena stapled to the ceiling, but I still get lowsy reception. I'm currently a sophomore at a local vo-tech school and *do* have electronics experiance(so don't worry with describing components, etc). I was thinking of something similar to those cable-tv boosters which rely on the AC line. Is there a way to possibly do this with FM signals?

If this NG is not the apropriate one to be posting this to, please e-mail me personally and suggest a better one.

Thanks for any help you may be able to offer!
-Jamie

4950. how to wire an end fed antennna

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: BRYAN RAY <M1DKR@m1dkr.freeserve.co.uk>
Message-ID: <7h54v5unh1@news5.svr.pol.co.uk>
Source record: 70358

can anyone help me wire an end fed anttenna using a long wire (40m)
into a reciever using coax and twin feeder diagram appreciated

4951. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <37362A5A.65D4@powerup.com.au>
Source record: 70359

The permeability isn't in the books! :-)

But it oscillates sweetly.

Monty Northrup wrote:
>
> On Sun, 09 May 1999 15:36:03 +1000, Murray Kelly
> <mkelly@powerup.com.au> wrote:
>
> >I have used a fibre tap washer OK and last time, for an 80m
> >oscillator I used a 'Lifesaver' after I sized it with PVA
> >glue and coated the wound coil with PVC cement to waterproof it.
>
> And just what is the permiability of a lifesaver, anyway?
>
> 73,
> monty N5FC

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

4952. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: dogbert@mindless.com
Message-ID: <373661ad.18190002@news.earthlink.net>
Source record: 70360
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Mon, 26 Apr 1999 18:22:42 -0400, "The Conqueror"
<joetheripper@hotmail.com> wrote:

>I was just wondering why they still keep the Morse code testing requirements
>if the military doesn't use it anymore and telegraphs are not that common. I
>think because they stopped it for the marines, there's no point in using it
>in ham radio either. And if you want to say it is for security, you are not
>allowed to use codes when intended to obscure meaning.
>
>-Dan K3DRQ
>
>k3drq@qsl.net
>
>

Now, LOOK. Haven't you watched the movie Independence Day?
It was Morse Code that saved the world! :-)

>
>

4953. HELP: TS520 INTERNAL digital display

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: "Paul A. Elliott" <n7ijb@gte.net>
Message-ID: <DttZ2.5786$ax4.339885@dfiatx1-snr1.gtei.net>
Source record: 70361

I recently bought a TS-520 that has an internal digital display !!

I need a circuit diagram for the display board's.

(I know they didn't make such a critter) however this one has the display and the Henry Radio receipt that was in the manual and is dated 12/11/75 says (1) Kenwood TS520 DIGITAL. the receipt also says in the margin, Note: customer to return radio for modification after Jan 1, 1976 so I am assuming that Henry Radio provided this mod.

The additional circuit board's are definitely not home grown.

I have also emailed Henry Radio but after almost 25 years I figure most of the Henry employees would be gone and it is more likely that there is a ham out there that has info on this mod. Covering all the bases!

The radio works fine but the display which has (4) led's is on but does not change reading while tuning.

Any information would be appreciated.
Thanks

Paul N7IJB n7ijb@gte.net

4954. White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Lee Smith <ckvnfm@mb.sympatico.ca>
Message-ID: <8huZ2.88$Np1.7023@news1.mts.net>
Source record: 70362

Hello Folks:

Can anyone point me toward a source for white LED's?

Thanks a million!

Lee Smith
VE4ANC

4955. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <926314894.160.99@news.remarQ.com>
Source record: 70363
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I think you're making a strong argument for maintaining the status quo.

Michael.

Sir <sir@sir.com> wrote in message news:37363938.123C@sir.com...
> Rich Mulvey wrote:
> >
> > On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> > >No one complains about having to learn how to use windows before
they can
> > >surf the net....
> > >
> >
> > Considering that I was "surfing the net" before it was even
> > *possible* with MS-Windows, you might want to choose a different
> > analogy. Sigh.
>
> The best analogy would be having to learn Morse Code in order to use
the
> internet, as Morse Code has as much to do with knowing how to operate
> and work the internet as it does with knowing how to operate and work
a
> Ham radio.

4956. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <37368CC0.C4FF41D6@mindspring.com>
Source record: 70364
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

But Don did say he was operating mobile CW; best *not* write it down, methinks!

I'm a bit in between; write down name, qth, rst, etc. -- but usually head-copy the rest.

Phil

Monty Northrup wrote:
>
> On Fri, 07 May 1999 12:29:02 -0700, Don W6JL <W6JL@ixpres.com> wrote:
> > I forgot one other important point in my post. DON'T WRITE STUFF
> >DOWN. Copy it in your head; that is how you will be using it
> >for ham radio ragchewing. Writing it down is an (unnecessary and
> >limiting) habit that you don't want to get into if you can
> >avoid it. I sometimes run into ops on the air who ask me
> >(as I am working mobile CW) "how do you write it down?". Egad.
>
> Hi Don!
>
> Hmmm... I've heard this admonishment before, and I really don't
> understand it. I've been operating almost exclusively CW for over 30
> years, and I've always written it down. It feels natural to me. It
> goes in my ears, it comes out my hand. It's not particularly legible
> above 30 wpm, mind you, but I can refer back to my notes in a ragchew
> and remind myself of what was said. (I can't recall a 10 minute
> monologue, but I can if it's written in front of me). Later on (2 or
> 3 qsos late), I can jot down a note or two in the log if I want. My
> wife can look over my shoulder if she wants. When visitors come over,
> they can see that the process actually works... morse in, words out.
> Above 35 wpm or so, I'll put the pencil down and copy entirely in my
> head, but if somebody throws a long unfamiliar and non-phonetic word
> out there at 45 wpm, I'll probably miss it, and I've found that's
> usually the case for people that "only copy in their head", even at
> slower speeds. And speaking of slower speeds, people that copy only
> in their heads have difficulty with copying 10 wpm qsos... I think you
> forget what was sent at the beginning of the word at that speed... hi.
>
> Besides the practicalities, I think it's easier and faster to learn
> code while writing it down. As you decipher a letter aurally, you
> write it down, see it with your eyes, and it connects you with the
> part of your brain that already knows how to read and write.
>

> Hey, different strokes for different folks, but I think it's a lot
> easier and more practical to learn code while writing it down, and
> make the transition to head-only copy later on if you need or want to.
> Am I the only one in hamdom that thinks so?
>
> 73,
> monty N5FC

4957. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <37368DC2.58299E14@mindspring.com>
Source record: 70365
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Monty Northrup wrote:
>
> Above 35 wpm or so, I'll put the pencil down and copy entirely in my
> head,

Not up to those speeds, alas; above 35 wpm or so I tune in a slower station.

> but if somebody throws a long unfamiliar and non-phonetic word
> out there at 45 wpm, I'll probably miss it, and I've found that's
> usually the case for people that "only copy in their head", even at
> slower speeds.

Agree!

> And speaking of slower speeds, people that copy only
> in their heads have difficulty with copying 10 wpm qsos.

And with that: Too slow and you cannot copy words, only letters; then I must write it all down.

Phil

4958. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Phil Wheeler <w7ox@mindspring.com>
Message-ID: <37368E39.5C4B4783@mindspring.com>
Source record: 70366
Cross-posted to: rec.radio.amateur,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave

And I'm trying to recover former CW skills/speed at 62; we will see if
enough brain cells and reflexes are left!

Phil

Monty Northrup wrote:
>
> On Fri, 7 May 1999 12:35:56 -0500, "BD" <bodu@pobox.com> wrote:
>
> >2 weeks?? ;) It took me, a 35yr old, almost 4mnths to learn it...
>
> I know what you mean... I took up the piano at 45...
>
> monty N5FC

4959. Re: 2 Heathkit scopes F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <37369166.2CB12DF6@megsinet.net>
Source record: 70367

Kï¿½IMJ wrote:
> I have 2 Heathkit scopes for sale O-12 and a OM-3 both $45 see at
> http://home.munged.net/~docky look under For Sale

That's six separate advertisements in this newsgroup from you in two days.
Downright rude of you.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

4960. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <373693E2.F23B5A6@megsinet.net>
Source record: 70368
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Stinson wrote:
> "Clifton T. Sharp Jr." wrote:
> > Only a spammer would call spamming "the new market".
> Funny how the definition of "spammer" seems to change
> with the control freak and self-appointed net cop
> who's throwing it around.

No change here. Spammers are sociopaths who steal the resources of others to carry out their own agenda.

> > You're wrong, and it's been explained before.
> You sound like a child on the school ground.
> "You're wrong! So there! Naaa!"
> Please enlighten me, oh wise one.
> Correct my poor ignorance.
> On second thought, don't. I hear enough BS on CSPAN.

Goodness knows you're spreading enough of it. In any event, you don't want your ignorance corrected, all you want is to rationalize your sociopathic actions.

> > It is not our job to delete them.
> Translation:
> "It's your fault that I'm too lazy to set my filters!"
> I'll bet you blame the bank when you bounce a check
> and yell at your kids when you drop the milk.

When people litter my yard, I stifle the litterers.

> >It is the job of newsgroup participants
> > not to post them where charter forbids them.
> Please quote the passage in the charter of this group
> that forbids sale postings.
> (silence)....... uh, huh... That's what I figured.

You really do need a visit to news.newusers.*. Sale postings are forbidden in all Usenet newsgroups outside biz.* unless the charter specifically allows them.

But you're not talking about an innocent sale posting or two. You're talking about some "new market", as if our computers are your personal advertising space.

> > As a matter of fact, newspaper switchboards
> >are overloaded with such calls.
> Childish horse manure.

> Kindly cite your sources for this ridiculous spluttering.

Friends who've worked at newspaper switchboards.

> > If you can't play nice with others, go somewhere else.
> If you can't curb your egoist urges to be net-cop-in-charge,
> you should perhaps go back to grade school where manners were
> supposed to have been taught to you.
> I'll meet you there and perhaps we'll both learn something!

You want not to learn. You want to do what you want to do, and you're either too stupid to know or too nasty to care what effect your actions have on others.

> >> People need to stop claiming they are somehow being harmed
> >> by the sale posts. It just isn't true.
> > Flat statement without substantiation.
> Word game providing a phoney retort when a real one is not possible.
> Please define "flat statement" and the process by which
> one substantiates same.

See your own posting for copious examples. As for your lame game, define "define".

> >Typical spammer tactic.
> Since the definition of "spammer" appears to depend on who's
> using it to manipulate, bully and insult others,
> I propose that there is no "typical" spammer.

Yeah, you're special.

> > > They're harming themselves by not setting filters
> > > that were put there for that purpose.
> > But we do. They usually take the form
> >"Provider, please stifle your spammer."
> Gosh--- I wonder why those providers don't run all those "spammer"
> for-sale posters off? Could it be that the people
> whining about the ads are (*GASP!*)
> FULL OF CRAP??? hmmmmmm!

It's because all too many people tolerate it because they think they can't do anything to stop it. I know better. I stop spammers.

> > > Same as someone who refuses to wear a seat belt-
> > > he has no one to blame for his bruised forehead but himself.
> >
> > A completely inappropriate analogy.
> Talk about your unsubstantiated "flat statements."
> I'll pass my blue ribbon to you.
> You clearly surpass me in this area.
> Congrats, Champ!

You're not very good at this, are you?

> > You'll pardon us if we keep fighting to keep things
> > the way they're meant to be, and work to get spammers off the 'net.
> I fully expect that anal-retentive control freaks will continue
> to blame others for their moronitudes*, attempt to bully people
> and demand that things go "their way."
>
> I also expect they will continue to FAIL.... heh heh heh....

I have an impressive record of stopping spammers. I will continue to stop
them at every turn.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

4961. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <dgfFBIBrx.Iwr@netcom.com>
Source record: 70369

In article <8huZ2.88$Np1.7023@news1.mts.net> "Lee Smith" <ckvnfm@mb.sympatico.ca> writes:
>Hello Folks:
>
>Can anyone point me toward a source for white LED's?
>
>Thanks a million!
>
>Lee Smith
>VE4ANC
>
>

All Electronics Corporation (los angeles area) - in their catalog - they
are a clear lense (not diffused) so my use of one as a panel indicator
wasn't very satisfactory (even at 1 mA it is still MUCH too bright);
they are about $4 each the last time I looked at their catalog.

73 Dave WB0GAZ dgf@netcom.com

4962. Old Transformer & Choke value

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: John Skapiak <jskapia1@twcny.rr.com>
Message-ID: <xzzZ2.10256$8m5.18935@newsr1.twcny.rr.com>
Source record: 70370
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have the following old transformers, chokes, and coils and I'd like to get an idea of what they might be worth.

UTC - S-58,S-60,R-107,F-7071,FT-4,R-19,R-20,H-24, and HQA-200 with box and spec. sheet.

Thordardson - T-21FO5, T-55180 B-7489102, and a T87C49 or T67C49 (difficult to read first letter)

Any information or assistance would be appreciated.

Thanks,

John K2SY

4963. Re: Idea for plate transformers....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <uG8IqKA41nN3EwYR@ifwtech.demon.co.uk>
Source record: 70371

Myron A Calhoun wrote:
>....
><<using old microwave oven transformers for a plate supply. We would parallel
>
><So these are about 2kV transformers. Off-load from a single transformer,
><you'd get about 2.8kV, but this is likely to sag down towards 2.5kV
><under even a moderate load. This is not good, because it will make your
><amplifier very liable to "flat-topping" and splatter on speech peaks.
>
><If you're determined to use these transformers, the best bet is a
><"center-tap" configuration with the insides of the secondaries connected
><together, and the primaries paralleled in opposite phases.
>>.... Even so, the regulation will be poor
>>because each transformer is in a half-wave rectifier circuit with a DC
>>magnetizing current that will still cause early core saturation. Use
>>plenty of reservoir capacitance (25-30uF) to help the voltage regulation
>>as much as you can.
>
>I had a long QSO with someone using two such transformers in an
>amplifier (connected as described above), and his signal sounded just
>fine to me. So much so, in fact, that I'm looking for old microwaves
>right now!

There are two reasons why it "sounded just fine".

One is the transformer / power supply issue. It certainly IS possible to use these transformers successfully in a linear amplifier, if you don't drag the voltage down by being too greedy for power output.

The other reason is that on-frequency audio quality reports tell you nothing useful about the linearity of a power amplifier. The distortion from a non-linear amp appears mostly OFF-FREQUENCY in the form of wideband splatter. Even if you're spreading splatter across the band - and across the world - the people you're working on-channel will still be saying "sounds just fine".

Try testing with local stations on a dead and empty band. Ask them to tune away either side of your frequency, and to tell you how wide your signal is before it disappears into the noise. You'll be surprised how badly an amplifier can be spreading, before it has any noticeable effect on the audio quality.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

4964. Re: Conversion of crystal transceiver to VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: dpotter@bbn.com
Message-ID: <3736cca5.258854268@news>
Source record: 70372

On Sat, 8 May 1999 06:00:41 -0400, "Robert Parker" <rparker@sprint.ca>
wrote:

>I have an HF marconi ch150 solid state transceiver and i'm going to convert
>it to VFO by injecting the VFO signal into one of the crystal sockets. I
>was wondering if anyone has done this before and what there experience was.
>I realize the harmonics must be filtered before injection and therefore
>before I do anything, I will look at the O/P of the VFO on a spectrum
>analizer to determine the type of filtering required. If i'm lucky, no
>filtering will be required. This modification will be for both transmitting
>and receiving in order to give this rig more versitility. Marconi has made
>a very nice rig and I wish to have it on the air on nearly all the bands.
>Coverage of thie rig is from 2mhz-24mhz.
>Second part of my query is: Does anyone know of any PC circuits that work to
>do the same thing as a VFO?
>Perhaps a PC controlled function generator?
>
>You comments and suggestions will be greatly appreciated.
>
>73's
>ROB
>VE3RPF
>
>

You will probably, almost certainly, have to modify the oscillator
circuit to eliminate the feedback path that made it an oscillator.
Depending on the circuit, that will entail removing a capacitor or
grounding a source/emitter/cathode or something of the sort.

There is a company in Florida, Bytemark, that sells a very nice little
PC card that puts out about 5 dBm up to 54 MHz that is very clean, at
least on my spectrum analyzer, and the price is reasonable. They have
a web page at http://www.bytemark.com

Good luck, Rob.

73

Dave
K1MBO

4965. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Ray <cougar@net2000.com.au>
Message-ID: <EkAZ2.321$B94.2319@nswpull.telstra.net>
Source record: 70373
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Learning morse code is like having to learn to program in binary before you
can turn your computer on or learning to ride a horse before you can get
your driving license just so you can relate to horse power.

Bring back the dark ages too!

Ray
Jim <kh2d@my-dejanews.com> wrote in message
news:7h5vi6$4es$1@brokaw.wa.com...
> Sir <sir@sir.com> wrote:
>
> >The best analogy would be having to learn Morse Code in order to use the
> >internet, as Morse Code has as much to do with knowing how to operate
> >and work the internet as it does with knowing how to operate and work a
> >Ham radio.
>
> Now that sounds like a plan, a Morse code test to get on the internet
> would keep some of you no-code peckerwoods out of the DX newsgroup
> and about a half dozen other ones this 'discussion' doesn't belong in.
>
> Is it REALLY necessary to post this crap to every ham newsgroup there
> is ? Some of us have already learned Morse code, we aren't looking for
> any good reasons not to....
>
> 73, Jim KH2D
>
>

4966. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: konstans@one-eleven.net
Message-ID: <3736cfee.77500702@nntp.one-eleven.net>
Source record: 70374
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Fri, 7 May 1999 08:21:11 -0500, "jpos" <jpos@mobilemark.com> wrote:

>I just finished giving my seven year old his code lesson. He's learning the
>code to earn a award in his Tiger Cub Scout group. He is a seven year old
>that came to me to learn the code, and has no interest in radio, I would
>think that anyone who is interested in radio should stop crying about it and
>donate the 15 minutes a night for 2 weeks, and learn it.

If only it were that simple. You and the otehr ProCoders can't accept
the fact it aint so. Haven't you read QST lately
>
>No one complains about having to learn how to use windows before they can
>surf the net....

You have to learn window before using the Net. Gee did not know that.
Indeed I know plenty of Net users that don't do windows. but then if
it were true that you did it is not likely that we would hear much
from them.

But My My the Federal governement requires knowledge of windows in
order to surf the net. I never knew that Thanks for telling me
>
>Jerry N9DKQ
>not a Brass Pounder.....

Mark Morgan
kb9rqz.

Privacy of unsolicted email is not assured
Unsolictied email will be published forwared
or ourwise disclosed as I see fit.

sending unsolitcied Email will be
deemed aceptance of these terms

4967. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: konstans@one-eleven.net
Message-ID: <3736d0fa.77769205@nntp.one-eleven.net>
Source record: 70375
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

On Sun, 9 May 1999 23:23:53 -0400, "Dean Craft" <w4ihk@mindspring.com>
wrote:

>True enough; however, it has everything to do with the es-prit de corps of
>ham radio. Knowing that one has gone through, and survived, the identical
>trials and tribulations of his or her counterparts, builds a unique bond of
>dedication and purpose. The instant gratification crowd of today has no
>appreciation for that bond.

That is saying that it is a hazing ritual. If more of you wanted to be
honest and call it that and defend it on that bais I'd have more
resopect, I'd alos be on HF becuase the FCC would acted even sooner to
end but..

It is also incorrect and inaccurate to say that the trails of all
people learning Code are indentical, as can be claerly seen by reading
the claims of the ProCoders on the ease of learning code
>
>Dean Craft -- W4IHK
>
>
>

Mark Morgan
kb9rqz.

Privacy of unsolicted email is not assured
Unsolictied email will be published forwared
or ourwise disclosed as I see fit.

sending unsolitcied Email will be
deemed aceptance of these terms

4968. Results!: Help: Small VHF antennas

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <3736DDB0.586932C3@pedinc.com>
Source record: 70376

Just to let everyone know, I finally got a tuned rectangular loop to work pretty well. I found a calculator for inductors that included rectangular loops at about the same time I discovered Harry Lythal's (SM0VPO) website "VHF test antenna." (http://www.geocities.com/SiliconValley/3569/) A few calculations and much bending of #12 wire to fit the space produced a sharply-tuned antenna that performed about 10dB better than anything I'd found up to that point. It's still cut-and-try but the results are very gratifying!

Thanks to everyone who suggested things and gave support!

--
Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4969. Re: Inappropriate Postings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: David Stinson <arc5@ix.netcom.com>
Message-ID: <3736E2CA.CE7C09F1@ix.netcom.com>
Source record: 70377
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Mr. Sharp:
I think you've made
your demands and expectations of we other users very clear.
I have made my position concerning your problems clear as well.

If you wish to continue a sand-kicking contest,
please do so in private email.

71 3/4,
Dave Stinson AB5S
arc5@ix.netcom.com

4970. Re: How to connect speaker out to an electret mike input

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3736E5C5.A73D82C5@fallschurch.esys.com>
Source record: 70378

David,
Use a 1 kilohm (not critical) potentiometer and a 0.05 to 0.1 microfarad capacitor. The speaker circuit wants to see a low Z load (usually 4 to 16 ohms) so you might consider shunting the whole pot with such a resistor if you disconnect the speaker with this connection. I suggested the 1 k pot rather than a 4 ohm pot, because it is much easier to find. If the audio source is a tube set, the low Z load is important, but transistors (in the usual output-transformer-less circuit) will not mind the higher Z load. The electret microphone is probably pretty Hi-Z, so I calculated the capacitor to have 10K reactance at 300 hertz. If the electret circuit is much higher impedance than my 10 k guess, your 3 decibel bass cutoff will move down proportionately -- good for hi-fi but bad for the risk of hum problems. You may feel free to try different values of capacitance to move the low frequency response. More capacitor = more bass. Hope this helps!
73 de Allan Kaplan, W1AEL.

4971. Re: Homebrew Isn't About Radio!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-10 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3736E8A5.D32F07EA@fallschurch.esys.com>
Source record: 70379

You are aptly named, "Squirrel"! I believe Roy's note was a bit more moderate and polite in tone than your response. rec.radio. amateur.homebrew is NOT about beer, as a reasonably careful reading of the newsgroup name should suggest. While we cannot prevent beer posts, and many of us enjoy beer, this NG is NOT the intended audience. "Homebrewing" has a very well-established meaning to radio amateurs, and goes back every bit as far as as internet communication about beer-making. We can coexist in gentlemanly fashion; we can raise our glasses to each other; but we should observe the civilized conventions of good Net citizenship and not post without lurking to see what the group is all about. Your note strongly suggests that you can read and think clearly -- we wish that others would do as well. Here's mud in your eye -- cheerio!
Allan (I drink some, but my son is the Brewer)

4972. numeric controlled osc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: AERO SCIENTIFIC <aerosci@chicagonet.net>
Message-ID: <01be9b44$660a8740$8204bad1@aerosci>
Source record: 70259

Has anyone used the Harris Semi HSP45102 numerically controlled oscillator with a Harris CA3338 video D/A? I've built up some hardware an am in the process of writing some firmware to go with it. I have noticed I get a badly destorted sine wave out. I didn't expect it to be perfect, but this is very destorted. The unit is built on a proto board with a ground plane and all interconnects are very short <1" . Any sugggestions would be appreciated.

John W9RNU

4973. Re: Homebrew Noise Cancelling Headphones?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: cmoy@ricochet.net
Message-ID: <7h8g1hbgv1@nnrp1.deja.com>
Source record: 70260

What you are describing is a type of open-loop noise cancellation where the noise sensor is located outside the headphone. Not as good as closed-loop, but still fairly common - although the sensor is usually a microphone.

Take a look at these articles on the HeadWize site for info:

Active Noise Reduction Headphone Systems:
http://headwize.com/tech/anr_tech.htm

Build These Noise Cancelling Headphones:
http://headwize.com/projects/noise_prj.htm

If you decide to implement the system you propose, consider writing an article for HeadWize.

In article <3733399b.0@news.netwalk.com>,
"Jim" <jbolinger@Nloisnptaemk.com> wrote:
> Some of you may not be aware that a loudspeaker (permanent magnet type) can
> also be used as a microphone---a sound wave will vibrate the speaker cone
> and induce a current in the coil. They are not 'great' microphones but work
> reasonably well.
>
> Depending on the type of element used I would expect headphone elements to
> have the same property. What I am considering is using this phenomena to
> build a small box for converting regular headphones to electronic noise
> canceling, to be used on board small aircraft. It could also be used in
> other applications.
>
> The expensive ones use a separate microphone inside the ear cups for sensing
> the sound inside the cup. This is then applied to a circuit which makes
> sure that the sound in the cup is as close as possible to the output of the
> radio, effectively canceling ambient noise.
>
> My idea is this: The current in the cord going to the headset consists of

> two components, the desired audio from the radio and a current
produced by
> the ambient noise. If this current was subtracted from the signal
from the
> radio, inverted, added to the signal from the radio, and then applied
to the
> headset it should cancel the ambient noise.
>
> Has anyone tried this, and how well does it work? It certainly would
be
> less expensive than the $400+ ENR headsets.
>
> Any other thoughts on this?
>
> --
> Jim
> N8EE
> jbolinger@Nloisnptaemk.com
> Remove the letters 'N o s p a m' to reply directly
>
>

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

4974. Re: AC Outlet Testing (was Re: Glowbugs & transformer-less power supplies)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <7h8kaa$7m$3@alice.walrus.com>
Source record: 70261

Gary Coffman (ke4zv@bellsouth.net) wrote:
: On Tue, 04 May 1999 03:10:38 -0700, Will White <wcw@asu.uswest.net> wrote:
: >Thanks, Roy, for the patient and thorough reply, and everyone else who
: >responded. I am now thoroughly put off the cheapskate idea of trying to build
: >my little glowbug projects sans transformers. The one-hand-in-back-pocket rule
: >is one worth following in all cases.

: Isolation transformers are cheap. Go ahead and build your AA5, but add an
: isolation transformer for safety.

: >Now, a more general and corollary question about AC house wiring: what is the
: >proper method of testing outlets to determine if they are wired correctly,
: >especially with respect to the third/ground wire? RS and other retailers sell
: >an overpriced rinky-dink tester of dubious value. I'd rather learn something
: >and save my money.
: >
: >I am almost certain that with the right procedure and a good DMM (or a simple
: >and inexpensive home-brewed tester) I should be able to get more information
: >of a higher reliability, but the question remains: what am I looking for, and
: >how to acquire that "what"?

: Well, the rinky dink testers work fine. The idea behind them is simple. They
: measure the potential between the conductors, using neon bulbs and ballast
: resistors. Between hot and neutral, there should be 110 VAC of course. Between
: hot and safety ground, there should also be approximately 110 VAC. Between
: neutral and safety ground there should be a very low potential. The testers
: are configured as standard plugs, so they make sure that hot, neutral, and
: safety appear on their proper pins. The bulbs tell the story.

: As Roy said, the round pin is safety ground, the wide blade is neutral, and the
: narrower blade is hot. The purpose of testing is to make sure that they're actually
: wired that way. In practical terms, it usually doesn't matter much if safety and
: neutral are swapped (though that's a Code violation, and could be a hazard if
: the bond in the entrance panel were to open). But it matters a lot if hot is swapped
: with either one of them.

: The handiest tool I've found to test outlets is called the Volt Pen. It is a plastic
: encased tool with a plastic blade sized to fit the hot slot on an outlet. You
: hold it in your hand and insert the blade in the slot. A neon bulb inside glows
: if the slot is hot (it uses hand capacitance to complete the circuit). It won't
: glow when inserted into the neutral slot, or when brought next to the safety
: ground (assuming that they're wired correctly). What makes this tool so handy
: is that it also works when brought near a wire. Bring it near a hot wire and it glows,
: bring it near a neutral or safety and it doesn't. This helps you identify hot wires

: without having to actually contact them, and also lets you know whether a circuit
: is hot or not before you work on it. Most electrical supply houses carry them.

: Gary
: Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
: 534 Shannon Way | We break it |
: Lawrenceville, GA | Guaranteed |

I agree about Volt Pens...they are quite handy, but just so you know,
these do not use a neon bulb...it's a LED driven by a high-gain op-amp.
There may also be a version that uses a FET of some sort, but the op=amp
version is common.
One thing to keep in mind about volt pens, is that they will flash on
static as well as current electricity, which can(but usually does not)
cause confusion.

4975. Re: Old monitor->television conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <7h8mc5$7m$4@alice.walrus.com>
Source record: 70262
Cross-posted to: alt.electronics.analog.vlsi,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Mark Zenier (mzenier@netcom.com) wrote:
: In article <7h30aajro1@nnrp1.deja.com>, <oap1@my-dejanews.com> wrote:
: >From your responce you sugest that the Harmony converter will not work with
: >CGA, Vga nor EGA

: For different reasons, yes. A cheap CGA monitor doesn't have Analog RGB
: inputs. VGA and EGA have different scan rates and won't properly display
: at NTSC scan rates. Either the monitor won't run, or will burn out, or it
: will display a side by side doubled picture.

: >I am taking this to mean that the output is a composite
: >signal and only if I have one of those cga monitors that also has a composite
: >input could I use it?

: The output of the Harmonic Research convertor is Analog RGB. If you
: have a CGA monitor with a composite input, you don't need the converter.
: Some monitors of that era did have both composite and RGB, and some
: didn't. For example, the Zenith monitors for the Z-100 color machines
: did, but (I think) the NEC Multisync didn't.

: >I am using an anolog C Band dish and am currently
: >feeding the composite output to my VCR and then to the TV antenae as the tv
: >lacks a composite inputand wanted to know if the improvement in picture
: >quality would be worth buying a new tv with composite inputs.

: I'd suggest a short term rental of a newer TV and see what it looks like.
: Most cheap TV's don't do much better than a VHS recording, so you won't
: seen any real improvement until you spend some $$$.

: Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

One hint....look at junk shops/flea markets for old Commodore
monitors-many of them have composite inputs(and generally the sellers do
NOT realize this, so they tend to underprice them).
One model to look for is the 1909.
If working well, they give a VERY good NTSC picture indeed, in fact, often
better than the average TV set.

If you find a different model, look for a composite jack(RCA, usually),
and a switch, used for changing modes.
Also, if you get one working, but all you get is green, look for another
slide switch...it was intended to mimic the older green-screen monitors in
one position, and give color in the other one.
Not knowing about this switch can lead to needless troubleshooting!

4976. Re: numeric controlled osc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <926409690.13216.0.nnrp-07.d4f06601@news.demon.co.uk>
Source record: 70263

AERO SCIENTIFIC wrote in message <01be9b44$660a8740$8204bad1@aerosci>...
>Has anyone used the Harris Semi HSP45102 numerically controlled oscillator
>with a Harris CA3338 video D/A? I've built up some hardware an am in the
>process of writing some firmware to go with it. I have noticed I get a
>badly destorted sine wave out. I didn't expect it to be perfect, but this
>is very destorted. The unit is built on a proto board with a ground plane
>and all interconnects are very short <1" . Any sugggestions would be
>appreciated.
>
>John W9RNU

A silly question, perhaps, but you haven't left off the LP filter on the DAC output, have you? BTW, the Analog Devices AD9850 DDS chip is much easier to use.

Leon

4977. Homeworkers Needed!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: toukol@mindspring.COM
Message-ID: <199905110844.BAA14676@mailbox1.ucsd.edu>
Source record: 70264

Dear Future Associate,

You Can Work At Home & Set Your Own Hours. Start earning Big Money in a short time

NO Newspaper Advertising!

Your job will be to stuff and mail envelopes for our company. You will receive $.25 for each and every envelope you stuff and mail out.

Just follow our simple instructions and you will be making money
as easy as
1 2 3

For example stuff and mail 200 envelopes and you will receive $50.00. Stuff and mail 1000 and you will receive $250.00. Stuff and mail 2000 and you will receive $500.00 and more

Never before has there been an easier way to make money from home!

Our Company's Home Mailing Program is designed for people with little or no experience and provides simple, step by step instructions.

There is no prior experience or special skills necessary on your part, Just stuffing envelopes.

We need the help of honest and reliable home workers like you. Because we are overloaded with work and have more than our staff can handle. We have now expanded our mailing program and are expecting to reach millions more with our offers throughout the US and Canada.

Our system of stuffing and mailing envelopes is very simple and easy to do!
You will not be required to buy envelopes or postage stamps.

We will gladly furnish all circulars at no cost to you. We assure you that as a participant in our program you will never have to mail anything objective or offensive.

There are no quotas to meet, and there no contracts to sign. You can work as much, or as little as you want. Payment for each envelope you send out is Guaranteed!

Here is what you will receive when you get your first Package. Inside you will find 100 envelopes, 100 labels and 100 sales letters ready to stuff and mail

As soon as you are done with stuffing and mailing these first letters, your payment will arrive shortly, thereafter. All you have to do is to order more free supplies and stuff and mail more envelopes to make more money.

Our sales literature which you will be stuffing and mailing will contain
information outlining our highly informative manuals that we are advertising nationwide. As a free gift you will receive a special manual valued at $24.95, absolutely free, just for joining our Home Mailers Program.

Plus you will get your own special code number, so that we will know how much you are to get paid. And to make re-ordering of more envelopes, that our company supplies very simple for you.

We are giving you this free bonus because we want you to be confident in our company and to ensure that we will be doing business with you for a long time.

Benefits Of This Job:

1. You do not have to quit your present job, to earn more money at home
2. You can make between $2,500 to $4,500 a month depending on the amount of time you are willing to spend stuffing and mailing envelopes
3. This is a great opportunity for the students, mothers, disabled persons or those who are home bodies.

To secure your position and to show us that you are serious about earning extra income at home we require a one-time registration fee of $35.00.
This fee covers the cost of your initial start up package, which includes 100 envelopes, 100 labels and 100 sales letters and a manual, your registration fee will be refunded back to you shortly thereafter.

Money Back Guarantee!

We guarantee that as soon as you stuff and mail your first 300 envelopes You will be paid $75.00 and your registration fee will be refunded.

Many of you wonder why it is necessary to pay a deposit to get a job. It is because we are looking for people that seriously want to work from home.

* If 3.000 people told us they wanted to start working from home and we sent out 3.000 packages free to every one. And then half of the people decided not to work, this would be a potential loss

of more than $60,000 in supply's and shipping that we have sent out to people that don't want to work

We have instituted this policy to make sure that you really want to work and at least finish your first package.

To Get Started Today Please Enclose Your Registration Fee of $35 Check,Cash Or Money Order and fill out the application below and mail to:

AHWA CO
Pmb
1928 E. Highland Blvd
Ste #F104-902
Phoenix, Az 85016

Name_____

Address_____

City_____ State_____

Zip Code_____

Telephone Number(s)_____

E-mail Address_____

For all orders, please allow seven (7) days for delivery and up to 10 days. Cash and Money Orders will result in faster shipping of your package.

4978. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Thomas C Sefranek <tcs@cmcorp.com>
Message-ID: <3737F7D6.7272C415@cmcorp.com>
Source record: 70265

David Feldman wrote:

> The white ones incorporate a red, green and blue chip on the same package,
> with two leads. The white balance can vary a bit but it's usually OK for
> casual usage.
>
> I've never seen a 4-legged one with separate controls for red/green/blue,
> but they do exist as I saw them in a moving-words sign at Disney that was
> full color.
>
> 73 Dave WB0GAZ dgf@netcom.com

I'd REALLY like to find this kind of LED, (the 4 leg kind.)
All the different white LEDs I have they all pump a phosphor
from another color source, usually blue,
in some cases an IR LED can pump up a phosohor.

--
Thomas C. Sefranek WA1RHP
ARRL Instructor, Technical Specialist, VE Contact.
http://hamradio.cmcorp.com/41_Repeater/repeater.html
http://hamradio.cmcorp.com/inventory/Inventory.html

4979. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Tom McDermott <mcdermot@NOSPAM.aud.alcatel.com>
Message-ID: <37382B31.7CA0B46C@NOSPAM.aud.alcatel.com>
Source record: 70266

You will certainly find a strong intest in the Ham Radio magazine on CD. I threw out all my Ham Radio magazines (except the ones I wrote articles in) about 10 years ago - and am sorry that I did!

Please keep us advised as to when the CD(s) will become available.

Tom McDermott, N5EG

CommQuart wrote:

> I just sent out a major portion of my HR collection for scanning.
> The magazine is being put on CD at this moment. CQ
> Magazine will be the CD's publisher.
>
> Peter
> Communications Quarterly Magazine
>

4980. Re: using washers for toroid - Bad idea?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990511095859.09749.00000468@ng-fh1.aol.com>
Source record: 70267

Actually, it should be scanned for Gamma Radiation. A Victoreen Model 631
should do nicely

4981. Re: checking transformers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990511100215.09749.00000469@ng-fh1.aol.com>
Source record: 70268

Thanks again for the great lessons on testing XFMR's at Hamfests. So far, I have learned a lot. You have learned well Hamhopper

4982. Re: numeric controlled osc

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7h9gm3$3v0$1@nnrp1.deja.com>
Source record: 70269

In article <01be9b44$660a8740$8204bad1@aerosci>,
"AERO SCIENTIFIC" <aerosci@chicagonet.net> wrote:
> Has anyone used the Harris Semi HSP45102 numerically controlled
oscillator
> with a Harris CA3338 video D/A? I've built up some hardware an am in
the
> process of writing some firmware to go with it. I have noticed I get
a
> badly destorted sine wave out. I didn't expect it to be perfect, but
this
> is very destorted. The unit is built on a proto board with a ground
plane
> and all interconnects are very short <1" . Any sugggestions would be
> appreciated.

You need better bypassing (proto board? Ugh!) and better
grounding (ditto...) on the CA3338. I built a DDS some
years ago that uses a Qualcomm Q2220 DDS chip and a
CA3338 (Techno Whizzy, 73, December 1991), and the bypassing
on the CA3338 ended up being capacitors soldered right
on the pins. Lead length: zero.

It works perfectly, and has recently found new life as the
VFO for some HF WEFAX stuff I'm playing with...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

4983. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7h9h39$4at$1@nnrp1.deja.com>
Source record: 70270

In article <7h85a7$db9$1@autumn.news.rcn.net>,
"CommQuart" <commquart@erols.com> wrote:
> I just sent out a major portion of my HR collection for scanning.
> The magazine is being put on CD at this moment. CQ
> Magazine will be the CD's publisher.

YES!

Every now and then I've even toyed with seeing if the
microfiche version was still available, but I recently
picked up a couple of QST CDROMs and see that this is
the way to go.

Put me down for a copy.

If everybody misses _ham radio_ so badly, why aren't the
present-day techie ham magazines (QEX, Communications
Quarterly) doing better?
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

4984. NEWBIE - Seeking Advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Alex <mathcsstudent@somehw.com>
Message-ID: <37380941.3F0BA857@somehw.com>
Source record: 70271
Cross-posted to:
rec.radio.amateur.misc,alt.tv.tech.plain-tv,rec.radio.amateur.equipment,alt.radio.digital,rec.radio.amateur.homebrew

I am a university math/cs student. Years ago I learned how to program GPIB
devices (using a library) and custom RS-232 to switch a device on and off.

I'd like to get a DAC/ADC card that would be suitable for capturing analog (NTSC and FM/AM) signals for use as a PC card. The idea is as much in software as possible, including interpretation of color bursts, carriers, etc, treating
a digital clipped signal as a bitstream, and control of frequency tuning. Just a plain vanilla DAC/ADC with a plain vanilla driver. This I believe would be a similar
setup to the converter included in NeXTStep PC's. (?)

I'm seeking advice as to what I need "on the other side" of the card to control
gamma correction/gain, and especially basic analog knowledge as pertains to
communications equipment. I know *of* these things, not any specifics. Any
suggestions/directions?

Thank you in advance.

4985. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: "R. Sherry" <RSherry@metricom.com>
Message-ID: <3738494C.1BB1@metricom.com>
Source record: 70272

```
Brian wrote:
>
> David Feldman wrote in message ...
> >In article <37374bc1.0@news.netwalk.com> "Jim" <jbolinger@Nloisnptaemk.com>
> writes:
> >>
> >>Lee Smith wrote in message <8huZ2.88$Np1.7023@news1.mts.net>...
> >>>Hello Folks:
> >>>
> >>>Can anyone point me toward a source for white LED's?
> >>>
> >>>Thanks a million!
> >>>
> >>>
> >>
> >>White LED???
> >>
> >>Don't think I have ever heard of one.
> >>
> >>The other post mentioned LEDs in a clear plastic dome, but the LED itself
> >>will still have some color. Because of how LEDs work (quantum physics
> >>stuff, which I won't go into here) they all have some color to them.
> >>
> >>
> >The white ones incorporate a red, green and blue chip on the same package,
> >with two leads. The white balance can vary a bit but it's usually OK for
> >casual usage.
> >
> >I've never seen a 4-legged one with separate controls for red/green/blue,
> >but they do exist as I saw them in a moving-words sign at Disney that was
> >full color.
> >
> >73 Dave WB0GAZ dgf@netcom.com
> >
> Actually some of the white ones are a high intensity blue, with a phospor
> coating. If you squint you can see the bluish tinge to the white, but it's
> certainly closer to white than, say, an incandescent bulb.
>
> kb9tbb
Saw a three led flashlight (white) selling for $25 at Foothill swap
meet. Not super bright but fine for short range in dark.
Russ, WA2GWV
```

4986. Re: HELP: TS520 INTERNAL digital display

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: "R. Sherry" <RSherry@metricom.com>
Message-ID: <37384C0F.334D@metricom.com>
Source record: 70273

Paul A. Elliott wrote:
>
> I recently bought a TS-520 that has an internal digital display !!
>
> I need a circuit diagram for the display board's.
>
> (I know they didn't make such a critter) however this one has the display
> and the Henry Radio receipt that was in the manual and is dated 12/11/75
> says (1) Kenwood TS520 DIGITAL. the receipt also says in the margin, Note:
> customer to return radio for modification after Jan 1, 1976 so I am assuming
> that Henry Radio provided this mod.
>
> The additional circuit board's are definitely not home grown.
>
> I have also emailed Henry Radio but after almost 25 years I figure most of
> the Henry employees would be gone and it is more likely that there is a ham
> out there that has info on this mod. Covering all the bases!
>
> The radio works fine but the display which has (4) led's is on but does not
> change reading while tuning.
>
> Any information would be appreciated.
> Thanks
>
> Paul N7IJB n7ijb@gte.net
I had one of these units and it is very nice. Check to see that the
crystal oscillator is operatiog. I think it is 1 MHz. See that the VFO
output is connected to the input of the counter board. Trace the signal
through the counter chain useing a scope or a second counter. My TS-520
was purchased from Henery new with the counter installed. It did not
come with a schematic. Kenwood got an injunction against Henery to
prevent the sale of these units because Kenwood was comming out with the
external counter design. The Henery units are very rare and I do not
think there are more than fifty.
Russ, WA2GWV

4987. Schematic wanted for 6 Mtr 4cx250 Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Erwin Cremers <ecremers@knoware.nl>
Message-ID: <37385333.A82B364C@knoware.nl>
Source record: 70274

Hello,

Can any one direct me to a site where i can find a schematic for a 6 mtr amplifier using a 4cx250 tube.

Hope to hear from you,

Greetings,

Erwin
PE1MGR
CU on the Magic Band

4988. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <37385869.0@news.netwalk.com>
Source record: 70275

Ok, I guess that proves that you do learn something new every day!

Jim

4989. FT-50R vs VX-5R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Joe Humberger <KB9TFH@MichianaToday.com>
Message-ID: <01be9b60$e72240e0$4a9cead0@Cyberlink.MichianaToday.com>
Source record: 70276

Hello,
My name is Joe Humberger and i a Ham in Northern Indiana, I am looking to buy a new HT. The two hts i am looking @ are the Yeasu FT-50R and VX-5R. I was woundering if somone could compare these for me. I am NOT looking for the reasons like "one is triband and the other is dual band" But i AM looking for "one has a better audio"... Thanks

73sss Joe Humberger KB9TFH

4990. Re: Any ideas for a radio booster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <3738661E.A7FED63@pedinc.com>
Source record: 70277

Slip wrote:

> Hi there,
> My appologies for the amateur question(well, I guess this *is* the
> amateur NG), but I would like to know how hard it would
> be to build a small radio booster. My home stereo is a Philips FW-316C to be
> exact. The antena input is an FM Aerial 300ohm T-type jack(two input jacks).
> Currently there's a 10' y-cable antena stapled to the ceiling, but I still
> get lowsy reception. I'm currently a sophomore at a local vo-tech school and
> *do* have electronics experiance(so don't worry with describing components,
> etc). I was thinking of something similar to those cable-tv boosters which
> rely on the AC line. Is there a way to possibly do this with FM signals?
>
> If this NG is not the apropriate one to be posting this to, please e-mail me
> personally and suggest a better one.
>
> Thanks for any help you may be able to offer!
> -Jamie

The first thing to look at is the antenna. If you can get the reception you want with just wire, that's the way to go! Orienting the folded dipole you have now can likely improve reception (at least on some stations), assuming that it's been accurately cut for the FM band. It's easy to build your own out of 300-ohm twin lead. If the signals are still noisy (you must be in the fringe area for all stations!), getting the antenna out of the building and in the clear is the next step (even just out the window can help). Next after that, would be multi-element ("beam") antennas, which you can make out of wire or even copper foil strips on a sheet of mylar or even cardboard. Those need a bit more space, but I've built some that I've just taped to the ceiling, pointed in the right direction. All these antennas can probably be found in any edition of the Radio Amateur's Handbook (just scale them for the FM band).

After exhausting all those passive options, THEN I'd consider an active booster.

Good luck!

--
Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4991. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <37386732.A002E560@pedinc.com>
Source record: 70278

Lee Smith wrote:

> Hello Folks:
>
> Can anyone point me toward a source for white LED's?
>
> Thanks a million!
>
> Lee Smith
> VE4ANC

The latest Hosfelt Electronics catalog has white LEDs on the cover --
T1-3/4 package, 2000 mcd, 4volts @ 20mA. $3.99 US. Telephone
800-524-6464. No URL listed.

--
Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

4992. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <373859E8.C6AF2C98@mwci.net>
Source record: 70279

marsgal42@hotmail.com wrote:

> If everybody misses _ham radio_ so badly, why aren't the
> present-day techie ham magazines (QEX, Communications
> Quarterly) doing better?

Hog wash.

Bill W0IYH

4993. Re: MD-139 mixer ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3738681D.6A8A1CDD@fallschurch.esys.com>
Source record: 70380

Anzac got absorbed into M/A-COM several years back, Rod. I shall look to see if I can find one of my old catalogs, so that I may be able to send you a data sheet copy if I am successful. AMP, the connector company, bought M/A-COM a few years ago, but I doubt that complicates the situation. I believe we will find that the MD-139 is a decent double-balanced mixer for ham purposes.
73 de W1AEL

4994. Re: QRP Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <37386dfe.899760@news.earthlink.net>
Source record: 70381
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

On Sat, 1 May 1999 18:45:15 -0400, "The Conqueror"
<joetheripper@hotmail.com> wrote:

>Hi,
>
>I was wondering if there was any way for me to homebrew or make from a kit a
>2 meter QRP <1W transceiver with only 2 or 3 frequencies and PL support.
>
>-Dan K3DRQ

Yes - check out:

http://home.earthlink.net/~af4k/mega/megakits.htm

for sources of kits.

4995. Dayton: Baggybob SMT parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: baggybob@execpc.com
Message-ID: <7h9td6$j5e@newsops.execpc.com>
Source record: 70382

Hello, we will be at Dayton Friday, Saturday and Sunday at spaces 4055 & 4056
We have SMT resistor kits, NP0 chip caps, smt transistors in smaller
quantities which makes them very affordable for stocking up. Mention this
internet message and get a free 900 Mhz PA module. If you can't make it
e-mail for a list of what's available.

4996. Re: Schematic wanted for 6 Mtr 4cx250 Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: John Robertson <robo@enterprise.net>
Message-ID: <37387F40.BE22490F@enterprise.net>
Source record: 70383

Hi Erwin

Look at

http://user.itl.net/~equinox/4cx.html

John
GM1VPZ
Erwin Cremers wrote:

> Hello,
>
> Can any one direct me to a site where i can find a schematic for a 6 mtr
> amplifier using a 4cx250 tube.
>
> Hope to hear from you,
>
> Greetings,
>
> Erwin
> PE1MGR
> CU on the Magic Band

4997. Pixie2

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: "Clint McAdams Jr." <cmac36@flash.net>
Message-ID: <160_2.470$XN4.1022@news.flash.net>
Source record: 70384

Just received a Pixie2 kit in the mail and wondered if anyone has any comments on putting it together.

Thanks

Clint

4998. Re: Any ideas for a radio booster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Slip <slipnfall@waconet.org>
Message-ID: <7ha1t6$27gb@enews3.newsguy.com>
Source record: 70385

Well this antenna which came with the stereo is of course the cheapest you can get. To me it just looks a piece of zipcord shielded wire split half-way down the middle. :-) One thing that I have done that actually does improve the reception is to attach one end to an AC outlet ground. Wouldn't this, in effect, be extending the antenna throughout the entire house? Another idea which came to me was to attach the antanne to the shielding of an air TV-antenna...(we have cable, so it's never used). Am I talking out my rear here or are these logical choices? I know grounding to the AC ground isn't smart due to the fact if something shorted, I'd have AC into my stereo for a short amount of time.

Thanks again for the suggestions!!
-Jamie

4999. PSE info on Coax relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Wilfried Derynck <w.derynck@planetinternet.be>
Message-ID: <7ha4f1$1pq$1@news.planetinternet.be>
Source record: 70386

Hallo, I just founded at the local scrapyard ,two coax relays with the following markings :

RADIALL R554723718 0-2 GHz Un:24V Made in France

Is there anyone who can tell me the maximum power handeling of this "transfer relay's"

Thanks and 73's de ON6EO

5000. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: John Moriarity <k6qq@hdo.net>
Message-ID: <926457841.873.97@news.remarQ.com>
Source record: 70387

CommQuart wrote in message <7h85a7$db9$1@autumn.news.rcn.net>...
>I just sent out a major portion of my HR collection for scanning.
>The magazine is being put on CD at this moment. CQ
>Magazine will be the CD's publisher.
>

Peter,

I sure hope you have a better software interface than that used
with the QST CD-ROMs. Also, it would be nice to have more gray
scale and resolution than the QST illustrations provide.

I'll be ordering a set.

73,

John, K6QQ

5001. Need info on RCA 8890

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Zack Miller <kb3cji@home.com>
Message-ID: <337E23BC.40495BC2@home.com>
Source record: 70388

I really need info on the RCA 8890 tube, If anyone has any info it would
be a big help
Thanks
Zack
kb3cji

5002. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: Henry Knoll <knoll003@tc.umn.edu>
Message-ID: <3738BF42.1E2A@tc.umn.edu>
Source record: 70389

John Moriarity wrote:
>
> CommQuart wrote in message <7h85a7$db9$1@autumn.news.rcn.net>...
> >I just sent out a major portion of my HR collection for scanning.
> >The magazine is being put on CD at this moment. CQ
> >Magazine will be the CD's publisher.
> >
Please don't do it in .pdf format. The illustrations are not good.

73

Henry WA0GOZ

5003. ECC85/6aq8 FM tuner frontend design questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: singhpk <singhpk@exit109.com>
Message-ID: <3738940C.E5CE17D6@exit109.com>
Source record: 70390

hello ,

I just got a grundig tube type of 1960 radio with
ECC85 in the front end and a conventional
ECH81/EBF89 IF stages followed by ratio detector.

This radio works rather well and it is surprisingly
sensitive.

It seems that the a neutralized triode is used
as the RF amp followed by a self oscillatting triode convertor.
both of these triodes are contained in one 6aq8/ecc85 tube.
I suspect that a 6dj8/ecc88 would have worked as well but NOT
a 12at7/ecc81.

I was toying with the idea of reverse engineering the design
of such a RF front end. The circuit is readily available
at http://www.vintage-radio.com/ goto the 1955-1956 link at the
bottom.

After going through the explanation, I still have the following
questions:-

1. How is the RF grid-cathode coil designed oscillattor coil designed
where is it tapped at ?
How does it exactly work, what is the purpose of grounding
the tap of the rf-grid-cathode coil via a unbypassed 120 OHM resistor
instead of directly.

2. How is the oscillattor coil designed ?
what is the pri-sec turns ratio and the tapping points on the primary.
How is the frequency stability acheived ?
(This oscillator is surprisingly , very stable .)

3. What are tradeoffs of using a self oscilatting triode convertor ?
Why wasnt a single pentode used at AM ~1000 KHZ frequencies
as a self oscillating convertor instead of the pentagrid tube like
ECH81 or 6SA7 ?

4. How to model this circuit in SPICE ?

This circuit is one of the most interesting circuits I have seen
for a long time and i would really like to duplicate it with
fire-fets and J310 fets .

thanks .

5004. Re: PMR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-11 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7hcbug$iu8$1@uranium.btinternet.com>
Source record: 70391

Someone! wrote in message ...
>Hello,
> I've just been given two xtal controlled PMR/SRBR txers...
>I've read that I can convert these into a 70cm rigs. There is a book I can
>buy but this is expensive so can anyone give me any help with this?
>
>You will be rewarded in the next life (or next time I see you down the pub
>:o) HiHi)
>
>David
>
>I also have several PMR radios and worked out the relationship between the transmit/receive frequencies in one particular set: one crystal was multiplied by three to be 10.7MHz below the Rx frequency, while the other crystal was one 6th of the transmit frequency. Perhaps david may be able to do the same: most PMRs have a plate inside with transmit and receive frequencies marked, and the crystals can be examined. Is it possible to change the crystals and retune appropriate stages without technical information? For example, I have an old Tait PMR which has all stages, such as Tx oscillator, multipliers, buffers and PA stages marked on the PCB. Could I tune up with new crystals with this info?

5005. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37addec6.1212430979@news.atl.bellsouth.net>
Source record: 70392

On Tue, 11 May 1999 15:07:22 GMT, marsgal42@hotmail.com wrote:
>If everybody misses _ham radio_ so badly, why aren't the
>present-day techie ham magazines (QEX, Communications
>Quarterly) doing better?

Because they generally aren't very good. Ham Radio had a
strong editorial hand with a clear sense of what it was about
and where it was going. That's lacking in the magazines that
have tried to fill its place.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

5006. Re: Any ideas for a radio booster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37aee1f6.1213247700@news.atl.bellsouth.net>
Source record: 70393

On Tue, 11 May 1999 16:09:02 -0400, "Slip" <slipnfall@waconet.org> wrote:
>Well this antenna which came with the stereo is of course the cheapest you
>can get. To me it just looks a piece of zipcord shielded wire split half-way
>down the middle. :-) One thing that I have done that actually does improve
>the reception is to attach one end to an AC outlet ground. Wouldn't this, in
>effect, be extending the antenna throughout the entire house? Another idea
>which came to me was to attach the antanne to the shielding of an air
>TV-antenna...(we have cable, so it's never used). Am I talking out my rear
>here or are these logical choices? I know grounding to the AC ground isn't
>smart due to the fact if something shorted, I'd have AC into my stereo for a
>short amount of time.

Hooking up to the AC wiring isn't a very good idea. But if you have an
outside TV antenna that isn't being used, hook it up properly to the
radio and it should be just dandy. The FM band falls between TV
channels 6 and 7, so an outdoor VHF TV antenna makes an excellent
FM broadcast antenna. Disconnect the present antenna and hook
the TV antenna up to your radio. If the stereo has a 75 ohm coax
connection available, use that, otherwise you need a 75 ohm to
300 ohm matching transformer (available at Radio Shack) to let
you properly connect the coax from the TV antenna to the screw
terminals on the radio.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

5007. Re: Need info on RCA 8890

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <37afe34f.1213592286@news.atl.bellsouth.net>
Source record: 70394

On Tue, 11 May 1999 21:32:38 GMT, Zack Miller <kb3cji@home.com> wrote:
>I really need info on the RCA 8890 tube, If anyone has any info it would
>be a big help

Our two generations back TV transmitter, a RCA TT50H, used those in the visual driver and in the aural PA. It is a ceramic metal tetrode. It used BeO as the ceramic, very toxic if you breathe or ingest the dust. As I recall, they ran at 4 kV with about 1.25 amps of plate current in the aural PA. I think screen voltage was around 1 kV and grid bias was about -65 volts. Drive for the aural (Class C FM) was 80 watts for 5 kW.

I *think* the filament voltage was specified as 6.0 volts at about 150 amps. Exact filament voltage was critical to tube life and emission. We only ran enough to get the power we needed. As I recall, we'd start a new tube at about 4.8 volts (back bombardment supplied a good bit of cathode heating at our operating frequency). That had to be periodically cranked up as the tube aged until we were running full voltage when the tube had about 20,000 hours on it (few made it that far without shorting).

I'm pretty sure we don't have the books on that old transmitter anymore, so that's about all I can tell you other than that they were very prone to grid to cathode shorts. The element spacing was very narrow to get the high gain at VHF, a touch too much heat and the tube would short as the grid sagged into the cathode.

Obviously, this tube was designed to run in a cavity, and that had to be very carefully designed to avoid parasitic oscillations. When the TT50H was new, RCA had to make several field modifications to the cavities to tame that problem. As with any other compact high power tube, lots of cooling air was required. As I recall, the TT50H used 5 hp 3 phase blowers, and those had to be running even when only filament power was on (and for 5 minutes after it was turned off).

I don't think this tube is very suitable for amateur use. It has so much gain that it is hard to control, and it isn't forgiving at all of tuning mistakes.

Gary
Gary Coffman KE4ZV | You make it |mail to ke4zv@bellsouth.net
534 Shannon Way | We break it |
Lawrenceville, GA | Guaranteed |

5008. Model radio link info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <37392f5f@jolt.pagesat.net>
Source record: 70395

I am looking for details on how model airplane
radio links and servo systems operate in detail.

Information I would like to know is.

What frequencies are used?
How many channels are available?
What is the RF bandwidth?
What is the modulation type?
Does there exist any books with typical schematics
and circuit details that might explain the above.

Any help will be appreciated.

norman@pcseng.com

5009. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: gelleric@goethe.informatik.uni-stuttgart.de
Message-ID: <7hbboo$c1v$1@inf2.informatik.uni-stuttgart.de>
Source record: 70396

...I did not find the address of the original poster, but I am interested to get the Ham Radio Magazine on CD.

73, Wolfgang DJ3TZ

5010. Re: WTB:Cheap UHF FM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: Greg Slagell <kf4pid@yahoo.com>
Message-ID: <7hbm1okks1@gaddy.interpath.net>
Source record: 70397

try alinco, last time I checked they had a small 440 HT for about $80.

okieman wrote in message ...
>Ham on fixed income is looking for a cheap UHF FM rig just for local
>repeater use on 444.
>
>

5011. Re: Glowbugs & transformer-less power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: bkizerian@my-dejanews.com
Message-ID: <7hbtq4vkv1@nnrp1.deja.com>
Source record: 70398

I have a few Stancor PS-8415 power transformers--Primary 117V., Secondaries 6.3V @ 0.6A and 125V @ 15 mA. Great for regen radios. I would be willing to part with some of them for a reasonable offer. Contact me directly at kizerian@ced.utah.edu.

Bruce kk7zz

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5012. QST Review on VX-5R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: Joe Humberger <KB9TFH@MichianaToday.com>
Message-ID: <01be9c69$344e5300$899cead0@Cyberlink.MichianaToday.com>
Source record: 70399

Hello again,
Does anyone have a copy of the QST Review on the VX-5R that they could
email to me? I would be greatly appreciate it...Thanks
73s....
Joe Humberger KB9TFH

5013. Re: Marcone Xtal oven with 2 Xtals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7hbs0h$3i2$2@news4.svr.pol.co.uk>
Source record: 70400

It sounds to me as if the two crystals that where sold with the oven may just be surplus to the seller and not necessarily designed for use with the oven they where selling.

For example with a 75 Deg C oven and a crystal designed for use at 75 deg C, the crystal will drift DOWN in frequency as the oven warms up until the crystal reaches its high temperature turning point. The high temperature turning point of the crystal should coincide with the oven temperature so as the oven cycles within a narrow temperature range the crystals temperature coefficient will be very small and the frequency drift with temperature will be small.

You cant just put any crystal that will physically fit in to an oven and expect good temperature stability. In fact a crystal not designed for oven use may actually be less stable when operated in an oven.

John G3UGY

Arjen Raateland wrote in message <373574B6.690E@vyh.fi>...
>Hello all,
>
>I bought a surplus crystal oven of the type with an octal plug. It was
>made by Marconi and has sockets for two crystals. The oven has a plain
>aluminum cover which is marked on top:
>
>Marconi
>W.44530 ED.A
>
>1. kc/s
>2. kc/s
>
>The oven came with two crystals marked:
>
>4000 kc/s
>MARCONI
>Q01670A
>XLC75C
>
>6000 kc/s
>MARCONI
>Q01670A
>20/75/30
>
>The oven has a bimetal switch, I assume, and it appears to work well on
>12 Vdc. I just connected the oven such that the switch is in series with

>the heater element. Heater current is about 500 mA at 12 V. I haven't
>measured the temperature inside, but the heater cycles on and off.
>
>Looking in the literature it seems a crystal for use in an oven is
>usually cut such that the frequency goes down when the oven heats up.
>The frequency starts to go up again past a certain temperature, which is
>the temperature the oven should maintain.
>
>Well, I measured the heating up characteristics of both crystals in this
>oven and found that the 4 MHz Xtal goes UP and the 6 MHz Xtal goes DOWN
>in frequency when the temperature rises from room temperature to the
>point where the oven starts cycling on and off. This behaviour seems
>strange. The difference in frequency is tens of Hertz.
>
>My test oscillator is actually my FET dipmeter which I couple to the
>Xtal and adjust till it locks as seen on a frequency counter. In my
>setup the 4MHz Xtal is ca. 2 kHz high and the 6MHz ca. 2 kHz low.
>Strange ... my counter time base may be off a little, but not by that
>much.
>
>While the oven cycles the frequency keeps going up and down a few Hertz.
>(I know the counter is just a garden variety, but the oven cycling is
>rather quick and the counter sits in comparatively steady
>circumstances.) The Xtals in this oven don't seem to be such a good
>combination to me.
>
>Does anybody reading this recognize this type of oven and it's Xtals
>perhaps? Any information is very welcome.
>
>Could it be that the stability (0,3 ppm) indicated by the seller will be
>attained by adding or subtracting the two frequencies? (Originally only
>a 4MHz Xtal was supposed to be included, the 6MHz one was a 'bonus'.)
>I've never heard of such a scheme, but who knows, the temperature
>coefficients are clearly opposed in sign between room temperature and
>oven temperature.
>
>Any information on this subject very welcome.
>
>73,
>Arjen OH2ZAZ
>--
>Arjen Raateland
>Finnish Environment Institute
>SAS Support
>phone +358 9 4030 0350

5014. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7hc155$2bm$1@nnrp1.deja.com>
Source record: 70401

In article <37addec6.1212430979@news.atl.bellsouth.net>,
ke4zv@bellsouth.net (Gary Coffman) wrote:

> Because they generally aren't very good. Ham Radio had a
> strong editorial hand with a clear sense of what it was about
> and where it was going. That's lacking in the magazines that
> have tried to fill its place.

I see your point - QEX and Communications Quarterly both
seem more to derive their identity from other sources
("too techie for QST" and "successor to Ham Radio",
respectively) rather than make their own way.

Confession: I don't subscribe to either magazine. If
the current Communications Quarterly looks good, I buy
it at the bookstore. If I see QEX at a hamfest and it
looks good, ditto. Otherwise I wait for the CDROM.

There's probably a moral there...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5015. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FBMMG2.11o.0.queen@torfree.net>
Source record: 70402

Hosfelt though not always the best price on some items has the best
customer service of any dealer. Their URL is
http://www.hosfelt.com

I always felt the best prices (though they have no white LED's yet) was
at Electronic Goldmine
http://www.goldmine-elec.com

Mark Nelson (mnelson@pedinc.com) wrote:
: Lee Smith wrote:

: > Hello Folks:
: >
: > Can anyone point me toward a source for white LED's?
: >
: > Thanks a million!
: >
: > Lee Smith
: > VE4ANC

: The latest Hosfelt Electronics catalog has white LEDs on the cover --
: T1-3/4 package, 2000 mcd, 4volts @ 20mA. $3.99 US. Telephone
: 800-524-6464. No URL listed.

: --
: Mark Nelson

: A collector of TV signal boosters and UHF converters -- God help me!
: http://www.geocities.com/TelevisionCity/Set/6312/

5016. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3739AC5D.4B69@northwest.com>
Source record: 70403

advertising rates. folks are appliance operators, and are attracted to the glitzy ads better than that heavy-duty tech stuff from HR. Better than half of QST is advertising. Anyhow, HR quit because they tried to compete head-to-head with CQ, 73, and QST. Towards the end, HR announced that they had to raise advertising rates so much to make ends meet, that they lost some of their long-time supporters

> marsgal42@hotmail.com wrote:
>
> > If everybody misses _ham radio_ so badly, why aren't the
> > present-day techie ham magazines (QEX, Communications
> > Quarterly) doing better?

5017. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: Richard Schober <rkschober@qtiworld.com>
Message-ID: <01be9c98$407516d0$5a4a31a1@rkschober>
Source record: 70404

Brian <schousek@geocities.com> wrote in article
<7h84sa$26k$1@jair.pressenter.com>...
>
--Portions snipped---

> Actually some of the white ones are a high intensity blue, with a phospor
> coating. If you squint you can see the bluish tinge to the white, but
it's
> certainly closer to white than, say, an incandescent bulb.
>
> kb9tbb
>
>

One of the companies that makes these is Nichia in Japan. Jameco
(http://www.jameco.com) distributes two different part numbers both priced
at $4.95ea. They are listed at 600mcd@20mA in either T1 or T1 3/4 sizes.

Hewlett-Packard recently announced its release of a line of white-light
LEDs (http://www.hp.com.go.led). The lamps use a blue
indium-gallium-nitrogen chip coated with a yttrium-aluminum-garnet phosphor
that produces almost pure white light. Luminous intensities of up to 2cd
are available. Pricing is qouted at $0.95 in quantities of 10000.

N8XQJ

5018. Noaa weather radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: matthew hudson <meh@univrel.tamu.edu>
Message-ID: <3739ADB9.ED62A0A4@univrel.tamu.edu>
Source record: 70405

I am looking at building my own Noaa weather radio with A-Tone detection. Does anyone know where to start this project. I know the frequencies I just don't know how to start building it...

5019. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <373982B6.1B27@pacbell.net>
Source record: 70406

Mark Nelson wrote:
>
> Lee Smith wrote:
>
> > Hello Folks:
> >
> > Can anyone point me toward a source for white LED's?
> >
> > Thanks a million!
> >
> > Lee Smith
> > VE4ANC
>
> The latest Hosfelt Electronics catalog has white LEDs on the cover --
> T1-3/4 package, 2000 mcd, 4volts @ 20mA. $3.99 US. Telephone
> 800-524-6464. No URL listed.
>
> --
> Mark Nelson
>
> A collector of TV signal boosters and UHF converters -- God help me!
> http://www.geocities.com/TelevisionCity/Set/6312/

In this vein, Mouser advertises a "Multi-color" LED lamp with
a red, green, and two blue LEDs in one package with six leads.
It's supposed to emit different colors depending on the various
currents through the individual LEDs.
Mouser stock number 604-LF59EBGBW.

Tom Donaly KA6RUH

5020. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <3739b6b4.0@news.netwalk.com>
Source record: 70407

Mark Nelson wrote in message <37386732.A002E560@pedinc.com>...
>The latest Hosfelt Electronics catalog has white LEDs on the cover --
>T1-3/4 package, 2000 mcd, 4volts @ 20mA. $3.99 US. Telephone
>800-524-6464. No URL listed.

....and my point was.....

How much do they list a 3 volt incandescent flashlight bulb for?

Jim
N8EE

5021. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7hckng$l1h$1@nnrp1.deja.com>
Source record: 70408

In article <3739AC5D.4B69@northwest.com>,
larryc@northwest.com wrote:
> advertising rates. folks are appliance operators, and are attracted to
> the glitzy ads better than that heavy-duty tech stuff from HR. Better
> than half of QST is advertising. Anyhow, HR quit because they tried to
> compete head-to-head with CQ, 73, and QST. Towards the end, HR
announced
> that they had to raise advertising rates so much to make ends meet,
that
> they lost some of their long-time supporters

Wayne Green has been banging away at this for a long
time: the cover price of the magazine pays for the paper,
printing and distribution. Having anything to actually
print on that paper is paid for by advertising.

In its heyday (late 1970s) 73 was half advertising too.
But that was half of 200 pages...
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5022. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3739D5F8.3712@pop.removethistomailme.net>
Source record: 70409

```
William E. Sabin wrote:
>
> marsgal42@hotmail.com wrote:
>
> > If everybody misses _ham radio_ so badly, why aren't the
> > present-day techie ham magazines (QEX, Communications
> > Quarterly) doing better?
>
> Hog wash.
>
> Bill W0IYH

Care to elaborate on that, for the benefit of the clue-impaired?

-- jm KE5FX

------------------------------------------------------
Note: My E-mail address has been altered to avoid spam
------------------------------------------------------
```

5023. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: "William E. Sabin" <sabinw@mwci.net>
Message-ID: <3739ED89.7E723059@mwci.net>
Source record: 70410

John Miles wrote:

> William E. Sabin wrote:
> >
> > marsgal42@hotmail.com wrote:
> >
> > > If everybody misses _ham radio_ so badly, why aren't the
> > > present-day techie ham magazines (QEX, Communications
> > > Quarterly) doing better?
> >
> > Hog wash.
> >
> > Bill W0IYH
>
> Care to elaborate on that, for the benefit of the clue-impaired?

Ham Radio was a good magazine that I subscribed to for many years. I liked it, which is why I subscribed, but I was not really overwhelmed by it.

1) It was a "good" publication that had good and interesting articles from time to time. It had its share of junk, also. Fisk was an excellent author, which helped a lot.

2) In my opinion it should not be magnified beyond that. The unbridled praise that I keep seeing and hearing is a bit much, I believe.

3) Comm Quart and QEX are just as good, in my opinion, and getting better all the time. The pejorative and belittling remarks to the contrary do not pass muster for me.

4) The comments about advertising problems seem reasonable.

Bill W0IYH

5024. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3739F69C.1E9D@pop.removethistomailme.net>
Source record: 70411

William E. Sabin wrote:
>
> Ham Radio was a good magazine that I subscribed to for many years. I
> liked it, which is why I subscribed, but I was not really
> overwhelmed by it.
>
> 1) It was a "good" publication that had good and interesting
> articles from time to time. It had its share of junk, also. Fisk
> was an excellent author, which helped a lot.

Yes, it was a real shame to lose him.

>
> 2) In my opinion it should not be magnified beyond that. The
> unbridled praise that I keep seeing and hearing is a bit much, I
> believe.
>

I agree, there were a few really nice articles (including some of the earliest info on Gunnplexer communications that is still hard to find in one convenient place today).

> 3) Comm Quart and QEX are just as good, in my opinion, and getting
> better all the time. The pejorative and belittling remarks to the
> contrary do not pass muster for me.

That makes sense. I don't think the other poster was belitting those pubs by asking why they aren't doing better in the marketplace -- I just wasn't sure whether you were arguing fer 'em or agin' 'em! IMHO, the more info out there the better.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

5025. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <373af939.776657025@netnews.worldnet.att.net>
Source record: 70412

On 12 May 1999 11:56:39 -0600, "Richard Schober"
<rkschober@qtiworld.com> wrote:

"Almost pure white light" ??

By definition, is not "white" light an equal mixture of all possible
visible wavelengths ?

And, what is the color temperature ?

< some snipped >
>Hewlett-Packard recently announced its release of a line of white-light
>LEDs (http://www.hp.com.go.led). The lamps use a blue
>indium-gallium-nitrogen chip coated with a yttrium-aluminum-garnet phosphor
>that produces almost pure white light. Luminous intensities of up to 2cd
>are available. Pricing is qouted at $0.95 in quantities of 10000.
>
>N8XQJ

Ron n1zhi
roncook@att.net
cook@amsa.com (office)
n1zhi@nsradio.org
ICQ: 26516311

5026. Re: Any ideas for a radio booster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <3739FD94.7E35DC93@megsinet.net>
Source record: 70413

Gary Coffman wrote:
> The FM band falls between TV
> channels 6 and 7, so an outdoor VHF TV antenna makes an excellent
> FM broadcast antenna.

I've been disappointed an amazing number of times in recent years thinking that. I have NO idea how they'd make a log-periodic with a big hole in the frequency range, but I have all too often run into installations that give outstanding TV pictures, yet so little FM signal that attaching the antenna to an FM radio kills the slight pickup it was getting from its internal leads. It was only after a few of these that I noticed that makers like Winegard were selling both VHF-UHF and VHF-UHF-FM antennas. (Changing, or even eliminating, the splitter at the ground end did no good. Maybe they had a splitter up top that did the dirty deed.)

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+

5027. Re: FS: Plessey mixer & receiver ICs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: grogancat@aol.com
Message-ID: <19990512184936.24830.00001098@ng121.aol.com>
Source record: 70414

I am happy with my purchase, vlad even called me about my order to verify, and left me with his phone number etc in case i had any questions when experimenting with them.

where do all the whining weirdos come from?

your pal tony
Hrvatska!
Za dom spremni!
#

5028. INFORMATION WANTED ON CRYSTAL TO VFO CONVERSION

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-12 00:00:00 UTC
From: Robert Parker <rparker@sprint.ca>
Message-ID: <Yjq_2.7153$r_1.4067382@newscontent-02.sprint.ca>
Source record: 70415

I have an HF marconi ch150 solid state transceiver and i'm going to convert it to VFO by injecting the VFO signal into one of the crystal sockets. I was wondering if anyone has done this before and what there experience was. I realize the harmonics must be filtered before injection and therefore before I do anything, I will look at the O/P of the VFO on a spectrum analizer to determine the type of filtering required. If i'm lucky, no filtering will be required. This modification will be for both transmitting and receiving in order to give this rig more versitility. Marconi has made a very nice rig and I wish to have it on the air on nearly all the bands. Coverage of thie rig is from 2mhz-24mhz.
Second part of my query is: Does anyone know of any PC circuits that work to do the same thing as a VFO?
Perhaps a PC controlled function generator?

You comments and suggestions will be greatly appreciated.

73's
ROB
VE3RPF

5029. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: sentinel_x@my-dejanews.com
Message-ID: <373b4522.12815752@news.ne.mediaone.net>
Source record: 70280
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

On Thu, 13 May 1999 23:22:42 +0300, "Sotiris Antoniou"
<samant@ath.forthnet.gr> wrote:

>Hi,
>I am trying to purchase some coils made by TOKO (small quantities). Please
>can someone give me an address for England or U.S.A. Any help would be
>very much appreciated.
>
>Best Regards.
>Sotiris Antoniou .
>samant@ath.forthnet.gr
>
>
try www.digikey.com !

>
>
>
>
>
>

5030. Re: Any ideas for a radio booster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <373b3fb7.0@news.netwalk.com>
Source record: 70281

Clifton T. Sharp Jr. wrote in message <3739FD94.7E35DC93@megsinet.net>...
>Gary Coffman wrote:
>> The FM band falls between TV
>> channels 6 and 7, so an outdoor VHF TV antenna makes an excellent
>> FM broadcast antenna.
>
>I've been disappointed an amazing number of times in recent years thinking
>that. I have NO idea how they'd make a log-periodic with a big hole in
>the frequency range, but I have all too often run into installations that
>give outstanding TV pictures, yet so little FM signal that attaching the
>antenna to an FM radio kills the slight pickup it was getting from its
>internal leads. It was only after a few of these that I noticed that
>makers like Winegard were selling both VHF-UHF and VHF-UHF-FM antennas.

If you look at the band allocations it is easy to figure this out.

The low VHF TV channels (2-6) run from 55 to 88 MHz, with a small gap at
around 70 to 75 MHz. Channels 7-13 run from 174 to 216 MHz, with the UHF
channels from 470 to 638 MHz.

By the way a log periodic works it would be possible to place three of them
on a single boom. One would be designed just for the low VHF channels, one
for the high VHF channels, and the third for UHF. In some cases, such as
deep fringe, this would be desirable for best TV reception as it would tend
to reject interference from any nearby FM stations.

Jim
N8EE

5031. Re: Any ideas for a radio booster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <373B59A0.4D2D9940@megsinet.net>
Source record: 70282

Jim wrote:
> If you look at the band allocations it is easy to figure this out.
>
> The low VHF TV channels (2-6) run from 55 to 88 MHz, with a small gap at
> around 70 to 75 MHz. Channels 7-13 run from 174 to 216 MHz, with the UHF
> channels from 470 to 638 MHz.

I'm not exactly current, but if UHF covers channels 13 through 69, it
would go from 470 to 812 MHz. We do have a local channel 66, 788-794 MHz.

> By the way a log periodic works it would be possible to place three of them
> on a single boom. One would be designed just for the low VHF channels, one
> for the high VHF channels, and the third for UHF. In some cases, such as
> deep fringe, this would be desirable for best TV reception as it would tend
> to reject interference from any nearby FM stations.

My understanding of the log periodic is strictly intuitive, and I don't
have the background in math that most antenna books demand. But I suppose
if you just ripped out the 88-108 MHz elements and "slid the sections
together", it could be handled with clever feed tricks.

I do know that I've had good reception using the 136-174 MHz frequencies
and 220 MHz on a V/U/FM antenna, and always suspected they were designed
for continuous coverage from 54-812 MHz rather than as "tri-band" antennas.
Don't know for sure on that, but there don't seem to be any jumps in
element sizes in such antennas.

--
+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+

5032. repeater controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Roger <n0yoxNOSPAM@iland.net>
Message-ID: <926637757.664.99@news.remarQ.com>
Source record: 70283

http://www.iland.net/~n0yox/n0yox.html

5033. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <373B731B.265CCB84@mail.rsccd.org>
Source record: 70284
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

Toko is sold by DigiKey, 1-800-DIGIKEY, or http://www.digikey.com.

Sotiris Antoniou wrote:
>
> Hi,
> I am trying to purchase some coils made by TOKO (small quantities). Please
> can someone give me an address for England or U.S.A. Any help would be
> very much appreciated.
>
> Best Regards.
> Sotiris Antoniou .
> samant@ath.forthnet.gr

5034. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373B7360.5E20@sir.com>
Source record: 70285
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Michael Young wrote:
>
> I have great news for you! You CAN become a ham without learning Morse
> code. Looking at FCC Part 97, you can qualify for a Technician's license
> with only a written procedure and absolutely minimal theory test. No
> Morse code test!
>
> It seems your wish has been granted, and quite some time ago at that.

The technician license does NOT allow you to use ANY of the Ham bands
below 6 meters. Thus you DO have to pass a Morse Code test if you want
to be a HAM without restrictions. A technician license is like a
fishing license that only allows you to fish in a small fraction of
small lakes. Only you don't have to know Morse Code for the fishing
license with no restricions on lakes.

5035. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373B74EC.988@sir.com>
Source record: 70286
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Jim wrote:
>
> Sir <sir@sir.com> wrote:
>
> >The best analogy would be having to learn Morse Code in order to use the
> >internet, as Morse Code has as much to do with knowing how to operate
> >and work the internet as it does with knowing how to operate and work a
> >Ham radio.
>
> Now that sounds like a plan, a Morse code test to get on the internet
> would keep some of you no-code peckerwoods out of the DX newsgroup
> and about a half dozen other ones this 'discussion' doesn't belong in.
>
> Is it REALLY necessary to post this crap to every ham newsgroup there
> is ? Some of us have already learned Morse code, we aren't looking for
> any good reasons not to....

Well if they would replace the Morse Code with Russian and make you learn Russian with a test to keep your HF priviledges, I'm sure you would be posting some comments on how you don't understand why you need to learn Russian if you only plan to use English. And then the Hams that allready KNOW Russian would tell YOU to shut up and stop complaining and posting as they aren't looking for any good reasons not to have to learn Russian.

There are going to be a lot of posts to newsgroups that don't happen to have subject matter that is of personal interest to you. Lots of YOUR posts will not have any interest to lots of other people too.

Read the threads of the subjects you find interesting and skip over the ones you do not. Seems like a lot of wasted time to reply to threads that don't interest you.

5036. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Greg Baker <bakergsj@maranatha.net>
Message-ID: <FMK_2.5629$LP2.104993@news6.ispnews.com>
Source record: 70287
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

What about Tech Plus license holders?

Sir wrote in message <373B7360.5E20@sir.com>...
>Michael Young wrote:
>>
>> I have great news for you! You CAN become a ham without learning Morse
>> code. Looking at FCC Part 97, you can qualify for a Technician's license
>> with only a written procedure and absolutely minimal theory test. No
>> Morse code test!
>>
>> It seems your wish has been granted, and quite some time ago at that.
>
>The technician license does NOT allow you to use ANY of the Ham bands
>below 6 meters. Thus you DO have to pass a Morse Code test if you want
>to be a HAM without restrictions. A technician license is like a
>fishing license that only allows you to fish in a small fraction of
>small lakes. Only you don't have to know Morse Code for the fishing
>license with no restricions on lakes.

5037. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373B7940.23EE@sir.com>
Source record: 70288
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Dean Craft wrote:
>
> Sir wrote in message <37363938.123C@sir.com>...
> >Rich Mulvey wrote:
> >>
> >> On Fri, 7 May 1999 08:21:11 -0500, jpos <jpos@mobilemark.com> wrote:
> >> >No one complains about having to learn how to use windows before they
> can
> >> >surf the net....
> >> >
> >>
> >> Considering that I was "surfing the net" before it was even
> >> *possible* with MS-Windows, you might want to choose a different
> >> analogy. Sigh.
> >>
> >
> >The best analogy would be having to learn Morse Code in order to use the
> >internet, as Morse Code has as much to do with knowing how to operate
> >and work the internet as it does with knowing how to operate and work a
> >Ham radio.
>
> True enough; however, it has everything to do with the es-prit de corps of
> ham radio.

Ham radio has changed. Packet, Satellite, R/C, television, and so much
more had nothing to do with what you said above. Perhaps all wood
workers should be required to be able to use old hand made tools of the
1800s before they are allowed to use modern power tools for the same
reason you gave.

Knowing that one has gone through, and survived, the identical
> trials and tribulations of his or her counterparts, builds a unique bond of
> dedication and purpose.

If I want to wash my clothes, I would find no bond of dedication or
purpose by using a washboard. I would prefer to use a washing machine
and dryer, and would not appreciate being forced to perform a test using
the washboard before I am given the PRIVILEDGE of being allowed to use a
washing machine. Would you? Or are you one of those lazy people that
think they should be allowed to use Washing Machines without ANY sort of
a test? How would we be able to keep CB'rs from using washing machines?

The instant gratification crowd of today has no
> appreciation for that bond.

Better sell your car and walk to work, don't use that Microwave oven either as that is for instant gratification and convienience too. Get out those two sticks, rub them together, and cook your food the hard way.

Using Morse Code was at one time an instant gratification and convienient thing too over writing and sending a letter pony express. Did people despise Morse Code back then because IT was more convienient and gave instant gratification?

All inventions give us convienience and instant gratification. That is a GOOD thing. Civilization finds better more efficient ways of doing things. Wanting to find an easier and better way of doing things is intelligent. Finding ways to make things more difficult is idiotic and stupid.

5038. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373B7A70.744E@sir.com>
Source record: 70289
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> Now, LOOK. Haven't you watched the movie Independence Day?
> It was Morse Code that saved the world! :-)

Yes, in science fiction movies you can show that Morse Code is very important and usefull. But what if I make a movie in which Morse Code causes the destruction of our entire universe?

5039. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373B8878.1CDE@sir.com>
Source record: 70290
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Greg Baker wrote:
>
> What about Tech Plus license holders?

What about it? Code test required.

>
> Sir wrote in message <373B7360.5E20@sir.com>...
> >Michael Young wrote:
> >>
> >> I have great news for you! You CAN become a ham without learning Morse
> >> code. Looking at FCC Part 97, you can qualify for a Technician's license
> >> with only a written procedure and absolutely minimal theory test. No
> >> Morse code test!
> >>
> >> It seems your wish has been granted, and quite some time ago at that.
> >
> >The technician license does NOT allow you to use ANY of the Ham bands
> >below 6 meters. Thus you DO have to pass a Morse Code test if you want
> >to be a HAM without restrictions. A technician license is like a
> >fishing license that only allows you to fish in a small fraction of
> >small lakes. Only you don't have to know Morse Code for the fishing
> >license with no restricions on lakes.

5040. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: kh2d@my-dejanews.com
Message-ID: <7hg1r4el1@brokaw.wa.com>
Source record: 70291
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Sir <sir@sir.com> wrote:

>There are going to be a lot of posts to newsgroups that don't happen to
>have subject matter that is of personal interest to you. Lots of YOUR
>posts will not have any interest to lots of other people too.

You appear to be so engrossed in your efforts to convince the rest
of the world that you are incapable of attaining anything in life that
requires effort that you seem to have totally missed the point.

The reason we have thousands of newsgroups is because the world is
filled with millions of people with different interests.

Although your inability to learn Morse code seems to be the current
focus in YOUR life, the rest of us don't necessarily view your lack
of motivation as an earthshaking event.

REC.RADIO.AMATUER.POLICY was created with the sole intent
of giving you a forum in which to air your views. Please feel free to
use it to your hearts content.

Posting your Morse code dribble in multiple newsgroups is not going
to gain you any support. Many unmotivated whiners before you have
proven this point.

Some people have things they want in life because they are willing to
expend the effort required to obtain those things, whatever that effort
may be. It is obvious to us that you are not one of those people.

What apparently is not obvious to you is that the rest of us don't care.

73, Jim KH2D

5041. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Mark Brown <kb0pyo@rconnect.com>
Message-ID: <373B945E.43E4B406@rconnect.com>
Source record: 70292
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I will try one last time. THIS BELONGS ON THE POLICY GROUP
NOT THE REST OF THE HAM GROUPS PLEASE TAKE IT WHERE IT
BELONGS!!!!!!!

Sir wrote:
>
> > Now, LOOK. Haven't you watched the movie Independence Day?
> > It was Morse Code that saved the world! :-)
>
> Yes, in science fiction movies you can show that Morse Code is very
> important and usefull. But what if I make a movie in which Morse Code
> causes the destruction of our entire universe?

5042. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373B9819.6776@sir.com>
Source record: 70293
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> What apparently is not obvious to you is that the rest of us don't care.

You all contribute to the thread, so you DO all care, else I would be
the only one and there would be no thread. I did not start the thread,
and it appears to be the most popular topic here right now. Even YOU
can not resist reading and replying to this.

5043. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <373B9839.662A@sir.com>
Source record: 70294
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mark Brown wrote:
>
> I will try one last time.

I hope that's a promise.

5044. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <926652739.087.96@news.remarQ.com>
Source record: 70295
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Good! You now know the choices available. Choose one.

Michael.

Sir <sir@sir.com> wrote in message news:373B7360.5E20@sir.com...
> Michael Young wrote:
> >
> > I have great news for you! You CAN become a ham without learning
Morse
> > code. Looking at FCC Part 97, you can qualify for a Technician's
license
> > with only a written procedure and absolutely minimal theory test. No
> > Morse code test!
> >
> > It seems your wish has been granted, and quite some time ago at
that.
>
> The technician license does NOT allow you to use ANY of the Ham bands
> below 6 meters. Thus you DO have to pass a Morse Code test if you
want
> to be a HAM without restrictions. A technician license is like a
> fishing license that only allows you to fish in a small fraction of
> small lakes. Only you don't have to know Morse Code for the fishing
> license with no restricions on lakes.

5045. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <926652998.698.27@news.remarQ.com>
Source record: 70296
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Sir <sir@sir.com> wrote in message news:373B7940.23EE@sir.com...
> Ham radio has changed. Packet, Satellite, R/C, television, and so
much
> more had nothing to do with what you said above.

Yep. So what's the problem doing this above 50 MHz?

Michael.

5046. Re: Model radio link info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFBqDyB.8JE@netcom.com>
Source record: 70297

In article <37392f5f@jolt.pagesat.net>,
Norman Gillaspie <norman@pcseng.com> wrote:
>I am looking for details on how model airplane
>radio links and servo systems operate in detail.
>
>Information I would like to know is.
>
>What frequencies are used?

The US licence free regulations are in Code of Federal Regulations Title 47 Part 95 Subpart C. (Same part as Citizens Band, which is Part 95 Subpart D). Try http://www.access.gpo.gov and look for the link to the National Archives and Records Administration for the official online version.

For amateur radio, try and find the ARRL band plan for 6 meters.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

5047. Need Plans for Homebrew Straight Key

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: gumb@hotmail.com
Message-ID: <373a6b88.17006655@news.earthlink.net>
Source record: 70416

If anyone has plans for this, please mail me at gumb@hotmail.com

5048. Re: Mods of FT-50(Only inside Japan version)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19990513041458.08345.00001822@ngol02.aol.com>
Source record: 70417

In article <7gq6dj$3oa$1@nnrp1.deja.com>, valerie65@my-dejanews.com writes:

>
>Anyone tried this Vlaski mod software? Does it work? Would it work with a
>series 8x version of FT-50?

I don't know about the 8X version, but it worked almost as well as the
mod done with the RT systems software and changing the bytes.

The biggest flaw was that it created a few memories with nothing in them
except DCS codes, i.e. no frequency showed or other things. It would not
delete those either. I note that loading said file into the RT Systems
program allowed easy deletion of the problem memories, which is one
point where the Yaesu backed software has a distinct edge. Still if you
don't have the RT systems software and want to make up your own
programming cable, I'ld consider it usable. I also note that it will load
the files that the RT systems program (ADMS-1D) creates and will use
the hardware that comes with the ADMS-1D. I had some difficulty at first
getting files saved by the program to come up in ADMS-1D, but that was
a cockpit error. It worked on my 6, and I didn't have an 8 to play with.
I saved several copies of my system the way it was setup before I
played with it, and would suggest that anyone playing with it to change
what bands it covers do the same before making changes. That way,
you can reload a working version no matter what. I suspect that the "8"
version
is just plain hardwired as is, but I'm not sure. One thing for sure is that
if it doesn't work, you aren't out any money.
-art clemons-

5049. Re: Noaa weather radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <373ac173.0@news.netwalk.com>
Source record: 70418

matthew hudson wrote in message <3739ADB9.ED62A0A4@univrel.tamu.edu>...
> I am looking at building my own Noaa weather radio with A-Tone
>detection. Does anyone know where to start this project. I know the
>frequencies I just don't know how to start building it...
>

Start with a narrow-band (10-15 kHz bandwidth) FM receiver. This is pretty
much identical to what is used for 2 mtr repeaters, police, fire, etc.

Jim
N8EE

5050. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7hemul$8ro$1@nnrp1.deja.com>
Source record: 70419

In article <3739F69C.1E9D@pop.removethistomailme.net>,
jmiles@pop.removethistomailme.net wrote:

> That makes sense. I don't think the other poster was belitting those
> pubs by asking why they aren't doing better in the marketplace -- I
just
> wasn't sure whether you were arguing fer 'em or agin' 'em! IMHO, the
> more info out there the better.

I wasn't, but that didn't seem to matter. Not when there
are uppity bitches to put down...

There is no denying that _ham radio_ was by far the most
techie engineering-oriented ham magazine. It was good, if
that's your schtick (it *is* my schtick). But the
reverence it attracts these days seems all out of
proportion, and seems to have a large nostalgia
component.

Do people want a real techie ham magazine (QEX/CommQuart -
both imperfect, but both on the right track), or do they
want nostalgia?
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5051. Re: NEWBIE - Seeking Advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: "Leland C. Scott" <no-spam@junk-mail.net>
Message-ID: <7hdqok$lf6@nnrp1.farm.idt.net>
Source record: 70420
Cross-posted to:
rec.radio.amateur.misc,alt.tv.tech.plain-tv,rec.radio.amateur.equipment,alt.radio.digital,rec.radio.amateur.homebrew

Alex,

Interesting idea, however I doubt a desktop PC has the computing horsepower to keep up with anything above audio frequency. Most of the DAC/ADC cards I have seen only support conversion rates up to the low 10's of Khz, which again limits you to audio frequency work. The fastest cards (conversion rates around 100 to 500 Khz) I have seen use a buffered type of design and are very expensive.

If your needs are only in the audio range then check out Texas Instruments, Motorola, Bur Brown etc. for info on their DSP evaluation boards. These boards are normally complete systems with analog I/O, memory and a fast DSP chip. Some of these boards can be had with a floating point DSP chip for under $200 USD. You would most likely spend just as much for a PC DAC/ADC card alone. In addition these evaluation boards come with manuals, programming software (assembler and linker), and a RS232 port so you can use your PC to develop/write the software on for down load to the board.

Leland C. Scott
KC8LDO

Alex wrote in message <37380941.3F0BA857@somehw.com>...
>I'd like to get a DAC/ADC card that would be suitable for capturing
>analog (NTSC and FM/AM) signals for use as a PC card. The idea is as
>much in software as possible, including interpretation of color bursts,
>carriers, etc, treating
>a digital clipped signal as a bitstream, and control of frequency
>tuning. Just a plain vanilla DAC/ADC with a plain vanilla driver.

5052. Re: Need Plans for Homebrew Straight Key

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <373ADD1F.99D4B1B0@arrl.org>
Source record: 70421

> I saw a detailed two part article in Home Shop Machinist--late 97 to
> mid 98--ZackW1VT

5053. Re: INFORMATION WANTED ON CRYSTAL TO VFO CONVERSION

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <926606242.18111.0.nnrp-04.d4f06601@news.demon.co.uk>
Source record: 70422

Robert Parker wrote in message ...
>I have an HF marconi ch150 solid state transceiver and i'm going to convert
>it to VFO by injecting the VFO signal into one of the crystal sockets. I
>was wondering if anyone has done this before and what there experience was.
>I realize the harmonics must be filtered before injection and therefore
>before I do anything, I will look at the O/P of the VFO on a spectrum
>analizer to determine the type of filtering required. If i'm lucky, no
>filtering will be required. This modification will be for both
transmitting
>and receiving in order to give this rig more versitility. Marconi has made
>a very nice rig and I wish to have it on the air on nearly all the bands.
>Coverage of thie rig is from 2mhz-24mhz.
>Second part of my query is: Does anyone know of any PC circuits that work
to
>do the same thing as a VFO?
>Perhaps a PC controlled function generator?
>

You could try a PC-controlled DDS chip, like the AD9850. I've got some
details on my web page:

http://www.geocities.com/SiliconValley/Code/1835

The schematic will be included in a day or two.

73, Leon

5054. Re: MD-139 mixer ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <373AE888.63F4A30@cig.mot.com>
Source record: 70423

I may still have an old Anzac Catalog. Will check tonight.
Evidently they don't have a Web page or have been bought out.

Chuck KD9JQ

http://www.imaxx.net/~kd9jq

Rod Preston wrote:
>
> Help !!!
>
> I am trying to ascertain the specification (upper freq in particular)of
> a component which I believe to be double balanced mixer type # MD-139.
> I'm fairly sure that the logo is that of Anzac Electronics, but as I
> can't locate their web page, I assume that they are no longer trading
> under that name.
>
> The package is 15mm x 15mm x 2mm (5/8"x 5/8" x 1/16") and has 10 pins.
> LO is pin 6 and the RF/IF ports are pin 3/10.
>
> Can any one assist ??
>
> Thanks
>
> Rod VK4KZR
>
> --
> Rod Preston VK4KZR
> WWLOC = QG62LO
> email: rpreston@netspace.net.au OR vk4kzr@amsat.org

--
Regards,

Charles Reichert

Motorola NSS NSG ACE phone: 847-632-6669 Work
IL-27 Post 2D7 fax: 847-632-4687 Work
1501 W. Shure Drive email: qa2696@email.mot.com
Arlington Hgts, IL. 60004

5055. Linear with 4CX-250s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Netnews <jaggi@cvrc.med.upenn.edu>
Message-ID: <7hf1jt$5sd$1@netnews.upenn.edu>
Source record: 70424

I have 6 4CX-250 tubes and all their accessories and was wondering if I could build a legal limit linear with 4 of those tubes. What would the load impedance be in this case? Would it be too low for a simple pi filter? Are there any schematics available for such a set up. Any help and advice is greatly appreciated.
KG2LD, Jurg

5056. Re: NEWBIE - Seeking Advice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Jim <jbolinger@Nloisnptaemk.com>
Message-ID: <373b1505.0@news.netwalk.com>
Source record: 70425
Cross-posted to:
rec.radio.amateur.misc,alt.tv.tech.plain-tv,rec.radio.amateur.equipment,alt.radio.digital,rec.radio.amateur.homebrew

Leland C. Scott wrote in message <7hdqok$lf6@nnrp1.farm.idt.net>...
>Alex,
>
>Interesting idea, however I doubt a desktop PC has the computing horsepower
>to keep up with anything above audio frequency. Most of the DAC/ADC cards I
>have seen only support conversion rates up to the low 10's of Khz, which
>again limits you to audio frequency work. The fastest cards (conversion
>rates around 100 to 500 Khz) I have seen use a buffered type of design and
>are very expensive.
>

Here at work we are currently using a 450 MHz pentium running NT for
developement work. This is in a VXI chassis which is designed for such
things, unlike a PC. We also have a 20 bit 20 MHz A/D with internal DSP
(for filtering and I/Q conversion) for collecting the data.

Even with all of this we can't do real time processing, of course we are
doing some pretty hairy stuff!!! (I programmed the DSP routines, by the
way.)

>If your needs are only in the audio range then check out Texas Instruments,
>Motorola, Bur Brown etc. for info on their DSP evaluation boards. These
>boards are normally complete systems with analog I/O, memory and a fast DSP
>chip. Some of these boards can be had with a floating point DSP chip for
>under $200 USD. You would most likely spend just as much for a PC DAC/ADC
>card alone. In addition these evaluation boards come with manuals,
>programming software (assembler and linker), and a RS232 port so you can
use
>your PC to develop/write the software on for down load to the board.
>

We are looking at using a DSP VXI board, but some of us doubt that it would
be any faster than doing it in the main processor with software, and
probably would be slower (clock rates are slower and you still have to
shovel the data back and forth). Of course we are digitizing a 5 MHz
signal, so audio on a DSP may be ok.

Have you looked into using the good ol' soundblaster card?

Jim
N8EE
DSP software engineer

5057. Propagation statistics in real time !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Fabio <cq.fabio@iol.it>
Message-ID: <7hf6rv$q10$1@hermes.iol.it>
Source record: 70426

Hi to all
In my site I've insert a page withe a little statistic (on-line and resault
in real time), about the propagation level in oll the continents,
If you have time, you can see it and contribute to this statistic.
Thank you : http://users.iol.it/cq.fabio/

5058. Re: MAKES LOTS OF MONEY..please read on

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Bis Wichy <wichy@dallas.net>
Message-ID: <926625246.705.87@news.remarQ.com>
Source record: 70427
Cross-posted to: rec.pyrotechnics,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.

Waaay too complicated! Life should be simple...

Just send $1 to:

SignalOne purchase fund
c/o WD0HCO
5129 Pruitt St.
The Colony, TX 75056

and make someone very happy.

Remember, a ham is a terrible thing to waste...

5059. Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Sotiris Antoniou <samant@ath.forthnet.gr>
Message-ID: <7hfccm$9cj$1@medousa.forthnet.gr>
Source record: 70428
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

Hi,
I am trying to purchase some coils made by TOKO (small quantities). Please
can someone give me an address for England or U.S.A. Any help would be
very much appreciated.

Best Regards.
Sotiris Antoniou .
samant@ath.forthnet.gr

5060. Help need circuit 60w for FM transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-13 00:00:00 UTC
From: Oscar Pi&#65533;ones <pinones.oscar.oe@bhp.com.au>
Message-ID: <7hfcgo$dfc16@atbhp.corpmel.bhp.com.au>
Source record: 70429

Hi,

I am looking for electronic schematic diagrams in order to build my own non commercial radio station.
I would really appreciate if somebody can help me in locating this information and anything else regarding this topic.

Thanks,

Oscar

5061. Need help with mic adapter circuit from electret to dynamic and back

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: duece6x6@aol.com
Message-ID: <19990513210838.25205.00000254@ng140.aol.com>
Source record: 70298

I need info on a circuit to adapt a dynamic mic (Dave Clark headset) to my ICOM hand held (electret) radio. I will pay for a prebuilt circuit or adaptor.

Thanx Steve Email only DUECE6X6@aol.com

5062. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Jeff Johns <jeffj@scott.net>
Message-ID: <199904132228.PNR00533@scott.net>
Source record: 70299
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Sir writes:

> What about it? Code test required.

Yup! I'm a + and will soon be a General<g>. CW is really addictive and it's amazing what you notice once you learrn it. Just the other day I was watching a AAMCO Transmission commercial on TV the other day. Their motto is "Double A, beep beep, M, C, O", it subconciously dawned on me that the "beep beep" is Morse for the M <g>. It's also nice to finally be able to know what the repeaters say when they ID.... it's not always just the callsign :) Anyways, CW may not be for eveybody, I guess that's why we have different license classes. There is a place for all of us in ths hobby!

73 Jeff W4JEF

```
*--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------*
|jeffj@scott.net w4jef@amsat.org | Reserve Patrol Captain |
| Satellite: Mir R0MIR-1, AO-27 | Jefferson County Sheriff's Dept|
|200LX+BayPac+FT50=Portable Packet| QTH Birmingham, AL USA |
*-----------------------------------------------------------------*
```


```
*--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------*
|jeffj@scott.net w4jef@amsat.org | Reserve Patrol Captain |
| Satellite: Mir R0MIR-1, AO-27 | Jefferson County Sheriff's Dept|
|200LX+BayPac+FT50=Portable Packet| QTH Birmingham, AL USA |
*-----------------------------------------------------------------*
```

5063. Motorola-SHF

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Zlatko Miocevic <sbeop@alf.tel.hr>
Message-ID: <7hgbh9fmp1@as102.tel.hr>
Source record: 70300

Thanks for read this message.If you know please write me where in Europe I can found: MRF2003,2005 and 2x2010.Thanks in advance 73 de 9A2SB,Zlatko

5064. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <f5AglJAtc8O3EwUi@falstaf.demon.co.uk>
Source record: 70301
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

In article <7hfccm$9cj$1@medousa.forthnet.gr>, Sotiris Antoniou
<samant@ath.forthnet.gr> writes
>Hi,
>I am trying to purchase some coils made by TOKO (small quantities). Please
>can someone give me an address for England or U.S.A. Any help would be
>very much appreciated.
>
>Best Regards.
>Sotiris Antoniou .
>samant@ath.forthnet.gr
>
BEC or BONEX - search on web, I can't remember the address.
Cirkit keep small stocks.

Cheers

Robin

--
Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

5065. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7hgnfl$a3u@groucho.cs.ubc.ca>
Source record: 70302

roncook@worldnet.att.net (Ron Cook) writes:

>"Almost pure white light" ??

>By definition, is not "white" light an equal mixture of all possible
>visible wavelengths ?

An equal-power mixture of all wavelengths would be "white noise" at
light frequencies. It would also be one sort of "white" in colour.

Light from the sun is often regarded as "white", but it does not have
equal energy at all wavelengths. It *does* have all wavelengths present.

However, "white" usually means "anything that a human perceives as white".
You can produce the sensation of white using three single-frequency
lasers with the correct ratio of intensities.

You can get white by mixing red, green, and blue LED output as well.

Apparently, the "white" LEDs don't do this - they're really blue LEDs
combined with phosphors to convert most of the short-wavelength blue
to longer wavelengths.

This is the same as most "white" neon tubes - the arc is blue or UV,
and phosphors on the inside of the tube convert it to something approximating
white.

Dave

>And, what is the color temperature ?

Good question. For the tri-colour LED, it should be adjustable over a
wide range by adjusting R G B drive currents. The "white" LED is
probably fixed in colour temperature.

Dave

5066. WANTED : meter bezel, Heath IM-11 VTVM

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990514071602.05231.00000519@ng-fs1.aol.com>
Source record: 70303

Hi, I'm looing for a decent, intact clear plastic meter bezel for a Heath IM-11 VTVM, please respond if you have one at a decent price....
Thank you,
Joe Pratt, Tubecntral@aol.com

5067. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <373C1D9E.580AAC9E@fallschurch.esys.com>
Source record: 70304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.swap

Jeff,
You are a contemporary example of a ham who put in an honest effort at CW instead of shying away from the work, and then found out how much satisfaction the mode affords! Good luck on your upgrade; CW operation is the best way to upgrade your code proficiency. Enjoy your hobby!
73 de W1AEL

5068. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <373C20B8.C7C35190@fallschurch.esys.com>
Source record: 70305

In fact, Sir, any woodworker who seeks meaningful certification, as by attending a reknowned school, such as Boston's North Bennet Street School, starts out on hand tools before he can touch power tools. This is an apprenticeship strategy that makes sense for many fields, including amateur radio. CW is very effective communication, and a real pleasure to operate. I am a long time CW op who realizes that we shall have to allow the No-Coders access to some HF privileges to stop their whining, and acknowledge the political reality of the situation. I passed my General code test at age 15 -- it is not hard, but does require some application and the deferment of gratification.
73 de W1AEL

5069. Re: MD-139 mixer ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <373C24FB.C3D2F8CF@fallschurch.esys.com>
Source record: 70306

As you can see, I found the data sheet. If you need a copy, send e-mail to w1ael@mindspring.com with your snail-mail QTH, and I shall cheerfully send you one.
That☐s a pretty good mixer for HF/VHF, but running that much LO power in a receiver demands serious attention to layout and shielding. Enjoy!

ANZAC MD-139 HIGH LEVEL DOUBLEBALANCED MIXER 1- 500 MHz
1 dB compression level +20 dBm typical, desensitization +17 dBm typical, both at +23 dBm LO power
Frequency range is above is for RF & LO ports; IF port goes DC ☐ 500 MHz.
73 de W1AEL

5070. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <373C25BD.8C3ABFA6@fallschurch.esys.com>
Source record: 70307

I shall seek both technical worth and nostalgia, thank you, Laura. For me, and other old-fart techies, that comes with old age. Really we miss Jim Fisk, who left us in untimely fashion...
73 de W1AEL

5071. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Dan Rae <rae4@ix.netcom.com>
Message-ID: <373C3390.486E1A10@ix.netcom.com>
Source record: 70308

Hi,
The best range of Toko coils used to be carried by a company in the UK
called Bonex.

tel: +44 1 753 549502

fax: +44 1 753 543812

They used to have a very good catalog, with lots of Technical data.

They have a web site, but I can't find the URL, but the dog ate my
bookmarks,

73 Dan AC6AO G3NCR

5072. New Version of Flexi-Tuner for the RX-320

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: mktg@ix.netcom.com
Message-ID: <37763517.5415541@nntp.ix.netcom.com>
Source record: 70309

May 14, 1999

Hello All,

The beta versions of Flexi-Tuner for the RX-320 are finally done and over with! Many thanks to the testers for their feedback and suggestions. All comments were very helpful.

Version 2.0 of Flexi-Tuner for the Ten-Tec RX-320 is now available for ordering.

Priced at $20.00, version 2.0 is an inexpensive way to take advantage of the features on the RX-320 that Ten-Tec did not implement and, at the same time, to have a control program for both DOS and Windows.

The major features of Version 2.0 of Flexi-Tuner for the Ten-Tec RX-320 are as follows:

1. Operates the RX-320 from virtually any desktop or laptop computer, including older 386 machines. An excellent use for that old 386 machine in the closet or one of the many $100 older laptops available at pawn shops and used computer stores.
2. Works in either DOS or Windows (this is a DOS program with a DOS interface).
3. Implements 34 selectivity filters from 8Khz to 300Hz.
4. All modes: AM, USB, LSB, CW.
5. AGC implemented: Fast, Medium, Slow.
6. Tuning steps down go 1 Hz or up to 1 Mhz, including 9Khz and 3Khz.
7. Adjustable squelch.
8. Bandpass tuning for CW and SSB (offset from center freq.)
9. Scanning using scan files. Adjustable parameters.
New! You can now have up to 200 scan files with as many 100 entries in each.
10. Built-in scan file editor.
New! You can now tune to any entry while in the scan file editor.
11. Built-in logging function with log editor. Easily track, edit, sort, monitor, and export log entries. Items logged include station name (or notation), frequency, mode, filter, date, time, and S-meter reading. Time and date can be adjusted if you want to log in UTC or other time zone.
New! Sort by time added to the log editor.
12. More sensitive S-meter.

13. Pause S-meter function on front panel. This eliminates
the "chuffing" heard on some RX-320 systems.
New! 14. Instantly mute audio with a single key.
15. Almost all parameters adjustable (great for knob twiddlers
like me).
16. Tighter code for faster operation.
17. No mouse required (or supported).
New! 18. Supports color, B&W, and inverted B&W monitors (CGA or
better, including B&W VGA monitors).

The program is supplied along with several scan files in a single zip
file. It can be sent to you either by e-mail or regular mail on floppy
disk. Installation and removal are simple, as the program does not
affect any system settings. Operation is also straightforward -- just
press various keys as shown on the screen.

Installation, removal, and operating instructions are included.

I would be pleased to send you Version 2.0 of Flexi-Tuner for the
RX-320.

Regards and 73,

David
W7HTJ

P.S. A demo version is available at no charge. It has all the features
of Version 2.0 except that the number of scan files is limited 25, each
scan file can hold 25 records, and the log file is limited to 250 en-
tries. An RX-320 is needed in order for the demo to function.

RX-320 Flexi-Tuner V. 2.0

How To Order

The full program, Flexi-Tuner Version 2.0, is available for purchase.
Shipment can be made by e-mail or on diskette by regular mail.

Price: $20.00 US for shipment by e-mail.
$25.00 US on diskette shipped by regular mail.

Send payment (check or money order) in favor of David C. Andresen.

Address: 8103 104th St., S.W.
Tacoma, WA 98498

Tel. (253) 588-4149
Fax: (253) 588-4366
E-mail: mktg@ix.netcom.com

All shipments made within 24 hours of receipt of payment.

Please include your e-mail or mailing address with your order.

Name: _____
Address: _____
City: _____
State: _____
Zip: _____

E-mail: _____

How to Ship? Mail or E-mail (circle one)

Please include payment. Invoices not sent.

5073. Re: MD-139 mixer ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <373C344A.2BAB0A5@cig.mot.com>
Source record: 70310

Glad Allan found the data sheet. My Anzac Catalog evidently was a
casualty of my move to the new qth fall of 97.

Chuck KD9JQ

Allan Kaplan wrote:
>
> As you can see, I found the data sheet. If you need a copy, send e-mail
> to w1ael@mindspring.com with your snail-mail QTH, and I shall cheerfully
> send you one.
> Thatï¿½s a pretty good mixer for HF/VHF, but running that much LO power in
> a receiver demands serious attention to layout and shielding. Enjoy!
>
> ANZAC MD-139 HIGH LEVEL DOUBLEBALANCED MIXER 1- 500 MHz
> 1 dB compression level +20 dBm typical, desensitization +17 dBm typical,
> both at +23 dBm LO power
> Frequency range is above is for RF & LO ports; IF port goes DC ï¿½ 500
> MHz.
> 73 de W1AEL

--
Regards,

Charles Reichert

Motorola NSS NSG ACE phone: 847-632-6669 Work
IL-27 Post 2D7 fax: 847-632-4687 Work
1501 W. Shure Drive email: qa2696@email.mot.com
Arlington Hgts, IL. 60004

5074. Re: FS/FA: ceramic filters, trimmercaps, knobs, RF components and more

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Arthur Moe <kb7ww@uswest.net>
Message-ID: <373C3200.522254B@uswest.net>
Source record: 70311

Bob, How about $20.00 for this pair.

Art
KB7WW

Bob Levitt wrote:

1 Used "Type 10B" Variac "Powerstat" variable
transformer by the Superior Electric Company
120 VAC in, 0 to 120 or 0 to 132 VAC out @ 2.25 Amp
plus one 3 Amp resettable thermal circuit breaker

1 Amphenol # 335-10871-3 SPDT coaxial relay 26VDC coil
silver plated with 3 miniature coax female (SMA?)
connectors, Date code 6836, but never used

5075. 2x4-1000 amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Leon Snider <leons@worldnet.att.net>
Message-ID: <7hhfvtbai1@bgtnsc03.worldnet.att.net>
Source record: 70312

Anyone in the south east have a NICE 2x4-1000 amp "for sale"? RF deck,or the whole thing. Leon

5076. Re: find Trimmer caps and ferrites

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: "Clifton T. Sharp Jr." <clifto@megsinet.net>
Message-ID: <373C6225.386529B4@megsinet.net>
Source record: 70313

TempEst wrote:
> Im after trimmer caps around 15mic Farads or

I hope you meant picofarads.

```
--
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
| Cliff Sharp | "Speech isn't free when it comes postage-due." |
| WA9PDM | -- Jim Nitchals, founder, FREE |
+-+-+-+-+-+-+-+-+-+- http://www.spamfree.org/ +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

5077. Re: ECC85/6aq8 FM tuner frontend design questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: la8ak@online.no
Message-ID: <373b0bef.163656731@news.online.no>
Source record: 70314

On Tue, 11 May 1999 16:33:16 -0400, singhpk <singhpk@exit109.com>
wrote:

>hello ,
>
>I just got a grundig tube type of 1960 radio with
>ECC85 in the front end and a conventional
>ECH81/EBF89 IF stages followed by ratio detector.
>
>This radio works rather well and it is surprisingly
>sensitive.
>
>It seems that the a neutralized triode is used
>as the RF amp followed by a self oscillatting triode convertor.
>both of these triodes are contained in one 6aq8/ecc85 tube.
>I suspect that a 6dj8/ecc88 would have worked as well but NOT
>a 12at7/ecc81.
>
>I was toying with the idea of reverse engineering the design
>of such a RF front end. The circuit is readily available
>at http://www.vintage-radio.com/ goto the 1955-1956 link at the
>bottom.
>
>After going through the explanation, I still have the following
>questions:-
>
>1. How is the RF grid-cathode coil designed oscillattor coil designed
>where is it tapped at ?
>How does it exactly work, what is the purpose of grounding
>the tap of the rf-grid-cathode coil via a unbypassed 120 OHM resistor
>instead of directly.
>
>2. How is the oscillattor coil designed ?
>what is the pri-sec turns ratio and the tapping points on the primary.
>How is the frequency stability acheived ?
>(This oscillator is surprisingly , very stable .)
>
>
>3. What are tradeoffs of using a self oscilatting triode convertor ?
>Why wasnt a single pentode used at AM ~1000 KHZ frequencies
>as a self oscillating convertor instead of the pentagrid tube like
>ECH81 or 6SA7 ?
>

>4. How to model this circuit in SPICE ?
>
>
>This circuit is one of the most interesting circuits I have seen
>for a long time and i would really like to duplicate it with
>fire-fets and J310 fets .
>
>
>thanks .
>
>
>
haven't seen your circuit, but believe they applied the Zwischen-basis RF amplifier with oscillator/mixer in one section. I have much info about the mixer design, but in German language. (Handbuch f&#65533;r Hochfrequenz und Elektrotechniker 1952-1955-1957... 4 volums. The zwischenbasis amplifier is described with centertapped coil - equal halfs for grid and cathode, it has the advantage of simultaneously maximum gain and minimum noise figure, this is not possible with conventional RF- amplifiers. But most of the designs used have not centertapped coil, and very little abstracts is found describing what was improved over the basic design. Believe ECC85 was the most commonly used valve for such FM tuners, while ECC84 was used earlier as cascode amplifiers.

Jan-Martin LA8AK

5078. Re: find Trimmer caps and ferrites

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7hi3jg$pn3$1@nnrp1.deja.com>
Source record: 70315

In article <373C6225.386529B4@megsinet.net>,
"Clifton T. Sharp Jr." <clifto@megsinet.net> wrote:
> TempEst wrote:
> > Im after trimmer caps around 15mic Farads or
>
> I hope you meant picofarads.

Maybe not...he's looking for some 4-inch ferrites.

Could be it's for a 27 millihertz oscillator.

N6OTQ

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5079. IF-10A CAT adapter for KENWOODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: ernie@netvision.net.il
Message-ID: <373c8c27.32489782@news.netvision.net.il>
Source record: 70316

Hello ALL,

The IF-10(x) unit will allow for control of Kenwoods via the RS-232 port of the computer , or direct TTL in case of track-box use.

I have built a clone of it for KENWOOD TS-711 , TS-811 TS-940, 140 & 680. The unit is instaled exactly as the original one, meassures the original size, and is built on a double-sided PCB.

\Depending on the amount of user-demand for the unit, I can have a kit made; The project will be a non profitable one, (Donation to Amsat) and price ($ 55 more or less) will depend on the amount of units.

This is a survey in order to now what to expect.

Please reply to me (4Z4TL) here (ernie@netvision.net.il) or v satellite to 4X1AS, Shlomo.

73 , Isaac Lindenbaum, 4Z4TL, Phone\Fax: 972-9-9588161

Credits: The printed circuit was edited by basil ZL3UF, and the schema modified a bit to suite implementing a crystal by Yakov 4Z5AY.

5080. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: nospam.tonypo1@nospam.home.com
Message-ID: <MPG.11a66e02da315fb19896ec@news>
Source record: 70317
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <373B8878.1CDE@sir.com>, sir@sir.com says...
> Greg Baker wrote:
> >
> > What about Tech Plus license holders?
>
> What about it? Code test required.

5WPM isn't impossible. And there are currently efforts to make the
maximum 12WPM. Kind of frosts me when I think about it but I'm glad I got
my 20WPM over and done with.

Tony

--
== Tony Pelliccio, KD1S formerly KD1NR
== Trustee WE1RD

5081. Re: ECC85/6aq8 FM tuner frontend design questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: singhpk <singhpk@exit109.com>
Message-ID: <373C634D.F877614B@exit109.com>
Source record: 70318

hello JMN,

So the first rf coil was centre tapped.

can you give some coil winding details
of the the oscilator coil as well from that
german book .
That will be most helpful.

73

J M Noeding wrote:

> On Tue, 11 May 1999 16:33:16 -0400, singhpk <singhpk@exit109.com>
> wrote:
>
> >hello ,
> >
> >I just got a grundig tube type of 1960 radio with
> >ECC85 in the front end and a conventional
> >ECH81/EBF89 IF stages followed by ratio detector.
> >
> >This radio works rather well and it is surprisingly
> >sensitive.
> >
> >It seems that the a neutralized triode is used
> >as the RF amp followed by a self oscillatting triode convertor.
> >both of these triodes are contained in one 6aq8/ecc85 tube.
> >I suspect that a 6dj8/ecc88 would have worked as well but NOT
> >a 12at7/ecc81.
> >
> >I was toying with the idea of reverse engineering the design
> >of such a RF front end. The circuit is readily available
> >at http://www.vintage-radio.com/ goto the 1955-1956 link at the
> >bottom.
> >
> >After going through the explanation, I still have the following
> >questions:-
> >
> >1. How is the RF grid-cathode coil designed oscillattor coil designed
> >where is it tapped at ?
> >How does it exactly work, what is the purpose of grounding
> >the tap of the rf-grid-cathode coil via a unbypassed 120 OHM resistor
> >instead of directly.
> >
> >2. How is the oscillattor coil designed ?

> >what is the pri-sec turns ratio and the tapping points on the primary.
> >How is the frequency stability acheived ?
> >(This oscillator is surprisingly , very stable .)
> >
> >
> >3. What are tradeoffs of using a self oscilatting triode convertor ?
> >Why wasnt a single pentode used at AM ~1000 KHZ frequencies
> >as a self oscillating convertor instead of the pentagrid tube like
> >ECH81 or 6SA7 ?
> >
> >4. How to model this circuit in SPICE ?
> >
> >
> >This circuit is one of the most interesting circuits I have seen
> >for a long time and i would really like to duplicate it with
> >fire-fets and J310 fets .
> >
> >
> >thanks .
> >
> >
> >
> haven't seen your circuit, but believe they applied the Zwischen-basis
> RF amplifier with oscillator/mixer in one section. I have much info
> about the mixer design, but in German language. (Handbuch fï¿½r
> Hochfrequenz und Elektrotechniker 1952-1955-1957... 4 volums. The
> zwischenbasis amplifier is described with centertapped coil - equal
> halfs for grid and cathode, it has the advantage of simultaneously
> maximum gain and minimum noise figure, this is not possible with
> conventional RF- amplifiers. But most of the designs used have not
> centertapped coil, and very little abstracts is found describing what
> was improved over the basic design. Believe ECC85 was the most
> commonly used valve for such FM tuners, while ECC84 was used earlier
> as cascode amplifiers.
>
> Jan-Martin LA8AK

5082. Synthesized Voice Vocabulary

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Ryan Faricy <online@faricy.net>
Message-ID: <7hi9fhian1@bgtnsc02.worldnet.att.net>
Source record: 70319
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi all.

Might there happen to be a sound-file compilation of the usual repeater-voice vocabulary? Please email your response. Thanks!

RTF

5083. Re: MD-139 mixer ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7hia8nttr1@scotty.tinet.ie>
Source record: 70320

MD-139

Frequency 1 to 500 MHz

IF Freq. 0 to 500 MHz

Conversion loss 6dB (typical)

1dB compression point +20 dBm

L.O. drive +10dBm

From M/A-COM RF and cellular catalogue 1992.

73, Ed. EI9GQ

5084. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7hia8ottr2@scotty.tinet.ie>
Source record: 70321

Try Cirkit (UK). mailorder@cirkit.co.uk

Sotiris Antoniou wrote in message <7hfccm$9cj$1@medousa.forthnet.gr>...
>Hi,
>I am trying to purchase some coils made by TOKO (small quantities). Please
>can someone give me an address for England or U.S.A. Any help would be
>very much appreciated.
>
>Best Regards.
>Sotiris Antoniou .
>samant@ath.forthnet.gr
>

73, Ed. EI9GQ

5085. Need Schematic Dumont Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: Ed Brown <brownfamily@airnet.net>
Message-ID: <01be9edd$57813880$5c1bb4d8@brownfamily>
Source record: 70322

I need a schematic for a Dumont 190 scope. It also went by AN/USM 281 D, since it actually was a military scope.

It has lost the vertical deflection and I cna't even begin without a schematic.

I will, of course, pay for the copy of the manual.

Ed WB4HUM

5086. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: "H. Adam Stevens" <alien@jump.net>
Message-ID: <373CF365.E85813F9@jump.net>
Source record: 70323
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

time to dig up the pre-ban vibroplex

BD wrote:

> Not too up on the humor-thing, eh?
>
> Sir <sir@sir.com> wrote in message news:373B7A70.744E@sir.com...
> > > Now, LOOK. Haven't you watched the movie Independence Day?
> > > It was Morse Code that saved the world! :-)
> >
> > Yes, in science fiction movies you can show that Morse Code is very
> > important and usefull. But what if I make a movie in which Morse Code
> > causes the destruction of our entire universe?

5087. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-14 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <9UBs+BAHkFP3EwKC@ifwtech.demon.co.uk>
Source record: 70324

Dan Rae wrote:
>Hi,
>The best range of Toko coils used to be carried by a company in the UK
>called Bonex.
>
>tel: +44 1 753 549502
>
>fax: +44 1 753 543812
>
>They used to have a very good catalog, with lots of Technical data.
>
>They have a web site, but I can't find the URL, but the dog ate my
>bookmarks,

Bonex are now called BEC Distribution Ltd, and their web site is
www.bec.co.uk
E-mail: sales@bec.co.uk

Their TOKO catalog is now bigger and better than ever - 260 pages,
including many interesting devices such as pre-tuned filters for the
amateur bands, that you don't normally hear about in the USA.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5088. AN2574-1-1-3-P datasheet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Stewart Bryant <stewart.bryant@virgin.net>
Message-ID: <373C9113.6306D846@virgin.net>
Source record: 70181
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

I picked up a couple of 4+1 digit DVM modules at the local junk sale a couple of
days ago. They are the ones that are in standard industrial sized
modules. I would like to use them in a power meter.

The type number is Analogic AN2574-1-1-3-P They were manufactured
in 1992

I tried look the part on the Analogic web site, but get the impression
that they are out of that business. Does anyone know where I might get
hold of a data sheet?

73

Stewart G3YSX

5089. Last freq references FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: douglas dwyer <doug@ddwyer.demon.co.uk>
Message-ID: <OVsozAAqrUP3Ew9g@ddwyer.demon.co.uk>
Source record: 70182

Clearing out the last of these frequency reference, unused precision SC
cut oven controlled crystal oscillators at 16.384 MHz that divide down
to 1,2,4kHz etc., they approach
small rubidium in long term stability and do better in
short term stability.
This is the only frequncy I have, as Im an oscillator designer I
recognised these oscillators when they came on the market from a
cancelled cellular phone system in the UK, special price now 5% list
price ie UK pounds 25 $US 45 (approximately 5% of the
list price).
Email for circuit to lock to any other freq around 10MHZ in 1kHz
steps and fuller spec.
--
douglas dwyer

5090. Homebrew Digital Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: "Joseph A. Consugar" <joesugar@erols.com>
Message-ID: <373D780B.AC45A809@erols.com>
Source record: 70183
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I'm thinking about designing a simple HF transmitter for use exclusively on the digital modes. (I'm not interested in voice or CW). Has anyone here given any thought to this? For example, would it be better to modulate the rf directly or use a SSB type upconversion for those people using soundblaster cards and digital software? I have some of my own thoughts the requirements of such a radio, but am interested in the thoughts of those of you with more experience.

Joseph
KC3XM

5091. Surplus "3rd brake light" LED strips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Richard &/or Patti Herndon <herndonNONONOSPAM@texas.net>
Message-ID: <373D83BB.2CB7@texas.net>
Source record: 70184

Sorry, the only connection of this to amateur radio is that my vehicle contains my mobile ham rig. <grin>

I'm looking for automotive surplus strips of very bright LEDs, like you see in the newer vehicle spoilers' 3rd brake lights. I'd like to make a 3rd brake light that really is visible in my old '80 Volvo rear window.

They're too expensive new. I don't like the look of the lamp bulb and jeweled lens cheapy, after-market 3rd brake lights.

73 de K5FNI,
Rick
Austin TX

5092. Vintage-Radio e-mail reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Mike <mike1@nospam.net>
Message-ID: <u%f%2.444$Uz6.920@news.megsinet.net>
Source record: 70185

This list will prove beneficial to anyone who is interested in the collection, restoration, and operation of vintage radio equipment. While this list will deal mainly with American-made amateur radio receivers and transmitters, other makes are welcome so long as they fit the category of "vintage". To
qualify for vintage status a set must be 25 years old and preferably contain some vacuum tubes. This category can include military, home broadcast sets, commercial equipment and homebrew equipment. Any homebrew equipment using vacuum tubes and operating CW or AM will be considered "vintage" equipment no matter what the age. Accessories such as keys, antenna tuners, wattmeters, test equipment, etc. is also considered a part of the Vintage hobby and will be welcome if it is at least 25 years old.

I sincerely hope that you will join our group of vintage enthusiasts. With your help we can make this a great List.

Please do NOT subscribe using a forwarding e-mail account (e.g. qsl.net; arrl.net). Please use your actual, non-forwarding address only.

To subscribe, visit http://www.qth.net and select vintage-radio or send e-mail as follows:

TO: majordomo@qth.net
SUBJECT:
BODY: subscribe vintage-radio

5093. Re: Linear with 4CX-250s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Heinz Schnait <oe5eep@qsl.net>
Message-ID: <373DB1CB.2E939381@qsl.net>
Source record: 70186

There was an article about a 4x 4CX-250/B linear amplifier in an Austrian Amateur Radio Journal. The author got 1.6kW with 105W drive and

450W with 10W drive. The plate voltage was 2kV. He used a simple PI Filter with 150pF(Tune), a roller inductor (25 turns, from hamfest, no further data given) and 1500pF(Load). I guess that's for 80 - 10 meters.

Certainly need higher values on 160. I thought about duplicating this design but never got started, too busy with other projects! Hi

The author is an oldtimer. He has built eleven linears before but this one is his first with ceramic tetrodes. The author does not have e-mail access. The article is written in German but the schematics might be usefull to you. Let me know if I shall send copies. (provide your fax number).

73

Heinz, OE5EEP <oe5eep@qsl.net>

5094. Propagation statistic in real time

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Fabio <cq.fabio@iol.it>
Message-ID: <7hkceplqe1@hermes.iol.it>
Source record: 70187

Hi to all
For first, I want to thank all the friends that they have contributed to my propagation statistic on-line.
Please every time (when you want). go again on my home page, for to give again our contribute, in this mode, the propagation statistic, is always update !
Thank you again to all !!!
Fabio URL: http://users.iol.it/cq.fabio/

5095. 74C86

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: n1bug@mint.net
Message-ID: <373dc674.4507804@news.mint.net>
Source record: 70188

Help?!
Does anyone know where I can get the 74C86 chip in small quantities??
I'm having trouble finding it. Anybody got one or two they would
sell??

Paul N1BUG
n1bug@mint.net

5096. Re: Vintage-Radio e-mail reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: rmoorek4zaj@webtv.net
Message-ID: <8320-373DDE6C-54@newsd-263.iap.bryant.webtv.net>
Source record: 70189

rmoorek4zaj@webtv.net

5097. FA: GUNN based 10 GHz Tranceiver/Motion Detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: "calvinf15@prodigy.net" <calvinf15@prodigy.net>
Message-ID: <373E244A.737@prodigy.net>
Source record: 70190
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Stereo-Doppler Microwave Intrusion Detector.

This unit was manufactured by Protection Technologies in late '94. It is brand new unopened in the box (I am currently using the one in the photo). The unit uses microwave RF energy at 10.525 GHz to flood an area 80x80' (adjustable down to 8x8'), and detect intruders moving at rates between 3 inches/sec and 10 miles/hour. The unique 2-channel Stereo Doppler signal processing allows the unit to discriminate between annoying false alarms generated by rythmic or cyclic motions caused by ceiling fans or wind vibration, etc. The unit model number is SD-80 and is complete with mounting L-bracket with hardware, and operator/schematic manual. This is a professional unit, not a Radio Shack alarm toy. Original cost was $425. Dimensions are approx 4x6x8" in a rugged, attractive case. Requires 10-14 VDC at about 3 watts and operates simple relay contact closure systems. The manual is very detailed and discusses how to incorporate this unit with standard and custom alarm system. I am only auctioning one of these now, but if demand is high, I have 3 more and can sell additional units to a willing buyer to build an entire system. See the picture at:

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=102107090

only 1 day left and the current price is $50, thanks.

5098. find Trimmer caps and ferrites

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: TempEst <blcs@eisa.net.au>
Message-ID: <7hhk8aglf1@news.eisa.net.au>
Source record: 70325

I am looking for some trimmer caps or ferrites, and am wondering if there is anyone who might be able to help me find them?

Im after trimmer caps around 15mic Farads or
removable core ferrites of around 10cm long where the supplier is able to supply me with the permiability rating! (pain in the arse in Australia)

If you can help me Ill send you a courtesy "thank you" e-mail :)

TempEst
Blcs@eisa.net.au

5099. May newsletter now on line

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Jabba <vk4wss@NOSPAMqsl.net>
Message-ID: <373c591a@grissom.powerup.com.au>
Source record: 70326
Cross-posted to: aus.radio.amateur.digital,aus.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi all and thanks for reading this.

The May newsletter for the Southside Amateur Radio Society Inc is now available for download at http://www.qsl.net/vk4wss

Articles in this issue include: -

Feature Article - Your First H.F. Transceiver
Golden Antenna Award
Trivia - Why Radio Amateurs Are Called "Hams"
The Double Windom
Funnies
CB to Six - Part 3 of a 4 Part Series
Travel Host Scheme
Club News
Odds and Sods
Schematics - A simple Power Supply

Back issues are available.

Other items include on line AOCP and NAOCP exams, a linear amplifier project, CW tips, Callbooks, Software and more. Why not drop by and have a look?

5100. May Newsletter now on line

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Jabba <vk4wss@NOSPAMqsl.net>
Message-ID: <373c5987@grissom.powerup.com.au>
Source record: 70327
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

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5101. Re: Synthesized Voice Vocabulary

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: Lumpy <lumpy@digitalcartography.com>
Message-ID: <373CE502.8D5@digitalcartography.com>
Source record: 70328
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Ryan Faricy wrote:
>
> Hi all.
>
> Might there happen to be a sound-file compilation of the usual
> repeater-voice vocabulary? Please email your response. Thanks!

Email me off the NG. You might be able to pursuede me
to do the files for you, gratis. What file format are
you looking for? ie wav, something else?

Lumpy ABï¿½GD
--
The Very Unofficial Colorado APRS Page
http://www.digitalcartography.com/aprs.htm

5102. Re: FS: 1000's of Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-15 00:00:00 UTC
From: h3963@aol.com
Message-ID: <19990515023058.20947.00000759@ng15.aol.com>
Source record: 70329

I service alot of tube amps should use a source for buying tubes, thanks
H3963@aol.com. fax 903 6457746.
Noel Holloway
Twilight Enterprises,

5103. Re: Coils made by TOKO

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: john <john@grandads.demon.co.uk>
Message-ID: <0rpWDFAIDgP3Ew5P@grandads.demon.co.uk>
Source record: 70191
Cross-posted to:
alt.radio.pirate,aus.radio.amateur.misc,rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.misc

In article <7hfccm$9cj$1@medousa.forthnet.gr>, Sotiris Antoniou
<samant@ath.forthnet.gr> writes
>Hi,
>I am trying to purchase some coils made by TOKO (small quantities). Please
>can someone give me an address for England or U.S.A. Any help would be
>very much appreciated.
>
>Best Regards.
>Sotiris Antoniou .
>samant@ath.forthnet.gr
>
Hello Sotiris,
Maplin Electronics have stores throughout the U.K.
Telephone: 01702-554000
Fax: 01702-554001
Feel free to e-mail me if you need more details.
--
Hope this helps,
Best wishes,
John.

5104. Linking Repeaters via the Internet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: gbrent@garlic.com
Message-ID: <373e18e5.8858355@news.garlic.com>
Source record: 70192

I'm thinking about creating a board so I can link my repeater to any other repeater using NetMeeting or some other internet voice software. Used to link repeaters via UHF links. Now, with the internet, we can have a full time link to repeaters anyplace in the world and at the same time avoid propagation problems and interference. This would be great fun to at least try.

Has anybody tried this yet? Looks like it would relatively simple. You've got audio and mic connections at the sound board on the computer. Connect to transceiver via cable. Little circuit to detect audio voltage and key transmitter.

Would be interested to know the results of anybody who has tried this.

73's,

Gerry
WA6E

5105. Re: Surplus "3rd brake light" LED strips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Steve Ratzlaff <sratzlaf@flash.net>
Message-ID: <373E4879.B7544360@flash.net>
Source record: 70193

Try All Electronics Corp. http://www.allcorp.com they may have them.

5106. Guide to the rec.radio Newsgroups

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7hlss8$1m4@news.Hawaii.Edu>
Source record: 70194
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Archive-name: radio/personal-intro

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info, and rec.radio.swap newsgroups, as well as their Internet mailing list counterparts and complements. It is intended to serve as a guide for the new reader on what to find where. Questions and comments may be directed to Jeffrey Herman, KH6O, (jeffreyh@hawaii.edu), or Paul Schleck, K3FU, pschleck@novia.net.

This message was last changed on 14 March, 1998.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

Over the years, as the net grew, the volume of discussion became progressively higher. First one by one, and then as part of two reorganizations, what was once one group became many. In the process, developments elsewhere on the net were reflected in the groups as they were created, most notably the change to place all of the ham radio groups in one hierarchy.

The collection of newsgroups continues to grow as more people join the net, and as more topics of discussion gain volume, I expect to see more groups be created as well. This follows what is happening on the rest of the net.

Nearly all of the radio newsgroups have corresponding mailing lists, the notable exception being rec.radio.swap. There are also a few mailing lists that don't have newsgroups.

The Current Groups
==================

It's important to post messages to the group that's appropriate for them, and not to the groups that aren't. The whole idea of having different newsgroups is so that folks who aren't interested in, say, homebrewing, don't have to wade through messages about homebrewing on the way to read about Field Day. Posting appropriately is just good etiquette.

The rec.radio.amateur.misc group is the catchall. It is what rec.ham-radio was renamed to during the first major reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, was removed on September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there. To answer a frequently asked question: No, there is no mailing list that goes along with this group. If you can't read Usenet news directly, you're out of luck.

The group rec.radio.amateur.policy was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate - it's now legal to order a pizza on the autopatch, if you're not in the pizza business - as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The group rec.radio.cb is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL

bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently David Dodell, WB7TPY. The email address for submissions to the group is rec.radio.info-moderator@primenet.com. Inquires and other adminis-trivia should be directed to rec.radio.info-request@primenet.com. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups r.r.amateur.antenna, .boatanchors, .dx, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, the older tube based amateur, military, and commercial gear, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter. The .dx group is devoted to long distance amateur communications. Each of these subgroups has its own charter and FAQ; please refer to the archives to find these documents.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

Mailing Lists

In addition to the mailing lists that mirror the Usenet newsgroups, there also are a few that stand alone. These cover specific areas of ham radio, and discussion is focused on just those areas.

The cq-contest mailing list is for discussions of contesting in ham radio. To join, send email with the word "subscribe" on a line by itself to cq-contest-request@tgv.com.

The DX mailing list covers the finer points of DXing. This one is also joined by mailing "subscribe" on a line by itself, this time to

dx-request@unbc.edu.

There's also a VHF mailing list, for VHF operators of the weak signal persuasion. You can join this one be sending "subscribe vhf" on a line by itself to vhf-request@w6yx.stanford.edu.

The QRP-L list is devoted to building and operating gear at low-power outputs. To subscribe, send an email to listproc@lehigh.edu and only write: subscribe qrp-l Your Name.

The TopBand e-list is devoted to all areas of operation on 160m. To subscribe, send an email to majordomo@contesting.com and only write: subscribe topband and follow the instructions you'll be sent.
This site, contesting.com, also hosts a couple dozen other ham-related e-lists. Use the above address, and only write: lists to get the entire index.

The Boatanchors e-list is devoted to the older tube-based ham, military, and commercial communications gear. To subscribe, send an email to: listserv@listserv.tempe.gov and only write: subscribe boatanchors

For homebuilding transmitters and receivers using tube technology, there is the Glowbugs e-list; send an email to:
majordomo@piobaire.mines.uidaho.edu and only write:
subscribe glowbugs <your@address.here>

The VHF DX discussion list can be accessed by sending an email to: majordomo@blacksheep.org and only writing: subscribe VHF-DX-discuss.

We now have a list devoted to amateur radio history. To subscribe, send an email to: ham-radio-history-subscribe@egroups.com - leave the body of the message blank.

Qth.net hosts over 100 ham-related e-lists, including lists devoted to each state, manufacturer, mode, band - too many to state here. Send an email to majordomo@qth.net and only write: lists to get the complete index.

For one of the most complete indexes of email lists, see the excellent web site http://pw2.netcom.com/~ac6v/pageae.html

Please do NOT send subscription requests to the mailing lists themselves; that doesn't work very often, and is very annoying to those on the list. Also, please keep your electronic mail address current with any mailing lists you subscribe to, as dealing with returned email is a nuisance for the person maintaining the mailing list.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your

article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jeffrey Herman, KH6O, rec.radio.amateur working-group
jeffreyh@hawaii.edu

5107. need a 2m/70cm co-linear design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: mcarney@bigpond.com
Message-ID: <37428114.2125470@news.bigpond.com>
Source record: 70195

Hi,
im after a design for a dual band 2m/70cm co-linear
antenna (i have a 5m fibreglass randome to house it in)
...something like an x500 or x700 would be nice!! Any
ideas would be greatly appreciated.

Thanks Mark mcarney@bigpond.com

5108. Re: Surplus "3rd brake light" LED strips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: jphelan501@aol.com
Message-ID: <19990516083603.29565.00001158@ng-fg1.aol.com>
Source record: 70196

Try JC Whitney as well. I bought an LED unit from them for my old Honda. The unit is in a small black case that adheres to the rear window. It is actually smaller and less obtrusive than the OEM unit in my other Honda.

73 de N3DRA
John

5109. PI Filter design

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: ct1hjo <mop69975@mail.telepac.pt>
Message-ID: <7hml51$st0$1@duke.telepac.pt>
Source record: 70197

Looking for program for PI Filter design, if possible with graphics and print out.

Any hint is welcomed.

Many thanks.

Wolfgang

5110. Contest Log Book on-line

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Fabio <cq.fabio@iol.it>
Message-ID: <7hmv3uthp1@hermes.iol.it>
Source record: 70198

If you need to publish your Contest Log Book on-line, but you have not a personal web site for to do it, try on this site:
http://users.iol.it/cq.fabio/logbook.htm

5111. 17 May Vandenberg Launch

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Brian Webb <102670.1206@CompuServe.COM>
Message-ID: <e4Wxsn8n#GA.131@nih2naaa.prod2.compuserve.com>
Source record: 70199

ASTRONOMY/SPACE ALERT FOR SOUTHERN CALIFORNIA
Brian Webb, KD6NRP
Ventura County, California
E-mail: 102670.1206@compuserve.com
Web Page: http ://ourworld.compuserve.com/homepages/rawhide_home_page

1999 May 16 (Sunday) 10:10 PDT

Satellite Launch Monday Night

Weather permitting, a missile launch scheduled for Monday, May 17th should be visible across most of California and as far away as Reno, Nevada; Saint George, Utah; and Tucson, Arizona.

Orbital Sciences Corp. will launch a Pegasus XL missile from an L-1011 flying off of California's central coast. Following release, the Pegasus should head due south and gradually climb. Several minutes later, the TERRIERS satellite should be placed into a polar orbit.

The launch is scheduled for 22:10 PDT, but can occur at any time during the 22:05-22:15 PDT launch window.

Observers near the California coast should see what appears to be an orange light moving from north to south.

Countdown status can be obtained beginning at T-1 hour by calling the 30th Space Wing Public Affairs office at 805-606-3595. The office should be manned Monday night from 21:15 to 22:45 PDT. More detailed countdown status will be available from the Vandenberg Launch Nets (see below).

Vandenberg Launch Nets

If the weather is clear in Santa Barbara or Ventura County on Monday night, ham radio operators in southern California are planning on running two nets to pass along countdown status and discuss the launch.

The primary Vandenberg Launch Net will be convened on the 147.000 MHz Santa Barbara repeater (131.8 Hz PL, +600 KHz offset) beginning at 21:30 PDT. Net Control will be Brian, KD6NRP.

The backup repeater will be the 147.885 MHz Thousand Oaks machine (127.3 Hz PL, -600 KHz offset).

A parallel HF (shortwave) Vandenberg Launch Net will be held on 3,815.5 KHz (LSB) beginning at 21:30 PDT. Net Control will be Dan, AC6NZ.

Pegasus XL/TERRIERS Launch Data

Flight Events

Time Latitude Longitude Altitude
Event (min:sec) (N) (W) (ft.)

Release 00:00 36 00 00 123 00 00 0,039,000
36.00 123.00

Stage 1 Ignition 00:05 36 00 00 123 00 00 0,038,691
36.00 123.00

Stage 1 Burnout 01:16 35 18 00 123 12 00 0,170,621
35.30 123.20

Stage 1/2 Separation 01:32 -------- -------- -------

Stage 2 Ignition 01:32 35 00 00 123 12 00 0,232,738
35.00 123.20

Stage 2 Burnout 02:43 32 48 00 123 48 00 0,572,912
32.80 123.80

Stage 2/3 Separation 07:22 -------- --------- -------

Stage 3 Ignition 07:33 21 36 00 126 18 00 1,741,330
21.60 126.30

Stage 3 Burnout 08:40 18 18 00 127 06 00 1,813,300
18.30 127.10

Launch Azimuth

The launch azimuth will be 190.52 degrees from true north. The vehicle will fly a north to south path.

Notes

1. Latitude, longitude, and altitude data was not available for all events.
2. The time, latitude, longitude, and altitude data for the other mission events was provided by Orbital Scienes Corporation.

The following is a NASA news release
regarding the TERRIERS mission.

STUDENT-BUILT SATELLITE SCHEDULED TO LAUNCH MAY 18

The TERRIERS satellite, built by students at Boston University and scheduled for launch on May 18, could provide a much better understanding of how changes in the ionosphere -- the electrically charged region of the upper atmosphere -- affect global communication systems, satellites, cell phones and pagers.

The Tomographic Experiment using Radiative Recombinative Ionospheric Extreme ultraviolet and Radio Sources, TERRIERS, named for the University's mascot, the Boston Terrier, will launch from Vandenberg Air Force Base, CA, at 1:10 a.m. EDT on May 18.

TERRIERS will use a unique combination of space- and ground-based instruments to measure ultraviolet, radio and visible light, which are produced naturally through various chemical reactions.

TERRIERS will use this light to create high-resolution, 3-D images of the ionosphere, similar to the way a CATscan takes multiple X-rays of the human body to assemble a three-dimensional image.

Just as high-speed electrons slamming into a TV screen cause it to glow and generate a picture, when high-speed charged particles smack into the Earth's ionosphere, they cause ultraviolet light to be emitted in the form of auroras. TERRIERS will measure these emissions to better understand the upper atmosphere.

"There is an increasing need to understand the ionosphere because changing conditions in this region adversely affect transmissions from communications satellites and impact global positioning systems," said Boston University's Daniel Cotton, principal investigator for TERRIERS. Data obtained from TERRIERS also could help scientists better predict space weather, Cotton said.

NASA's cost for the spacecraft is an estimated $6.1 million, which combined with the cost of the launch vehicle totals an estimated $12.3 million.

A three-stage Pegasus rocket, manufactured by Orbital Sciences Corp., Dulles, VA, will hold the 272-pound (123-kilogram) satellite under the belly of an L-1011 Stargazer aircraft. The aircraft will release the Pegasus rocket at an altitude of 40,000 feet over the Pacific Ocean. The Pegasus will carry the TERRIERS satellite into its 340-mile (550-kilometer) orbit. The spacecraft will then circle Earth in a polar orbit once every 96 minutes.

More than 60 Boston University students and faculty members have been involved in the science, theory, design, instrument-development and testing of TERRIERS since its selection in 1995. Sixteen Boston University undergraduate students will control the satellite from a mission control center located on campus after the satellite reaches its final orbit.

In addition to scientists from Boston University's Center for Space Physics, other collaborators on the mission include teams from the Naval Research Laboratory, Washington, DC; University of Illinois Urbana-Champaign; Massachusetts Institute of Technology's Haystack Observatory, Tyngsboro, MA; and AeroAstro, Herndon, VA.

TERRIERS is one of three NASA-funded missions under the Student Explorer Demonstration Initiative (STEDI). The Universities Space Research Association of Columbia, MD, administers the STEDI program for NASA. Information about STEDI can be found on the Internet at:

http://cass.jsc.nasa.gov/stedi/overview.html

For more information about the TERRIERS project, visit the Boston University web site at:

http://www.bu.edu/satellite

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5112. MFJ-1798

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Howard James <howardj@hamrad.swinternet.co.uk>
Message-ID: <7hn98uueh1@news6.svr.pol.co.uk>
Source record: 70200

Has anybody had experience of using the MFJ-1798 10 band 80 to 2 vertical?
It seems to do a lot but does it actually do it?
Thanks.
Howard.
G3UPZ

5113. Constructing Helical Antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Terry Gaff <shbcommm@indigo.ie>
Message-ID: <373F2ABE.D9BB1C5A@indigo.ie>
Source record: 70201

Hi all,

I have built two helical antennae to replace my 1 meter dish (I can't put this one on the roof !) but despite a lot of effort I have failed to get any signal out of them. I have two PC programs (and my own math) for calculating helical antenna dimensions, they both say that the ground plane or reflector should be BETWEEN XX cm and YY cm diameter (circular reflector), are these dimensions critical i.e.. can it be larger than the specified dimension? How critical is matching, when I feed in frequency and amount of turns required etc. both programs tell me that the impedance is 140 ohms. Don't I have to match it to 50 ohms? I have seen various helical designs on the web, one type has the helix material flattened at the reflector end and another type incorporates a type of matching strip 1/2 a wavelength long with the helix soldered somewhere along its length. Which method should I use? Or is there any thing else that's is important I should consider?

I would appreciate if anybody could help me with this.

Regards to all.

Terry Gaff

5114. Need Help With Overdrive Protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7hnf1c$lf1$1@news2.bit-net.com>
Source record: 70202
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am well along the path to building my 1KW 160-6m
solid state amp. I want to defend the finals (a pair of
MRF154's) with an input circuit to limit potential overdrive.

I see two options:

1. Use a 100W (4dB) pad which I understand will divide
whatever the input power is by 4 and send 3/4 of it into a
dummy load and 1/4 to the amp. That way with 100 watts
of drive the amp. only sees about 25 watts.

25 watts should give full power. Pieter N4IP who has built
one of these (see: http://www.ibelings.com/n4ip/sskw/) says
he has accidently keyed 100W into his amp on multiple
occasions and nothing blew up. He says the MRF154/157
transistors are very rugged.

2. A peak power detector that feeds a voltage to a circuit
that trips the COR if the 25 watt drive threshold is exceeded.

Option 2 is better because I can run the drive rig at lower
output thus extending the life of that rig. Option 1 is simpler ...

I am seeking your advice and your favorite circuit(s) to
accomplish either or both.

Thanks! & 73, DavidC K1YP@qsl.net

5115. Headset to handset conversion question

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Richard &/or Patti Herndon <herndonNONONOSPAM@texas.net>
Message-ID: <373F47A5.856@texas.net>
Source record: 70203

This is a combination communications and ham radio related question.

I noticed in the new Radio Shack flyer on page 3, there are three new models of phone headset that all use a stereo 2.5 mm plug. They seem designed for cell phone use, but seems like they could also be used in ham gear and a regular desk telephone set if a converter box is built.

MY top priority: Has anyone any experience in converting this (actually any one of the three) units to plug into a regular desk phone?

MY secondary priority: Same question for ICOM or similar ham gear? Did you have to do anything special to get the voltage they probably use for the mic?

Does anyone know if they are condenser mic or what? i.e., what voltage do they need? do they have built in amps or other special requirements that would limit their use for ham 4-8 ohm audio out?

Thanks. I can do all this, just other fish to fry if someone else has already swum this channel. <grin>

Thanks for info and please note to remove the all-caps part of my email address for direct replies.

73 de K5FNI,
Rick
Austin, TX

5116. VX-5R mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Joe Humberger KB9TFH <KB9TFH@MichianaToday.com>
Message-ID: <373F39AF.DFF03A22@MichianaToday.com>
Source record: 70204

Hello, i have heard that you can modify the VX5R by using software, well what software do i need and how do you do this mod and does it work as well as the hardware mod.
Thanks for your help....73sss
Joseph Humberger KB9TFH

5117. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: "just.do.it" <AT>
Message-ID: <7hnj27$9uu$1@nntp9.atl.mindspring.net>
Source record: 70205
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Cutting here -n- there from all the threads:

> What if you wanted to play the flute, but a law required that you learn
> how to play the harp before you were allowed to play the flute?
>
> What if you didn't like the harp and only wanted to play the flute, and
> other flute players called you lazy for not wanting to waste time
> learning an instrument you had no intention of ever playing?
>
> They have no desire to use morse code. How silly it would be to waste
> the time to learn morse code, only to forget it once one has the license
> to go ahead and use voice.
>
> Only people who intend to USE morse code should learn it.

90% of the automobile drivers out there don't intend to use anything
they *learned* to get their drivers license, why not drop that
requirement too? Just let 'em all drive, drop the roadtest
requirement!

>That's ok we can argue all we want about keeping the code test, but something
>needs to be done to bring people into amateur radio not keep them out.

Ever stop to think that maybe the government intended to keep some
people out? Why not drop the code requirment for commercial broadcast
while we're at it?

>I suspect the same small fraction of 13 year olds are still learning code. Like many
>things that require a little work up front, CW is worth it.
>73

And worth some pride too... ever heard of the rite of passage. Why
not do *something* you can take pride in instead of changing the rules
so you don't have to apply hardly any effort?

> If you're not wired for it, there are many other modes to use. That is one of the
> beauties of ham radio.

Absolutly!!! The whole spectrum above 50 mhz is wide open for those
who have no interest in CW. You knew it before you got into radio...
So what's the problem? (but be forwarned... you'll hear alot of CW
there too. Moonbounce, contesting, etc.)

>The key to keeping code from dying is those of you who are proficient MUST take
>those of us willing to learn under your wing and pass it on to us....

Seems all the *old Timers* around here left me to my own devices...
Wonder *how* I did it..... hmmmmm

>If you efforts to find someone in Ft. Worth fail, Why dont you and your
>buddies get on the 2 meter radio and teach each other?

5 wpm is NO CODE. It's like an open book test. If you *try* to learn
the code with *any* effort at all, you *will* pass the 5 WPM test.
From there you'll meet hundreds of others in the same boat on 40 & 80
mtrs.
Plenty of practice to hone your skills. I had a problem getting over

10 wpm myself once licensed as a P, but got on the air with a friend
of mine for an hour a nite over the period of a week, pushing
ourselves to the limit, and passed General that weekend. *USE IT* once
you get it.

> I have the skill to pass the practical test (and have with the training software) through
> Advanced, yet I hold only a Tech ticket because of the code. I am still trying but I
> haven't found my method for learning code yet. I memorized the tapes, and have tried a
> couple of different computer tutor programs, but so far I have not been able to master
CW.
> I will get it eventually, but it is not coming easy.

Sounds about normal to me...
if you study... it will come......

>If your son doesn't have to learn or like radio to enjoy Morse Code,
>then people who want to use or like radio do not have to learn Morse
>Code.

Did you're mama ever say "who ever said life was fair?" Just 'cause
you want to learn gun handling doesn't mean you have to kill someone.
I don't have a son, but I have to pay school tax.... WHAAAAA!

Hope I hit a few sore neves here. Amateur radio isn't the only thing
in life that will require you to learn something proficiently to do
(unlike my spelling to post to the group).

Take a look back at all the things that got lax on the rules in the
past and see what happened to them. Do you really want amateur radio
to go that route?

The hardest part about learning the code is to just put away all
the excuses you have as to why you < can't / don't have time for /
shouldn't have to / are just to darn lazy to > learn the code *and do
it.*

Next thing you know, after they start packaging up an extra class
radio amateur operators license in all the HF radios (sound familiar?)
They'll be whining that the FCC should abolish CW off the airwaves
'cause they can't handle not being able to understand what is going on
on the bottom half of the band.

I might could stomach letting a small portion of the prime DX bands go for the slow coders (P's),and leave the rest of the licese structure alone. But I hope at least that they leave the extra class alone so that *some* of us can keep a little pride in something that we *worked for* instead of crying about it 'till we got it for next to nothing.

If anyone out there is interested in *learning* CW and going to EXTRA in 6 months, e-mail me. All it requires is about 4 hours a week of *dedication*... You have to *want to do it* to do it.

The others.... FLAME AWAY, got my asbestos boxers on.

Breaker Breaker x.19x.xxx.xxx, catch me on the bottom 150 khz of the band good buddy, c'mon back!
||||||||||||||||BLEEEEEEEEEEEEP||||||||||||||||||

Richard Whiten/WB2OTK

NOT!

5118. Doug Hall Interface serial protocol needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: "R. E. Curry" <recurry@curry.org>
Message-ID: <bil%2.1035$fx5.611@news.rdc1.sfba.home.com>
Source record: 70206

Does anybody know where to get information on the "DHE Generice Data Stream" protocol most all the repeater controllers use to interface to the Doug Hall Interface? I'd rather not reverse engineer it. I want to be able to control one from a PC.

Regards,
Ron
ke6wed

5119. Re: Linear with 4CX-250s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: W7AAV@webtv.net
Message-ID: <8361-373F4FE4-39@newsd-281.iap.bryant.webtv.net>
Source record: 70207

having built an amplifier using a pair of 4cx300a's, a next door cousin to the 250, as far as I can remember, the only real difference in the tubes are there plate dissapation, the 250 for two hundred fifty watts, the 300 accordingly. as for using four of them, kinda think you will have problems, with a match. two will run a kw fine..... The Radio Handbook by William I. Orr, W6SAI first printed in 1970 has the schematic of the rig I built several years ago (I have the eighteenth edition of the handbook) says it is listed in library of congress catalog card number 40 33904, I know ur looking for a four tube design, this is only using two of em, and u gotta force air thru them for cooling, as you can tell with the plumbing hi hi gud luck
Steve

5120. Re: Linear with 4CX-250s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Pat Jankowiak <vaxhackery@worldnet.att.net>
Message-ID: <373F8856.D1B0F020@worldnet.att.net>
Source record: 70208

I have an old broadband RF power amp that I made into a linear amp. It produced a 300 watt AM carrier and 1200W peak on AM (staying within ratings), but in SSB it put out about 1800 watts PEP.
There is a neat little set of calculation programs for figuring pi and pi-L networks, and other linear-related things, free to download at:

http://www.montagar.com/~patj/rf_read.zip

I wrote them years ago, and the PIOUT.EXE one certainly saves alot of time getting the output section to work right the first time.. Hope you like simple DOS programs.

Netnews wrote:
>
> I have 6 4CX-250 tubes and all their accessories and was wondering if I
> could build a legal limit linear with 4 of those tubes. What would the load
> impedance be in this case? Would it be too low for a simple pi filter? Are
> there any schematics available for such a set up. Any help and advice is
> greatly appreciated.
> KG2LD, Jurg

5121. Re: Linear with 4CX-250s - The CAD site Pat Jankowiak posted.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Me <Censorship-no@nospam.com>
Message-ID: <7ho6nr$n74@dfw-ixnews6.ix.netcom.com>
Source record: 70209

I had a problem following the link Pat had posted to some PI-Filter designs he has on his website. However, when I keyed into the main page, I was then able to follow the link to the "free and shareware" which has quite a nice collection of programs.....

http://www.montagar.com/~patj/

5122. Subminiature tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-16 00:00:00 UTC
From: Fred Ruckser <nospam@somewhere.com>
Message-ID: <7hpb86$f74$1@mail.pl.unisys.com>
Source record: 70210

I have some subminiature tubes for which I need the specs. Can anybody help me ? The tubes are 1AJ5 made by Rogers and CK526AX made by Raytheon.
Thank you in advance
Fred, wb6iiq

5123. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <3740D3E6.E24@sir.com>
Source record: 70131
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
just.do.it email.ro (AE) wrote:
>
> Cutting here -n- there from all the threads:
>
> > What if you wanted to play the flute, but a law required that you learn
> > how to play the harp before you were allowed to play the flute?
> >
> > What if you didn't like the harp and only wanted to play the flute, and
> > other flute players called you lazy for not wanting to waste time
> > learning an instrument you had no intention of ever playing?
> >
> > They have no desire to use morse code. How silly it would be to waste
> > the time to learn morse code, only to forget it once one has the license
> > to go ahead and use voice.
> >
> > Only people who intend to USE morse code should learn it.
>
> 90% of the automobile drivers out there don't intend to use anything
> they *learned* to get their drivers license,

Give me an example, I can't think of one thing you learn to get a
driver's license that you wouldn't need to know when you drive.

why not drop that
> requirement too? Just let 'em all drive, drop the roadtest
> requirement!

That would be like dropping the rules and technical requirements on the
ham test. Both are needed and used by everyone in Ham radio. We are
talking about Morse Code which does NOT have to be used in order to
operate Ham radio. If it was required to learn how to ride a horse to
get that driver's license, then you could argue about that, but they
don't test for stuff EVERY driver won't need to know in order to drive.

> Ever stop to think that maybe the government intended to keep some
> people out?

No, they droped the code on the tech to get people in, not out. They
would drop the code for other classes too if they could, but it is an
international requirement, so it will take a bit longer to do.

Why not drop the code requirment for commercial broadcast
> while we're at it?
```

There never was or is a code requirement for commercial broadcast.

5124. FA: QQE06/40

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: ea <tsh@arrakis.es>
Message-ID: <373fa7fc@news.arrakis.es>
Source record: 70132

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=104296831

5125. PI4ZLD website

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Henk Remijn <hremijn@nospam.zeelandnet.nl>
Message-ID: <373f4adb$0$22827@news2.zeelandnet.nl>
Source record: 70211
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet

PI4ZLD info.

See http://pi4zld.8m.com/info-eng.html (us mirror)
or for europeans: http://www.hzeeland.nl/~eddy/ham/rdb/info-eng.html
or dutch: http://www.hzeeland.nl/~eddy/ham/rdb/info-ned.html

5126. BIG BIG amp parts 4sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19990516212358.13170.00001591@ng-fk1.aol.com>
Source record: 70212

For sale-
3CX15000B7 tube (yes 15000- not 1500)
Jennings UCSXF 20-15000mmf 10KV Vac cap
Carl T jones 50uh 10KW coil- very large
Very large 4 position bandswitch
(3) Very large 4uf 10kv OIL CAPS. Theses are about 40LBS
each- about the size of a cinder block.
All parts are in excellent shape, will not split up- no time to finish project.
$2500 and u pay ship. Prefer pick up near Phila.
Tnx
Jim

5127. Re: Need Help With Overdrive Protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: xkmiller01x@ticnet.com
Message-ID: <23E3D8A5D3FB80AD.41D5D99451E9FFD3.1311B34250870BD3@library-proxy.airnews.net>
Source record: 70213

How about a variation on Option 2 to provide an ALC feedback to the rig to keep the power down to 25w? Commercial amps have been using it for years. It's faster than the COR and a lot less trouble to design. All you would need is a little alc amp calibrated to send a signal back to the rig.

Kerry Miller, WD5ABC

On Sun, 16 May 1999 17:54:25 -0400, "DavidC" <davidc@bit-net.com> wrote:
>
>2. A peak power detector that feeds a voltage to a circuit
>that trips the COR if the 25 watt drive threshold is exceeded.
>
>Option 2 is better because I can run the drive rig at lower
>output thus extending the life of that rig. Option 1 is simpler ...
>

5128. Measuring Q

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bea004$f4385b40$1d874d0c@default>
Source record: 70214

I'm interested in how some of you measure Q of high Q inductors.
I thought I was isolating the scope probe from the coil with a 1 meg
resistor, however I tried a suggestion from Roy Lewallen and used
a 1pf cap and the Q went up considerably.
So I'm asking for your best methods to measure Qs of over 500.
I'm willing to build a test setup just for measuring Q.
I'll use parallel or series tuning.

Thanks
Mike

5129. Re: White LED's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19990516224015.12490.00002215@ngol05.aol.com>
Source record: 70215

In article <3739b6b4.0@news.netwalk.com>, "Jim" <jbolinger@Nloisnptaemk.com>
writes:

>How much do they list a 3 volt incandescent flashlight bulb for?
>

Even at $3.99 plus let's say some resistors to limit voltage across the
LED, the LED could be cheaper to use in several different ways. First,
if treated properly, the lifespan of an LED is at the least hundreds of times
that of a single bulb, thus one LED in terms of lifespan is equal to
several hundred bulbs. I also note that if ones needs are for a light for
an extensive period of time, 20 mA drawn from a set of D cells or C cells
is quite likely to use less in the way of battery power and give extended
battery
life too.

The downsides are that you can't use an LED to warm your hands in cold
weather as you can do with an ordinary flashlight bulb, and the light output
expressed in some ratio of light candles is tremendously less. That being
said, LEDs with a properly shaped reflector might be a good idea for many
in need of the services of a flashlight.
-art clemons-

5130. Re: Need Help With Overdrive Protection

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <6KwNpBABj7P3EwKA@ifwtech.demon.co.uk>
Source record: 70216

Kerry Miller wrote:
>How about a variation on Option 2 to provide an ALC feedback to the
>rig to keep the power down to 25w? Commercial amps have been using it
>for years. It's faster than the COR and a lot less trouble to design.
>All you would need is a little alc amp calibrated to send a signal
>back to the rig.
>
>Kerry Miller, WD5ABC
>
>
>On Sun, 16 May 1999 17:54:25 -0400, "DavidC" <davidc@bit-net.com>
>wrote:
>>
>>2. A peak power detector that feeds a voltage to a circuit
>>that trips the COR if the 25 watt drive threshold is exceeded.
>>
>>Option 2 is better because I can run the drive rig at lower
>>output thus extending the life of that rig. Option 1 is simpler ...
>>

The problem with all "option 2" circuits - including ALC feedback - is that they have a finite response time, which is almost certainly longer than it takes to blow the MOSFET gate.

The same applies in the transceiver that is driving the amp: all modern transceivers are capable of significantly more than their rated output power, and are held back by an internal ALC loop to improve the linearity. At the beginning of a transmission (or after a pause) there may be a spike of output power that would be enough to blow a following MOSFET. Transceivers vary, but some are particularly likely to do this if the power is turned down using the front-panel control, which actually operates on the internal ALC loop.

Therefore the best idea seems to be a combination of "option 1" and "option 2". Use enough fixed attenuation to protect the MOSFETs against physical damage at all possible power levels (up to at least 150W for a 100W-class transceivers, regardless of the front-panel power setting), and also use ALC to protect against non-linearity.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5131. Re: Constructing Helical Antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7hpduh$js8$1@nnrp1.deja.com>
Source record: 70217

Hi Terry

The stuff you've found pretty much describes the state of the art for helicals for amateur use, as of the last time I played with them, which was 1992.

My experiments (without benefit of sophisticated test gear) showed that the center-fed helical was at about 150 ohms, and the side-fed with flattened section was about 75 ohms for my stuff, which at 432 MHz wasn't rigid enough to get solidly to 50 ohms. I used a 75 ohm feed and ran everything on 75 ohms, and had usable results.

Think it's just an impedance match problem? Since you're replacing a 1-meter dish with a helical, you're at a high enough frequency that even a minute spacing or alignment variance will affect impedance profoundly.

Can you build your matching section as a microstripline on teflon board or on glass-epoxy with known characteristics? This might make things more controllable. Yes, I realize that since you have a .ie domain, you may have problems getting teflon PCB.

N6OTQ

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5132. Contest and voice keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Stu Olson <solson@usa.net>
Message-ID: <7hpa50$s7v$1@fir.prod.itd.earthlink.net>
Source record: 70218

With Fieldday and the June VHF contests just around the corner, why not save the old "voice box" and use a software digital voice keyer. "VoiceKeyExpress" works great on your lap top or full sized PC. Version 1.3.5 is available for downloading at the URL below. Runs as a standalone application, or is fully integrated with the FT-Manager radio control software. Don't wait till the last minute to register, as I'll be on vacation during both of the contests.

73......Stu

--
Stu Olson <'98 TJ Mobile as N7QJP>
http://home.earthlink.net/~n7qjp

5133. Oscillator problem with HB tube xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: cartercook@aol.com
Message-ID: <19990517114359.12426.00001606@ng30.aol.com>
Source record: 70219

I need some ideas from you who know tube transmitters.

I have built a 6DQ5 transmitter from the 1962 ARRL Handbook and am having difficulty with the 6AG7 oscillator section. The lower half of the 6AG7 acts as a xtal oscillator. Top half of the tube is connected to a tuned circuit and is supposed to amplify the signal for the output tube grid.

The lower section of the 6AG7 works great. I can hear it fine on an adjacent receiver. However, I can't get the 6AG7 to induce the necessary 2 mils of current onto the grid of the final.

I've checked the wiring and verified with a grid dipper that the 6AG7 tuned circuit is resonant. I have rechecked associated components for value, opens and shorts.

What's my next troubleshooting steps? Any suggestions will be gratefully received.

Carter Cook
W5URW
cartercook@aol.com

5134. PC boards from Inkjet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: VINCENT COPPOLA <vinyc@snet.net>
Message-ID: <374036BD.FE9@snet.net>
Source record: 70220

I have an Hp 694C Inkjet. This following FAQ talks about plotting the board to tracing paper and then exposing the board using the standard positive pre-sensitized method.

Has anyone had any experience with this? Results versus a laser?

I am also thinking instead of tracing paper maybe trying the InkJet transparencies, although they are more costly. That might reduce exposure time.

This site says much about the various processes.

http://darkportal.com/cc/pcbfaq.htm#PCBFAQ_021

(chapter 2.21)

Thanks for reading,
Vince N1VC

5135. Re: Subminiature tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: tubecntral@aol.com
Message-ID: <19990517124659.14540.00001548@ng-co1.aol.com>
Source record: 70221

Hi, here ya go...
CK-526AX, comon hearing-aid (Huh?<Grin>)
type, 1.25 volt filiment, 4 milliwatt output.

1AG5, T2X3 sub-mini diode/pentode
filiment 1.25 volts, @ 40 mA,

You may find out more by using this online
tube database,where it says 6AK5, just wipe that and enter tube # you are
interested in. It is at the below address:

http://hereford.ampr.org/cgi-bin/tube

Glad I could help...
Regareds, Joe Pratt, Tubecntral@aol.com

>
>I have some subminiature tubes for which I need the specs. Can anybody help
>me ? The tubes are 1AJ5 made by Rogers and CK526AX made by Raytheon.
>Thank you in advance
>Fred, wb6iiq
>
>
>
>
>
>
>
>

5136. Re: Subminiature tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Fred Ruckser <nospam@somewhere.com>
Message-ID: <7hpja2nvj1@mail.pl.unisys.com>
Source record: 70222

Thanks Joe

TUBECNTRAL wrote in message
<19990517124659.14540.00001548@ng-co1.aol.com>...
>
>Hi, here ya go...
>CK-526AX, comon hearing-aid (Huh?<Grin>)
>type, 1.25 volt filiment, 4 milliwatt output.
>
>1AG5, T2X3 sub-mini diode/pentode
>filiment 1.25 volts, @ 40 mA,
>
> You may find out more by using this online
>tube database,where it says 6AK5, just wipe that and enter tube # you are
>interested in. It is at the below address:
>
>http://hereford.ampr.org/cgi-bin/tube
>
> Glad I could help...
> Regareds, Joe Pratt, Tubecntral@aol.com
>
>>
>>I have some subminiature tubes for which I need the specs. Can anybody
help
>>me ? The tubes are 1AJ5 made by Rogers and CK526AX made by Raytheon.
>>Thank you in advance
>>Fred, wb6iiq
>>
>>
>>
>>
>>
>>
>>
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>
>

5137. FS: Ceramic Filters and stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: bw201@torfree.net
Message-ID: <FBw1y6.G4K.0.queen@torfree.net>
Source record: 70223
Cross-posted to: rec.radio.swap,sci.electronics.components,rec.radio.amateur.homebrew

Here is an updated list as of May 13 as some items were sold.

The following are personal items I have for sale. Best reasonable
offers accepted, but I reserve the right to deem what is reasonable ;-)

I will not consider offers totalling under $20 (before shipping) due
to the amount of bother in breaking up all of this into very tiny orders,
but will break this up into smaller orders, so you may bid for all or
some of the quantity of a particular item and mix and match as you wish.
Final discretion is completely up to me, and I will not even respond to
absurd bids (such as the guy who wanted all 72 triacs for $10 Canadian
including shipping when the shipping would have been about $6!) The
minimum reserve bids are primarily for the cheapest priced items to keep
away the people who think I will sell the whole lot for almost nothing,
but also for the rest of you so you know I am not completely heartless.

I will have other stuff to add to this list over time as I go through
my drawers and a couple of boxes. I hope this will go well and that
I won't have to resort to E-Bay at some time in the future. So I will
post the updated list as items are sold. But I don't expect it to
sell quickly because of the nature of the items. I have to see if
this will work well or if it will be total anarchy.

E-mail your offers to bw201@torfree.net

Shipping is extra, but I can confirm shipping from Toronto, Canada and
can work it into the price if you wish. You may make bids in either
Canadian money or U.S. dollars. Orders must be prepaid but I can send
you references of people I have dealt with on sci.electronics.* groups
all of whom were happy with our dealings. And once an offer is accepted
we will trade physical addresses and phone numbers.

I have done all of my shipping by surface or air, parcel post, insured
by the post office so far with no problems.

Thanks

Qty. Item MINIMUM reserved bid
All items have never been for the TOTAL
been used unless noted quantity of this
(ie. it says "USED") particular item in
U.S. dollars,
shipping extra
VVVVV

100 SFE10.7MA5A Murata-Erie 10.7MHz ceramic IF filter $ 10
(red dot - 10.70MHz center frequency) 3dB bandwidth
280 ±50 kHz, 20dB bandwidth of 650kHz, 6dB insertion
loss, 330 Ohm input/output impedance, the standard
for most stereo's and home receivers

25 KBF-455R-15A Kyocera 455kHz ceramic 6-POLE IF filter 44
455kHz ±1.5kHz center frequency. 6dB bandwidth
±7.5kHz (ie. 15kHz), 50dB bandwidth of ±15kHz.
6dB maximum insertion loss, 1.5kOhm impedance.
0.28" X 0.433" X 0.34" high. 5 pin type (one input
one output, and 3 ground pins and I can provide
copies of the data and pin-outs from their catalog)

25 CFW455E Murata-Erie 455kHz ceramic 6-POLE IF filter 36
6dB bandwidth ±7.5kHz, 50dB bandwidth ±15kHz
6dB maximum insertion loss, 1.5kOhm impedance.
These are very similar to the Kyocera ones and I
again can provide the data and pin-outs. Remember
these are the equivalent of THREE of the regular
2-pole filters.

1200 Ferrite beads - About 0.1" long x 0.13" O.D.,

84 Taiyo Yuden 3 lead passive hybrid filters 1.00
pn BPF07225, believed to be 72.25MHz bandpass
filters for commercial band receivers.

3 Raytheon 726C/JAN Kylstrons used and in unknown
conditions but tube filaments are good (Listed at
$115 each brand new at www.elexs.com/10Klyst.htm)

5 Mini-Circuits MAR-3 monolythic broadband microwave
amplifiers. These are spec'd from DC up to 2 GHz.
They are in their original sealed protective carriers.
And with data sheet/application notes.

5 2N5947 Low-noise low-distortion TO-117 stud RF NPN
transistor by Motorola for CATV and broadband amplifiers
5 Watt Pd, 400mA Ic max., 30 Vceo, 1100 MHz minimum fT
at 75mA Ic can provide photocopy of the data sheets

50 2SC1254 Low-noise UHF-VHF NPN transistor TO-72 case
by NEC. 800 MHz minimum fT at 6mA, 50mA Ic max.
25 Vceo, 0.25 Watt

5 80180 TO-117 stud RF NPN transistor by MEC for CATV
amplfiers. 5 Watt Pd max., 250mA Ic max., 25 Vceo,
1500 MHz fT

2 MPS6507 UHF-VHF NPN transistor TO-92 by Motorola 0.50
700 MHz minimum fT at 10mA, 100mA Ic max., 20 Vceo

1 MPS6511 UHF-VHF NPN transistor TO-92 by Motorola 0.25
1200 MHz minimum fT at 10mA, 100mA Ic max, 20 Vceo

4 MPS6547 UHF-VHF NPN transistor TO-92 by Motorola 1.00
600 MHz minimum fT at 2mA, 50mA Ic max., 25 Vceo

2 Isolated tab dual NPN RF transistors in special package
probably made by MA/COM. Looks like they are dual
common emitter RF Power transistors for CATV driver
broadband amplifier applications. I have no specs
but believe the part number start with "PH" as is a
common series by MA/COM. One says:
"N640 -12 and the other "W640 -12
PH2306 349" PH24010 313"
Rectangular tab with one mounting hole at each end,
and 7 .05" wide ribbon leads (3 on one side, 4 on other)

2 Mica compression trimmer capacitor 20 - 150pf
2 lug connections with a separate grounded screw
adjustment grounded through a centered mounting
bracket - flat base style approx. 7/16" x 7/8
rivetted plate (ie. cannot be taken apart and modified)

79 Mica compression trimmer capacitor 35 - 250pf
2 lug connections with a separate grounded screw
adjustment grounded through a centered mounting
bracket - flat base style approx 5/16" x 13/16"
part number 310720850061
rivetted plate (ie. cannot be taken apart and modified)

58 Dual separate mica compression trimmer capacitor PCB mount
with capacitors set in ceramic block 1 1/16" x 1 3/16"
with maximum height of ceramic 7/16" high.
Includes some silvered mica plates to limit range.
One capacitor is, 390 - 470pf,
the other capacitor is two sections in series:
first one 230 - 375pf, second 140pf fixed
Electro Motive part number 51102200
For you homebrewers, by removing the extra flat plates
(the slighty curved ones give the maximum variable range)
and just the silvered mica sections you can create various
combinations eg. 10 - 80pf with two plates one unplated mica
piece for the first section, and for the other section
20 - 120pf with three plates and two unplated mica pieces
or 10 - 75pf with just the top two plates and one mica piece.

241 Dual separate mica compression trimmer capacitor PCB mount
with capacitors set in ceramic block 1.0" x 0.7" x 0.25"
Electro Motive part number 310720850911
Includes some silvered mica plates to limit range.
One section is variable from about 390 pf to 480 pf.
The other section has a fixed 150 pf (approximately) in
series with a variable capacitance of 260 pf to 340.

These can be modified similar to the 58 units above.

8 NE5533AN Dual very-low noise Op Amp designed for 8
high quality low level audio preamplifiers

10 Solitron Devices, SD10, Sounvister - NOISE ZENER's 20
9V Zener diodes used as audio white noise sources in
much audio equipment. Comes with data sheet showing
individually tested noise outputs of 390 to
900 uV/20Khz @ 600 ohm, ordered by International
Rectifier (according to the data sheet) in 1975

1 Sigma Datacel # 301R2-24 optocoupler
with one lamp and two photoconductive cells

6 Clairex Photomod # CLM4012 optocoupler with one lamp
and one photoconductive cell with spec. sheets

1 Amphenol # 335-10871-3 SPDT coaxial relay 26VDC coil
silver plated with 3 miniature coax female (SMA?)
connectors, Date code 6836, but never used

35 DG180BP Dual SPST Very Low-Resistance (�10) J-FET 100
Low Distortion Analog Switches especially suited to
Video or Audio Switching purposes and precision Sample
and Holds, by Harris/Siliconix/Intersil list price
$20.20 U.S.! I have copies of the specs sheets for
you plus a summary of the data is at the end of this list
(FET switches unlike CMOS ones do not change resistance
with signal and so are extremely low distortion)

2 SHORTED General Electric C50 110 Amp SCR's free with
Electrically they are useless, but you might minimum $20
be able to use the braid on them. They are purchase
also great to hold by the braid and then whip but you pay
a mugger over the head with! ;-) the shipping

2 Used Piezoelectric Ceramic Blocks with metalized
ends. About 2" x 2" x 1 1/8". HEAVY

1 Double Disk converter/hole punch All metal construction $1.00
Yes the original product in the original box for you
antique lovers! Now if you can just find 3.5" 720k disks ;-)

80 USED - Miniature lamp holders with 24/28 volt lamps 5.00
plus 16 spare bulbs

12 Appliance neon indicator lamps with internal resistor 4.00
3/8" x 1 1/4" rectangular hole

9 Appliance slide switch 3A@125VAC plus 5.00
neon indicator lamp with internal resistor
3/8" x 1 1/4" rectangular hole

48 Knobs for 1/8" shaft Raytheon pn TSA50-2WL-1 9/16" dia
x 7/16" high. Fluted black polycarbonate knob with brass
insert with one set screw, white line up the side and
brushed aluminum circle on top. Electronics Goldmine
sells a similar knob (without the stylish brushed alumimum
circle) as their part number G9251 for $2.49 EACH.
Each in individual sealed bags.

3 Alco black machined aluminum knob for 1/8" shaft with
flat finger grip and thick aluminum skirt
numbered from 0 through 9

15 Various plastic knobs with set screws for
1/8" dia. shafts

12 Knobs for 1/4" shaft. 1 1/4" dia. x 5/8" high
Fluted black ABS knob with aluminum insert with two set
screws, NO pointer, with brushed aluminum circle on top.

12 Solid aluminum knob for 1/4" shaft. Aluminum coloured.
24 sided, with round front, 7/8" dia. max x 3/4" high
total. Smaller round base of 11/16" dia. for 1/4".
One set screw. Part brushed aluminum, part polished.
Nice looking. Has 1/32" wide metal insert as pointer.

3 Various machined aluminum knobs for 1/4" shaft

4 Various plastic knobs for 1/4" shaft

10 Large plastic knobs for 1/4" shaft with one set screw
Gold-coloured anodized alumimum cap, brown plastic
approx 2" in diameter and 5/8" deep

1 Strobe - flashes from 1 to 6 times a second. 20
Good for use in medium sized darkened room like a
rec room. Approx. 4 x 6 x 12 cm. (This unit and
the one below are in Hammond 1591C Heavy Duty ABS
boxes with 1591AC clear lids. These boxes alone cost
over $7 US each.) Runs off of the
AC outlet and has internal fuse for protection.
Uses FILM capacitors (3.3 &#65533;F) for charge storage.
The first item that "blows" on strobes are the
Xenon flash tubes, the other major item is the
capacitor if cheap electrolytics are used rather than
film capacitors. Film capacitors also have much
lower ESR (effective series resistance} and so are
usually as bright as strobes using electrolytic
capacitors with 3 times the capacitance.
(2 Linear replacement Xenon tubes are available for
$1.50 each, but only with the purchase of the strobe.)

1 Strobe - flashes from 2.5 to 14 times a second. 35
Good for use in medium sized darkened room like a
rec room. Approx. 4 x 6 x 12 cm. plus the size of

the external fan that includes a finger protector.
(This unit built in a Hammond 1591 Heavy Duty ABS
box with 1591 AC clear lid.) Runs off of the AC
outlet and has internal fuse for protection.
Uses Film capacitor (3.3 ÔF) for charge storage.
Because it uses the same capacitance as the $20
unit, but flashes up to 2.5 times as often, it
delivers up to 2.5 times as much power to the
Flash Tube. Includes a built-in fan to increase
Xenon tube life as well as using a special tube
designed for higher speed/higher power flashing use.
(4 Linear replacement Xenon tubes with data sheet,
are available for $4 EACH, but only with the
purchase of the strobe.)
WARNING: prolonged exposure to higher flash rates
can produce nausea and even epileptic-like seizures
in some people who are NOT epileptic.

1 6 Digit mechanical counter with 6 Digit preset 1
which drives relay - 93 Volts DC
could probably be powered by one of the
16VAC + 50 VAC listed below

1 ACE cylindrical key mechanical 7 pin lock 1
with 3 keys, for cabinet etc.,

16 25kÔ Linear 50mm-travel slide potentiometer 2
with centre detent - no 3mm mounting screws

Military Grade high-G shock resistant relays

1 USED Hi-G Inc. 26.5VDC 575Ô DPDT 2A contacts
20 x 10 x 10mm

1 Branson #AR6919 26.5VDC 390Ô 4PDT bolt-mount
20 x 23 x 10mm

1 HiG Inc. 26.5VDC 675Ô DPDT 2A contacts
20 x 23 x 10mm

1 Struthers-Dunn 26.5VDC 300Ô DPDT 5A contacts
25 x 31 x 15mm

4 Deutsch Inc. microsized 25.5VDC 1.3kÔ DPDT
only 10 x 15 x 5mm!

(Solenoids and transformers are preferably for sale in the Toronto,
Canada area for pick-up, because of the cost of shipping heavy items
such as these, but if you are willing to pay for the shipping I will
send these anywhere.)

SOLENOIDS (very heavy but if you are willing to pay the shipping
you are welcome to them with minimum $20 order)

7 Unmarked solenoids 110VDC - 1" x 1 1/4" x 2" free

10 Unmarked solenoids 110VDC - 1" x 1 1/4" x 1 1/4" free

TRANSFORMERS (all with 115VAC primaries except the audio xformers):

1 Used "Type 10B" Variac "Powerstat" variable
transformer by the Superior Electric Company
120 VAC in, 0 to 120 or 0 to 132 VAC out @ 2.25 Amp
plus one 3 Amp resettable thermal circuit breaker

5 Microtran T1104, telephone coupling transformers
600 : 600 Ohm, 300-3500Hz ±0.5dB, 0.5% distortion max
3/4" x 7/16" x 9/32"

3 #154A5969-1 Green audio transformer
1" x 3/4" x 7/8" believed to be 700mW
250 Ohm resistance and 30 Ohm resistance, believed
to be 5k Ohms to 500 Ohm Center-tapped impedance

1 Calectro D1-726 audio 3/4" x 5/16" x 5/16"
500 Ohm C.T. to 8/3.2 with 2" long insulated wires

1 Red audio transformer 1" x 3/4" x 3/4" three windings
26 ohms, 26 ohms and 50 ohms resistance,
believed to be 1k, 500 and 500 ohm impedance

2 Blue audio transformrs 1" x 3/4" x 3/4" three windings
52 ohms, 82 ohms and 82 ohms resistance,
believed to be 1k, 2.5k and 2.5k ohms impedance

1 Yellow audio transformer 1" x 3/4" x 7/8", one winding
26 Ohms, the other is 82 ohms resistance with two taps,
believed to be 500 ohm to 5 kohm (w/taps) impedance

1 Hammond #167J36 36VCT @ 1A closed frame
Heavy metal protective cover over windings

2 Hammond #166G36 36VCT @ 0.5A open frame

2 Signal Transformer ST-3-36 36VCT @ 65mA P.C. mount

2 Used 10VA 40VCT shielded

1 Used Hammond #166G20 20VCT@0.5A open frame

1 Hammond #166L5 5VAC@2A open frame

7 16VCT and 50VAC ±6VA

1 10 VAC + 10 VAC; 6 VA pcb mount transformer
by Signal Transformer; Split Trans # DST-40-20

6 11 VAC ±3VA (ie. ±250ma)

1 9.5 VAC @ 200mA

2 14VCT ±4VA (ie. ±300ma)

1 18VCT and 60VCT (common center tap) ±10VA

1 25VAC ±3VA

3 12.6VAC ±3VA

2 30 VAC @ 50mA

1 12VCT @ 150mA

1 Used 34VCT @ 20VA - 120/240 VAC input

3 AC adapters 7.5VDC @ 300mA 3.5mm plug

2 AC adapters 4.5VDC @ 100mA coaxial power plug

2 AC adapter 16.6VAC @ 100mA no connector "Atari"

1 AC adapter 9VDC @ 100mA coaxial plug

1 AC adapter 6VDC @ 300mA no plug

MOTORS (cheap! No bid too low on the unreserved motors as long as your total order meets the $20 minimum before shipping is added.)

1 "MN-30 Micro Motor" by Tradeship (California) Inc
Open-framed 12 Volt DC 5 pole permanent magent hobby motor at up to 18,000 r.p.m. 3/32" shaft with gear about 2 1/4" long with mounts, 1/2" thick, 3/4" wide graphice brushes. In original box

1 "MX-77 Micro Motor" by Tradeship (California) Inc
Open-framed 12 Volts DC 7 pole permanent magnet hobby motor at up to 20,000 r.p.m. 3/32" shaft with gear about 2 5/8" long with gear, 5/8" thick, 7/8" wide graphite brushes. In orginal box

1 Sychron 20 r.p.m 24VAC 6Watt AC motor

6 3-12 VDC permanent magnet motors
body approx. 1" dia. X 1.5" long with 1/2" long shaft. Has graphite brushes

4 1.5-6 VDC permanent magnet hobby motors
body 0.5" x 0.8" x 0.9" long with 0.15" long shaft

16 Misc. USED motors with assorted voltages from 1.5 to 12 VDC, including motors used in cassette tape recorders and VCR's.

4 108 VDC permanent magnet motors 7500 r.p.m.
full-load current of 0.08 amps. Rated for 105±C @
20 minutes. Body approx. 1" dia. X 1 3/8" long
with 3/16" long "d" shaft

3 USED pancake type 12 Volt stepper motors
removed from old floppy drives

1 USED cube style stepper motor from an old Hard Drive
body approx. 1.5" X 1.5" X 1" with gear on shaft
short 3/4" long leads

1 New stepper motor Rapid-syn model 20V-03L 6
Impedance protected. 6 leads. I can't "feel"
the step size. 2" dia. x 2 1/2" long body.
Double shafted 1/4" dia. x 1" long at both ends
Three threaded mounting holes at one end -
two at the other

1 Used stepper motor similar to above 20Volt 3
somewhat longer shafts. 6 leads with connector
Rapid-syn model 20V-01J. Looks like one end is
meant to fit into a 1.75" dia. hole, with a ridge
presumably for holding it in just above this.
"Feels" like it is 3.6° step size.

1 Stepper motor used from HD. 5 lead with connector
Astrosyn model # 17PS-c006-01. 1 5/8" x 1 5/8" x
1 1/4" body. 5mm dia. x 12mm long shaft.

Misc:

2 5 pin 180° DIN male to four RCA males on 3' cord 2

1 5 pin 270° DIN male to DIN male on 7' cord 1

1 5 pin male to 5 pin male slide projector control cable 1

1 misc 3 pin heater cord with no AC plug 0.01 ;-)

1 1/4" male to 1/4" female shielded extension cable 0.75

3 1/4" male to bare shielded end cable 2

8 Elmwood Sensor series 2400 thermal switch 2
N.C. - opens at 84°F

10 Used Red bananna jacks 0.50

4 6 Amp 250VAC 11' long European colour-coded 6
sets electrical cords with no AC plug at one end,
and 3 prong modular female at other, plus
the matching Switchcraft EAC-301

1 Used optical shaft encoder - removed 6
1/2" dia. x 3/4" long shaft. All electronics connect
to 5 pin connector Housing about 2" in dia. x 2" long

SPEAKERS: (to be sold in one inexpensive batch) $ 5

2 5cm dia. 8° 0.3W

8 5cm dia. 8Ω 0.15W

4 Used 5cm dia. 8Ω 0.1W

1 Sharp 8cm dia. 10Ω 0.4W

3 Sharp 6cm dia. 10Ω 0.3W

2 Sharp 6.5cm dia. 25Ω 0.2W

2 Used 5.7cm dia. 40Ω 0.2W

2 5 cm dia. 100Ω 0.2W

DG180 DATA:

DG180BP Dual SPST Very Low-Resistance (Ω10 Ω) J-FET Low Distortion
Analog Switches especially suited to Video Switching purposes
and precision Sample and Holds, by Harris/Siliconix/Intersil
They listed at $28.25 each (CND funds) at the time I purchased them.
I have full spec sheets and Siliconix price list that shows them at
$20.20 U.S funds in singles, $13.44 if bought in 100's quantities.

I was doing a video switching project with a friend some time ago and
chose the DG180 JFET switch because it had the lowest resistance of any
I.C. and because of its very low distortion, since JFET switches unlike
CMOS ones retain constant ON-resistance for varying analog inputs.
These 35 are what I had left over.

I will of course provide data sheets with the chips.

Here is the basic data on them.

DG180 by Silconix (and second sourced by Harris/Intersil)
Dual SPST JFET Analog Switches

Features:
* Constant ON-Resistance Over Entire Analog Range (UNLIKE CMOS DEVICES)
* Low Leakage
* Low Crosstalk
* The lowest ON-Resistance available in any IC

Benefits:
* Low Distortion
* Eliminates Large Signal Errors
* High Bandwidth Capability

Applications:
* Video Switching
* Audio Switching
* Sample and Hold
* D/A Ladder Switches

The DG180 is a precision dual single-pole, single throw (SPST) analog
switch designed to provide accurate switching of video and audio signals.
This switch is ideally suited for applications requiring a constant

ON-resistance over the entire analog range.

Reduced switching errors are achieved through low leakage current (Isoff < 1 nA). Application which benefit from flat ON-resistance include video switching, audio switching, and precision sample and holds.

Each device comprises four n-channel JFET transistors (in parallel) and a bipolar driver (TTL compatible) to achieve fast and accurate switch performance. In the ON state, each switch conducts current equally well in either direction. In the OFF condition, the switches will block up to 20 V peak-to-peak, with feedthrough less than -60dB at 10 MHz.

For the DG180BP (14 Pin Ceramic Side Brazed Package) by Siliconix:
(Part number DG180BK for the Intersil/Harris Ceramic DIP package)

Operating temperature range = - 25 °C to 85 °C

With V+= +15 V, V-= -15 V, and VL= +5 V:

Analog Signal Range Full temp range -7.5 to + 15 Volts

Switch Resistance @ Is = 10 ma Room temp 7.5 Ω typ. 15 Ω max.
Full temp range 25 Ω max.

Switch Saturation Current 2ms Pulse Duration 300 mA

Turn On time 240 ns typ, 600 max.

Turn Off time 140 ns typ, 250 max.

OFF Isolation f = 1 MHz, RL = 75 Ω typically > 55 dB
10MHz, RL = 75 Ω typ. 35 dB
50MHz, RL = 75 Ω typ. 20 dB

Also guaranteed to work with +12 Volts, -12 V and +5 V power supplies.

End of list

5138. Re: Homebrew Digital Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <374065CA.180A@ixpres.com>
Source record: 70224
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Joseph A. Consugar wrote:
>
> I'm thinking about designing a simple HF transmitter for use
> exclusively on the digital modes. (I'm not interested in voice or CW).
> Has anyone here given any thought to this? For example, would it be
> better to modulate the rf directly or use a SSB type upconversion for
> those people using soundblaster cards and digital software? I have some
> of my own thoughts the requirements of such a radio, but am interested
> in the thoughts of those of you with more experience.
>
> Joseph
> KC3XM

Joseph OM,

What do you mean by "digital modes"? (CW is the original digital,
ie, binary, mode)? AMTOR? PACTOR? RTTY? CLOVER? others? It makes a
difference.
For AMTOR/PACTOR/GTOR, RTTY, all you need is a reasonably stable CW
transmitter that you can FSK. That is what I use. I built a simple 40W
CW transmitter, and shift the VCXO up 170-200 Hz for marking, and
unshift for spacing. It is very simple to make CW/FSK transmitters.
You don't need the complexity of balanced modulators, filters, audio
string, and linear amplifiers. No linearity is required, of course (as
with any FM scheme), so Class C, D, E amps are fine.
If any of this is news to you, or you are unfamiliar with the terms,
then I suggest you do some reading in any ARRL or RSGB handbook Joe.

73 and GL,

Don, W6JL

5139. Re: PC boards from Inkjet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Howard James <howardj@hamrad.swinternet.co.uk>
Message-ID: <7hppndqin1@news4.svr.pol.co.uk>
Source record: 70225

Vince,
I use a Epson Stylus 600 inkjet and plot directly to transparency. No problems whatsoever as long as you use proper inkjet transparencies. I also have a 300 dpi laser and to be honest I think the inkjet is better.

Howard
G3UPZ

VINCENT COPPOLA wrote in message <374036BD.FE9@snet.net>...
>I have an Hp 694C Inkjet. This following FAQ talks about plotting the
>board to tracing paper and then exposing the board using the standard
>positive pre-sensitized method.
>
>Has anyone had any experience with this? Results versus a laser?
>
>I am also thinking instead of tracing paper maybe trying the InkJet
>transparencies, although they are more costly. That might reduce
>exposure time.
>
>This site says much about the various processes.
>
>http://darkportal.com/cc/pcbfaq.htm#PCBFAQ_021
>
>(chapter 2.21)
>
>Thanks for reading,
>Vince N1VC

5140. Re: Surplus "3rd brake light" LED strips

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <37407C44.3DB@ixpres.com>
Source record: 70226

Richard &/or Patti Herndon wrote:
>
> Sorry, the only connection of this to amateur radio is that my vehicle
> contains my mobile ham rig. <grin>
>
> I'm looking for automotive surplus strips of very bright LEDs, like you
> see in the newer vehicle spoilers' 3rd brake lights. I'd like to make a
> 3rd brake light that really is visible in my old '80 Volvo rear window.
>
> They're too expensive new. I don't like the look of the lamp bulb and
> jeweled lens cheapy, after-market 3rd brake lights.
>
> 73 de K5FNI,
> Rick
> Austin TX

Rick OM,

Why mess up the back hatrack of your perfectly good '80 Volvo, with one of those 3rd brake lights? Do you really think it will make any difference? And, they are ugly (even in the 'spoilers'). What about air bags for it (the ones that are dangerous for kids and eat up all that usable space in the dash so that you end up with a micro-size glove compartment)? Antilock brakes (that do not reduce the statistical accident rate, but have the 'advantage' of requiring $1000 master cylinders)? Or non-CFC air conditioning (the less efficient, incompatible, inflammable stuff)? As the old saying goes, "the road to hell is paved with good intentions".
But, yes, they are 'trendy' (and PC), HI.
Sorry I am not any help; I guess I couldn't resist.

73,
Don, W6JL

5141. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: ka5kon <ka5kon@krkcket.net>
Message-ID: <Hj003.4863$xa.48030@c01read02-admin.service.talkway.com>
Source record: 70227

Hi,
I'm pete Aymond,KA5Kon. I copy about 18 wpm in my head and work c w
mobile.I had been trying to get my speed up
when a friend suggested working mobile so i could not write any thing
down! Guess what happened? After 3 weeks
I was coping 18 easily.NOT BAD when I had been stuck at 8 wpm fornearly
10 years.SO my advice to anyone trying
to get faster code is WORK MOBILE.You'll be surprisedt it will work!!!

S/Pete Aymond/KA5KON
--
Posted via Talkway - http://www.talkway.com
Exchange ideas on practically anything (tm).

5142. Re: Constructing Helical Antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: Terry Gaff <shbcommm@indigo.ie>
Message-ID: <37409BEA.9A42EF28@indigo.ie>
Source record: 70228

Hi "jstrohm",

Thanks a lot for your input.

Regards

Terry

5143. 49er templates

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-17 00:00:00 UTC
From: deos <myanni@atlas.uoa.gr>
Message-ID: <7hqef9png1@foo.grnet.gr>
Source record: 70229

```
can someone sent me the templates for the 49er norcal
rig
```

5144. VHF PA Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7hsa2fqdp1@uranium.btinternet.com>
Source record: 70133

I have recently dismantled a couple of old PMR radios, and have the
following PA transistors:

BLY33
ZRF0112
ZRF0113
I assume the latter two are a complementary pair.
Please let me know if you have any info on these devices.
Many thanks, John

5145. BNC Power Ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Larry Benko <benko@aztek-eng.com>
Message-ID: <3741B7BE.763FBC3F@aztek-eng.com>
Source record: 70134

Approximately how much power can a BNC connector handle
at 2 meters with a reasonable SWR (e.g. < 2:1)? A SWR
of 1:1 would be 50V rms and 1A rms for 50W. Is this too
much power?

Thanks in advance,
Larry Benko, AC0B

5146. Crystal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7hsdf9$11i$1@mendelevium.btinternet.com>
Source record: 70135

I have a couple of crystal filters from dismantled radios, one by ITT marked '914E', and one by STC marked '901CM' . Both are for 10.7MHz. Anyone got any info on them please?
Best wishes from John.

5147. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3741C2EA.17A8@ixpres.com>
Source record: 70136

Allan Kaplan wrote:
>
> Mobile CW operation will do wonders for your code proficiency, IF you
> survive the accident!
> 73 de W1AEL

Allan OM,

Been running mobile CW here for 18 years. I have seen several
mishaps with cell phone users and women putting on makeup in that time,
but no problem with CW mobile at all. CW mobile is very relaxing and
effortless to do if you are proficient in CW. And, it works very well
for ragchewing.
73,
Don, W6JL

5148. please explain "terminations" in ARRL Radio Designer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Bert Douglas <bertdNOSPAM@bellsouth.net>
Message-ID: <ZNj03.2727$Pk.833897@news2.mia>
Source record: 70137
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

Hi Net Folks,

Thanks for the help.

I am very confused right now by the whole issue of "terminations" in Radio Designer, and would really appreciate it if someone can tell me what is going on.

I am using a simple network of two resistors to try to understand what is going on. Here it is:

```
BLK
RES 1 2 R=100
RES 2 0 R=100
TEST: 2POR 1 2 0
END
```

In the Report Editor I set the following terminations:
port 1 = 200 + j0
port 2 = 10000 + j0

And I plot VG (voltage gain), which has a value of -12dB.

I am expecting a value of -3dB. So what is happening?

My understanding of the meaning of the terminations is that there is (effectively) an infinitely long zero-loss coax cable attached to the port with the specified impedance. Voltages are measured at the ports.

In the above example S21 has a value of about -25db.

If I set the input and output terminations to any equal values (including zero), then I get a VG of -8.87 dB.

Any help would be greatly appreciated.

Bert Douglas

5149. Re: MRF-455 @ 50 Mhz.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Bill Nadzam <nadzam@bills2way.com>
Message-ID: <3741C959.9093EDFD@bills2way.com>
Source record: 70138

Use the SD1446 from Thompson.
It is a drop in replacment for the MRF455, and will
operate at 60Mhz just fine.

okieman wrote:
>
> Does anyone have any experience using this transistor at this frequency
> or is the cutoff of 30 Mhz pretty accurate ???
> THANKS...KC0EH...Chuck...

--
==========
Bill Nadzam "K8WN"
mailto:nadzam@bills2way.com
http://www.bills2way.com
==========

5150. Idiot Question On FET Parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <T9L5YBAqPdQ3EwVf@falstaf.demon.co.uk>
Source record: 70139

Dear All,
Idiot question time again I'm afraid.

I have got very frustrated by looking at devices which initially look just what I want but when I come to work the details out only half, or even none, of the parameters I am after appear in the data sheets. Usually these are capacitance's or so on that I am looking for to calculate matching impedance's.

Now, I have found some devices that have things that look like what I am after but I just need to confirm that the names actually mean what I think they mean.

Ciss Capacitance between gate and source of common source JFET
Crss Capacitance between gate and drain of common source JFET
Coss Capacitance between drain and source of common source JFET

Is this correct?.

Cheers

Robin

Robin Birch robin@falstaf.demon.co.uk

M1ASU/2E0ARJ Old computers and radios always welcome

5151. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: David <dmartin@net1inc.net>
Message-ID: <3741D8C1.374C0716@net1inc.net>
Source record: 70140
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Please remove crosspost to rec.radio.amateur.dx

Michael Davidsohn wrote:

> But the law has always been there, Ham radio is a club and if you require
> membership you must adhere to the rules.
> Can you drive a car on a public road without a license ?
>
> Mike
> G3ZCC licensed since 1969 (aged 14 at the time)
>
> just.do.it email.ro (AE) <AT> wrote in message
> news:7hnj27$9uu$1@nntp9.atl.mindspring.net...
> > Cutting here -n- there from all the threads:
> >
> > > What if you wanted to play the flute, but a law required that you learn
> > > how to play the harp before you were allowed to play the flute?
> > >
> > > What if you didn't like the harp and only wanted to play the flute, and
> > > other flute players called you lazy for not wanting to waste time
> > > learning an instrument you had no intention of ever playing?
> > >
> > > They have no desire to use morse code. How silly it would be to waste
> > > the time to learn morse code, only to forget it once one has the license
> > > to go ahead and use voice.
> > >
> > > Only people who intend to USE morse code should learn it.
> >
> >
> > 90% of the automobile drivers out there don't intend to use anything
> > they *learned* to get their drivers license, why not drop that
> > requirement too? Just let 'em all drive, drop the roadtest
> > requirement!
> >
> >
> > >That's ok we can argue all we want about keeping the code test, but
> something
> > >needs to be done to bring people into amateur radio not keep them out.
> >
> > Ever stop to think that maybe the government intended to keep some
> > people out? Why not drop the code requirment for commercial broadcast
> > while we're at it?
> >
> > >I suspect the same small fraction of 13 year olds are still learning

> code. Like many
> > >things that require a little work up front, CW is worth it.
> > >73
> >
> > And worth some pride too... ever heard of the rite of passage. Why
> > not do *something* you can take pride in instead of changing the rules
> > so you don't have to apply hardly any effort?
> >
> >
> > > If you're not wired for it, there are many other modes to use. That
> is one of the
> > > beauties of ham radio.
> >
> > Absolutly!!! The whole spectrum above 50 mhz is wide open for those
> > who have no interest in CW. You knew it before you got into radio...
> > So what's the problem? (but be forwarned... you'll hear alot of CW
> > there too. Moonbounce, contesting, etc.)
> >
> >
> > >The key to keeping code from dying is those of you who are proficient
> MUST take
> > >those of us willing to learn under your wing and pass it on to us....
> >
> >
> > Seems all the *old Timers* around here left me to my own devices...
> > Wonder *how* I did it..... hmmmmm
> >
> >
> > >If you efforts to find someone in Ft. Worth fail, Why dont you and your
> > >buddies get on the 2 meter radio and teach each other?
> >
> >
> > 5 wpm is NO CODE. It's like an open book test. If you *try* to learn
> > the code with *any* effort at all, you *will* pass the 5 WPM test.
> > From there you'll meet hundreds of others in the same boat on 40 & 80
> > mtrs.
> > *Plenty* of practice to hone your skills. I had a problem getting over
> >
> > 10 wpm myself once licensed as a P, but got on the air with a friend
> > of mine for an hour a nite over the period of a week, pushing
> > ourselves to the limit, and passed General that weekend. *USE IT* once
> > you get it.
> >
> >
> >
> > > I have the skill to pass the practical test (and have with the training
> software) through
> > > Advanced, yet I hold only a Tech ticket because of the code. I am still
> trying but I
> > > haven't found my method for learning code yet. I memorized the tapes,

> and have tried a
> > > couple of different computer tutor programs, but so far I have not been
> able to master CW.
> > > I will get it eventually, but it is not coming easy.
> >
> >
> > Sounds about normal to me...
> > if you study... it will come......
> >
> > >If your son doesn't have to learn or like radio to enjoy Morse Code,
> > >then people who want to use or like radio do not have to learn Morse
> > >Code.
> >
> >
> > Did you're mama ever say "who ever said life was fair?" Just 'cause
> > you want to learn gun handling doesn't mean you have to kill someone.
> > I don't have a son, but I have to pay school tax.... WHAAAAA!
> >
> >
> >
> > Hope I hit a few sore neves here. Amateur radio isn't the only thing
> > in life that will require you to learn something proficiently to do
> > (unlike my spelling to post to the group).
> >
> > Take a look back at all the things that got lax on the rules in the
> > past and see what happened to them. Do you really want amateur radio
> > to go that route?
> >
> > The hardest part about learning the code is to just put away all
> > the excuses you have as to why you < can't / don't have time for /
> > shouldn't have to / are just to darn lazy to > learn the code *and do
> > it.*
> >
> > Next thing you know, after they start packaging up an extra class
> > radio amateur operators license in all the HF radios (sound familiar?)
> > They'll be whining that the FCC should abolish CW off the airwaves
> > 'cause they can't handle not being able to understand what is going on
> > on the bottom half of the band.
> >
> > I might could stomach letting a small portion of the prime DX bands
> > go for the slow coders (P's),and leave the rest of the licese
> > structure alone. But I hope at least that they leave the extra class
> > alone so that *some* of us can keep a little pride in something that
> > we *worked for* instead of crying about it 'till we got it for next to
> > nothing.
> >
> > If anyone out there is interested in *learning* CW and going to EXTRA
> > in 6 months, e-mail me. All it requires is about 4 hours a week of
> > *dedication*... You have to *want to do it* to do it.
> >

> > The others.... FLAME AWAY, got my asbestos boxers on.
> >
> >
> > Breaker Breaker x.19x.xxx.xxx, catch me on the bottom 150 khz of the
> > band good buddy, c'mon back!
> > ||||||||||||||||BLEEEEEEEEEEEEP||||||||||||||||||
> >
> > Richard Whiten/WB2OTK
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> >
> > NOT!
> >

5152. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: RADIO MAN <theoldbrookltnkid@ameritech.net>
Message-ID: <3741E592.4AFF@ameritech.net>
Source record: 70141
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Jim Kehler wrote:
>
> Sir <sir@sir.com> wrote:
>
> >There are going to be a lot of posts to newsgroups that don't happen to
> >have subject matter that is of personal interest to you. Lots of YOUR
> >posts will not have any interest to lots of other people too.
>
> You appear to be so engrossed in your efforts to convince the rest
> of the world that you are incapable of attaining anything in life that
> requires effort that you seem to have totally missed the point.
>
> The reason we have thousands of newsgroups is because the world is
> filled with millions of people with different interests.
>
> Although your inability to learn Morse code seems to be the current
> focus in YOUR life, the rest of us don't necessarily view your lack
> of motivation as an earthshaking event.
>
> REC.RADIO.AMATUER.POLICY was created with the sole intent
> of giving you a forum in which to air your views. Please feel free to
> use it to your hearts content.
>
> Posting your Morse code dribble in multiple newsgroups is not going
> to gain you any support. Many unmotivated whiners before you have
> proven this point.
>
> Some people have things they want in life because they are willing to
> expend the effort required to obtain those things, whatever that effort
> may be. It is obvious to us that you are not one of those people.
>
> What apparently is not obvious to you is that the rest of us don't care.
>
> 73, Jim KH2D
Really, there should be no requirement for Morse Code. Why they even
got rid of the 500 KILOCYCLE Morse Code Frequency for ships.
--
RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5153. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: RADIO MAN <theoldbrookltnkid@ameritech.net>
Message-ID: <3741E5FC.43DE@ameritech.net>
Source record: 70142
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Sir wrote:
>
> > What apparently is not obvious to you is that the rest of us don't care.
>
> You all contribute to the thread, so you DO all care, else I would be
> the only one and there would be no thread. I did not start the thread,
> and it appears to be the most popular topic here right now. Even YOU
> can not resist reading and replying to this.
The thing about Morse Code is that it seems that the OLD TIMERS are
saying that we did it and you should too. That is baloney. What some
cheese with that wine?
--
RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5154. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: rfjim@mft.com
Message-ID: <3741ebf2.469079@news.mft.com>
Source record: 70143
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

I must agree that due to intl. treaty users on the hf bands are required to and should know cw. however I dispute the use of a speed test in that particular language for upgrade or access to spectrum. 5wpm satisfies the intl. treaty, we should be testing on tech. knowledge or added knowledge of the rules and regs, for upgrade purpose. It used to be that you needed to know hand signals for your drivers test. I believe they dropped that requirement in my state, but even if it was still in place, should we test how fast one can give them to upgrade our drivers license, or how fast we can recognize various shapes and colors of road signs. No of course not and speed should not be an issue in amatuer radio cw. Only a working knowledge of the code is needed and that is what should be mandated. If an individual wants to use cw to a large extent and increases their speed, so be it, but for others that use fm ssb etc. basic working knowledge is all that is necessary and all that should be required.
On Tue, 18 May 1999 08:21:29 -0500, WebMonkey <click@below.com> wrote:

>Sir wrote:
>>
>> just.do.it email.ro (AE) wrote:
>> >
>> > Cutting here -n- there from all the threads:
>> >
>> > > What if you wanted to play the flute, but a law required that you learn
>> > > how to play the harp before you were allowed to play the flute?
>> > >
>> > > What if you didn't like the harp and only wanted to play the flute, and
>> > > other flute players called you lazy for not wanting to waste time
>> > > learning an instrument you had no intention of ever playing?
>> > >
>> > > They have no desire to use morse code. How silly it would be to waste
>> > > the time to learn morse code, only to forget it once one has the license
>> > > to go ahead and use voice.
>> > >
>> > > Only people who intend to USE morse code should learn it.
>> >
>> > 90% of the automobile drivers out there don't intend to use anything
>> > they *learned* to get their drivers license,
>>
>> Give me an example, I can't think of one thing you learn to get a
>> driver's license that you wouldn't need to know when you drive.
>>

>> why not drop that
>> > requirement too? Just let 'em all drive, drop the roadtest
>> > requirement!
>>
>> That would be like dropping the rules and technical requirements on the
>> ham test. Both are needed and used by everyone in Ham radio. We are
>> talking about Morse Code which does NOT have to be used in order to
>> operate Ham radio. If it was required to learn how to ride a horse to
>> get that driver's license, then you could argue about that, but they
>> don't test for stuff EVERY driver won't need to know in order to drive.
>>
>> > Ever stop to think that maybe the government intended to keep some
>> > people out?
>>
>> No, they droped the code on the tech to get people in, not out. They
>> would drop the code for other classes too if they could, but it is an
>> international requirement, so it will take a bit longer to do.
>>
>> Why not drop the code requirment for commercial broadcast
>> > while we're at it?
>>
>> There never was or is a code requirement for commercial broadcast.
>
>on a 50mHz and above note:
>99% of the repeaters in my area use morse id 'exclusively'
>mine excluded of course =] [a pleasant mix of voice and morse]
>kinda nice to know what the repeater 'call' is.....
>--
>A.C. Curtis
>KBWLF
>53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
>mailto:demoman@rollanet.org
>http://www.rollanet.org/~demoman

5155. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: David <dmartin@net1inc.net>
Message-ID: <3741F33E.170EA658@net1inc.net>
Source record: 70144
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Please remove the cross post to rec.radio.amateur.dx

RADIO MAN wrote:

> Sir wrote:
> >
> > > What apparently is not obvious to you is that the rest of us don't care.
> >
> > You all contribute to the thread, so you DO all care, else I would be
> > the only one and there would be no thread. I did not start the thread,
> > and it appears to be the most popular topic here right now. Even YOU
> > can not resist reading and replying to this.
> The thing about Morse Code is that it seems that the OLD TIMERS are
> saying that we did it and you should too. That is baloney. What some
> cheese with that wine?
> --
> RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5156. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: "H. Adam Stevens" <alien@jump.net>
Message-ID: <37421514.80EA755A@jump.net>
Source record: 70145
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Well said.
I'm thinking of one area where I use Morse outside of ham radio: flying. Navigation aids identify in Morse, but a 5 WPM proficiency suffices. Good. I like your idea.
H.
WA5IGW

j reynolds wrote:

> I must agree that due to intl. treaty users on the hf bands are
> required to and should know cw. however I dispute the use of a speed
> test in that particular language for upgrade or access to spectrum.
> 5wpm satisfies the intl. treaty, we should be testing on tech.
> knowledge or added knowledge of the rules and regs, for upgrade
> purpose. It used to be that you needed to know hand signals for your
> drivers test. I believe they dropped that requirement in my state, but
> even if it was still in place, should we test how fast one can give
> them to upgrade our drivers license, or how fast we can recognize
> various shapes and colors of road signs. No of course not and speed
> should not be an issue in amatuer radio cw. Only a working knowledge
> of the code is needed and that is what should be mandated. If an
> individual wants to use cw to a large extent and increases their
> speed, so be it, but for others that use fm ssb etc. basic working
> knowledge is all that is necessary and all that should be required.

snip--

5157. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: "H. Adam Stevens" <alien@jump.net>
Message-ID: <374213A4.31860CA3@jump.net>
Source record: 70146
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

No, I'm saying that if you want the same license I have, pass comparable tests.
Is CW relevant? The Navy thinks not. It's still valid and satisfying.
I'm no 35 WPM Extra, just an Advanced. I took my last code test at the Dallas
FCC office in April of 1964, 13 WPM. The damn government already stole my First
Phone, I don't want it to redefine my ham license, too. Just create a new
ticket? Been done.
The service does need to evolve with technology, no one uses spark much.
I have no simple solution.
73
H.
WA5IGW

RADIO MAN wrote:

> Sir wrote:
> >
> > > What apparently is not obvious to you is that the rest of us don't care.
> >
> > You all contribute to the thread, so you DO all care, else I would be
> > the only one and there would be no thread. I did not start the thread,
> > and it appears to be the most popular topic here right now. Even YOU
> > can not resist reading and replying to this.
> The thing about Morse Code is that it seems that the OLD TIMERS are
> saying that we did it and you should too. That is baloney. What some
> cheese with that wine?
> --
> RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5158. WTB:sockets for a 4x150g tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: WebMonkey <click@below.com>
Message-ID: <374216FC.2B61@below.com>
Source record: 70147
Cross-posted to: rec.radio.amateur.swap,rec.radio.amateur.homebrew

```
i need a couple of sockets for a 4x150g tube
coaxial base i think is what it's called
sk-604 i think would work
thanks for your time
email below
--
A.C. Curtis
KBï¿½WLF
53.45 and 442.45, 77.0Hz enc/dec [multi-cast repeater system]
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman
```

5159. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Mother Nature <m_nature@hotmail.com>
Message-ID: <37421E2F.E0FFF6F8@hotmail.com>
Source record: 70148
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Hi from soc.penpals and let me say that all of this technical talk is
making me hot......<g>

"H. Adam Stevens" wrote:
>
> No, I'm saying that if you want the same license I have, pass comparable tests.
> Is CW relevant? The Navy thinks not. It's still valid and satisfying.
> I'm no 35 WPM Extra, just an Advanced. I took my last code test at the Dallas
> FCC office in April of 1964, 13 WPM. The damn government already stole my First
> Phone, I don't want it to redefine my ham license, too. Just create a new
> ticket? Been done.
> The service does need to evolve with technology, no one uses spark much.
> I have no simple solution.
> 73
> H.
> WA5IGW
>
> RADIO MAN wrote:
>
> > Sir wrote:
> > >
> > > > What apparently is not obvious to you is that the rest of us don't care.
> > >
> > > You all contribute to the thread, so you DO all care, else I would be
> > > the only one and there would be no thread. I did not start the thread,
> > > and it appears to be the most popular topic here right now. Even YOU
> > > can not resist reading and replying to this.
> > The thing about Morse Code is that it seems that the OLD TIMERS are
> > saying that we did it and you should too. That is baloney. What some
> > cheese with that wine?
> > --
> > RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> > FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5160. ****** WANTED ******** Motorola STX Model 821 or MTS 2000 Flashport Series Radios ****** Wanted ******

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Todd Hargis <hargis@mail.org>
Message-ID: <927081324.349.74@news.remarQ.com>
Source record: 70149
Cross-posted to: in.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.spac

I'm looking for: Motorola STX model 821 or MTS 2000 Flashport series radios. They must be 800mhz and Smartnet ii capable. These are for a small dept. here in the Indy area that is looking for a way to get around paying the enormous price of new ones from the local radio authority. If they have extra batteries or chargers or public safety mics that would be great also but not needed. Anybody that has these in good to fair condition can e-mail me at paramike@indy.net with prices and terms, I will forward the info to the chief of the dept. inquiring about the radios. Thanks for your help, Mike

5161. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: RADIO MAN <theoldbrookltnkid@ameritech.net>
Message-ID: <37423562.B3A@ameritech.net>
Source record: 70150
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mother Nature wrote:
>
> Hi from soc.penpals and let me say that all of this technical talk is
> making me hot......<g>
>
> "H. Adam Stevens" wrote:
> >
> > No, I'm saying that if you want the same license I have, pass comparable tests.
> > Is CW relevant? The Navy thinks not. It's still valid and satisfying.
> > I'm no 35 WPM Extra, just an Advanced. I took my last code test at the Dallas
> > FCC office in April of 1964, 13 WPM. The damn government already stole my First
> > Phone, I don't want it to redefine my ham license, too. Just create a new
> > ticket? Been done.
> > The service does need to evolve with technology, no one uses spark much.
> > I have no simple solution.
> > 73
> > H.
> > WA5IGW
> >
> > RADIO MAN wrote:
> >
> > > Sir wrote:
> > > >
> > > > > What apparently is not obvious to you is that the rest of us don't care.
> > > > >
> > > > You all contribute to the thread, so you DO all care, else I would be
> > > > the only one and there would be no thread. I did not start the thread,
> > > > and it appears to be the most popular topic here right now. Even YOU
> > > > can not resist reading and replying to this.
> > > The thing about Morse Code is that it seems that the OLD TIMERS are
> > > saying that we did it and you should too. That is baloney. What some
> > > cheese with that wine?
> > > --
> > > RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> > > FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!
OOOHHH!!!
--
RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5162. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Mark Brown <kb0pyo@rconnect.com>
Message-ID: <3742378C.BB38546A@rconnect.com>
Source record: 70151
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

When are you idiots going to learn some nettiquette, CROSS
POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
PLEASE CEASE & DESIST.

RADIO MAN wrote:
>
> Sir wrote:
> >
> > > What apparently is not obvious to you is that the rest of us don't care.
> >
> > You all contribute to the thread, so you DO all care, else I would be
> > the only one and there would be no thread. I did not start the thread,
> > and it appears to be the most popular topic here right now. Even YOU
> > can not resist reading and replying to this.
> The thing about Morse Code is that it seems that the OLD TIMERS are
> saying that we did it and you should too. That is baloney. What some
> cheese with that wine?
> --
> RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5163. Re: PC boards from Inkjet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Leon Heller <leon_heller@hotmail.com>
Message-ID: <927014836.24721.0.nnrp-08.d4f06601@news.demon.co.uk>
Source record: 70152

VINCENT COPPOLA wrote in message <374036BD.FE9@snet.net>...
>I have an Hp 694C Inkjet. This following FAQ talks about plotting the
>board to tracing paper and then exposing the board using the standard
>positive pre-sensitized method.
>
>Has anyone had any experience with this? Results versus a laser?
>
>I am also thinking instead of tracing paper maybe trying the InkJet
>transparencies, although they are more costly. That might reduce
>exposure time.
>
>This site says much about the various processes.
>
>http://darkportal.com/cc/pcbfaq.htm#PCBFAQ_021

I've tried this, and it works reasonably well. It's a bit tricky getting the correct UV exposure time, as the paper is a bit opaque and the print isn't really opaque enough. I think I could get a single track between IC pads, with a bit of care.

73, Leon

5164. Data needed for NEC Diode Mixer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: benedict69@hotmail.com
Message-ID: <37435774.3958567@news.bigpond.com>
Source record: 70153

Hi,

I'd be grateful if someone can help me locate the specifications for a NEC diode mixer, type 7110Z. Physically the diode mixer is very similar to the Minicircuits SBL style of mixer.

It appears, unfortunately, that the NEC website carries no information on this component.

5165. VK5 - Please help with VHF FM Crystal Filter bandwidth specs.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: rjburden@bigpond.com
Message-ID: <37445788.3978335@news.bigpond.com>
Source record: 70154

Hi,

I picked up some surplus commercial VHF radios at a recent Hamfest
and
wondered if anyone knew the bandwidth for the following crystal
filters:

HyQ "QF10701" and "QF10A7"
HCM "10M-4B"
Phillips "10.7N" and "10.7P"

Thanks in advance,
Richard

5166. MRF-455 @ 50 Mhz.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: okieman <okieman@innocent.com>
Message-ID: <hjd03.178$wz.7407@news12.ispnews.com>
Source record: 70155

Does anyone have any experience using this transistor at this frequency
or is the cutoff of 30 Mhz pretty accurate ???
THANKS...KC0EH...Chuck...

5167. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <374169D3.9DE6AEBF@fallschurch.esys.com>
Source record: 70156

Mobile CW operation will do wonders for your code proficiency, IF you
survive the accident!
73 de W1AEL

5168. Re: Ham Radio Mag on CD?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: n7ws@arrl.net
Message-ID: <3741695b.44779438@news.azstarnet.com>
Source record: 70157

On Tue, 11 May 1999 15:07:22 GMT, marsgal42@hotmail.com wrote:

>In article <7h85a7$db9$1@autumn.news.rcn.net>,
> "CommQuart" <commquart@erols.com> wrote:
>> I just sent out a major portion of my HR collection for scanning.
>> The magazine is being put on CD at this moment. CQ
>> Magazine will be the CD's publisher.
>
>YES!
>
>Every now and then I've even toyed with seeing if the
>microfiche version was still available, but I recently
>picked up a couple of QST CDROMs and see that this is
>the way to go.
>
>Put me down for a copy.
>
>If everybody misses _ham radio_ so badly, why aren't the
>present-day techie ham magazines (QEX, Communications
>Quarterly) doing better?
>--
I was away when this thread started, so I'll add on here.

I have all of the hr issues. I was an early subscriber to comm quart, but quit because it's too damn expensive for what you get. I'm on again an off again with QEX (currently on).

Fisk was a good editor, even though he screwed me with his Radio Kit copy of my speech processor. Early on, hr paid for articles upon acceptance, although when Alf Wilson took over after Fisk's death, that policy changed. (I got screwed again with that change)

QST at the time did not pay for articles and I think that hurt them in the sense that the techie stuff went to hr.

As to the ads supporting the publication, I guess that is true, although QEX has few ads and QST is mostly ads. It is clear that ARRL is no longer a ham organization, but a publishing house. If you don't think so, count the number of pages of QST devoted to ads for ARRL. Last time I counted, there were 18 pages of ads for ARRL stuff. No wonder there isn't room for tech articles.

I would buy the hr CD if it is reasonably priced. I could use the storage space.

N7WS

5169. Re: Oscillator problem with HB tube xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37416DD1.2DBEF4AA@fallschurch.esys.com>
Source record: 70158

I suggest checking the negative bias voltage on the 6DQ5 final. While you're in there (with one hand in your pocket!) check the screen and plate voltages on the final, too. Have you already satisfied yourself that the 6AG7 voltages are okay? Sorry, I do not know off hand what these voltages need to be, but it sounds as though the final amp may be cut off, or the amp section of the 6AG7 may be asleep.
73 de W1AEL

5170. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Michael Davidsohn <michael@davidsohn.co.uk>
Message-ID: <37417396@glitch.nildram.co.uk>
Source record: 70159
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

But the law has always been there, Ham radio is a club and if you require
membership you must adhere to the rules.
Can you drive a car on a public road without a license ?

Mike
G3ZCC licensed since 1969 (aged 14 at the time)

just.do.it email.ro (AE) <AT> wrote in message
news:7hnj27$9uu$1@nntp9.atl.mindspring.net...
> Cutting here -n- there from all the threads:
>
> > What if you wanted to play the flute, but a law required that you learn
> > how to play the harp before you were allowed to play the flute?
> >
> > What if you didn't like the harp and only wanted to play the flute, and
> > other flute players called you lazy for not wanting to waste time
> > learning an instrument you had no intention of ever playing?
> >
> > They have no desire to use morse code. How silly it would be to waste
> > the time to learn morse code, only to forget it once one has the license
> > to go ahead and use voice.
> >
> > Only people who intend to USE morse code should learn it.
>
>
> 90% of the automobile drivers out there don't intend to use anything
> they *learned* to get their drivers license, why not drop that
> requirement too? Just let 'em all drive, drop the roadtest
> requirement!
>
>
> >That's ok we can argue all we want about keeping the code test, but
something
> >needs to be done to bring people into amateur radio not keep them out.
>
> Ever stop to think that maybe the government intended to keep some
> people out? Why not drop the code requirment for commercial broadcast
> while we're at it?
>
> >I suspect the same small fraction of 13 year olds are still learning
code. Like many
> >things that require a little work up front, CW is worth it.
> >73
>

> And worth some pride too... ever heard of the rite of passage. Why
> not do *something* you can take pride in instead of changing the rules
> so you don't have to apply hardly any effort?
>
>
> > If you're not wired for it, there are many other modes to use. That
is one of the
> > beauties of ham radio.
>
> Absolutly!!! The whole spectrum above 50 mhz is wide open for those
> who have no interest in CW. You knew it before you got into radio...
> So what's the problem? (but be forwarned... you'll hear alot of CW
> there too. Moonbounce, contesting, etc.)
>
>
> >The key to keeping code from dying is those of you who are proficient
MUST take
> >those of us willing to learn under your wing and pass it on to us....
>
>
> Seems all the *old Timers* around here left me to my own devices...
> Wonder *how* I did it..... hmmmmm
>
>
> >If you efforts to find someone in Ft. Worth fail, Why dont you and your
> >buddies get on the 2 meter radio and teach each other?
>
>
> 5 wpm is NO CODE. It's like an open book test. If you *try* to learn
> the code with *any* effort at all, you *will* pass the 5 WPM test.
> From there you'll meet hundreds of others in the same boat on 40 & 80
> mtrs.
> *Plenty* of practice to hone your skills. I had a problem getting over
>
> 10 wpm myself once licensed as a P, but got on the air with a friend
> of mine for an hour a nite over the period of a week, pushing
> ourselves to the limit, and passed General that weekend. *USE IT* once
> you get it.
>
>
>
> > I have the skill to pass the practical test (and have with the training
software) through
> > Advanced, yet I hold only a Tech ticket because of the code. I am still
trying but I
> > haven't found my method for learning code yet. I memorized the tapes,
and have tried a
> > couple of different computer tutor programs, but so far I have not been
able to master CW.
> > I will get it eventually, but it is not coming easy.

>
>
> Sounds about normal to me...
> if you study... it will come......
>
> >If your son doesn't have to learn or like radio to enjoy Morse Code,
> >then people who want to use or like radio do not have to learn Morse
> >Code.
>
>
> Did you're mama ever say "who ever said life was fair?" Just 'cause
> you want to learn gun handling doesn't mean you have to kill someone.
> I don't have a son, but I have to pay school tax.... WHAAAAA!
>
>
>
> Hope I hit a few sore neves here. Amateur radio isn't the only thing
> in life that will require you to learn something proficiently to do
> (unlike my spelling to post to the group).
>
> Take a look back at all the things that got lax on the rules in the
> past and see what happened to them. Do you really want amateur radio
> to go that route?
>
> The hardest part about learning the code is to just put away all
> the excuses you have as to why you < can't / don't have time for /
> shouldn't have to / are just to darn lazy to > learn the code *and do
> it.*
>
> Next thing you know, after they start packaging up an extra class
> radio amateur operators license in all the HF radios (sound familiar?)
> They'll be whining that the FCC should abolish CW off the airwaves
> 'cause they can't handle not being able to understand what is going on
> on the bottom half of the band.
>
> I might could stomach letting a small portion of the prime DX bands
> go for the slow coders (P's),and leave the rest of the licese
> structure alone. But I hope at least that they leave the extra class
> alone so that *some* of us can keep a little pride in something that
> we *worked for* instead of crying about it 'till we got it for next to
> nothing.
>
> If anyone out there is interested in *learning* CW and going to EXTRA
> in 6 months, e-mail me. All it requires is about 4 hours a week of
> *dedication*... You have to *want to do it* to do it.
>
> The others.... FLAME AWAY, got my asbestos boxers on.
>
>
> Breaker Breaker x.19x.xxx.xxx, catch me on the bottom 150 khz of the

> band good buddy, c'mon back!
> ||||||||||||||||BLEEEEEEEEEEEEEP||||||||||||||||||
>
> Richard Whiten/WB2OTK
>
>
>
>
>
>
>
>
>
>
>
>
>
> NOT!
>

5171. Re: VK5 - Please help with VHF FM Crystal Filter bandwidth specs.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <3741702D.E068A853@fallschurch.esys.com>
Source record: 70160

You may be able to decode the crystals,"QF10701" and "QF10A7" , made by
Hy-Q (a British crystal and filter vendor who is nice to hams) by
visiting their website at http://www.hy-q.co.uk/
Their phone number in the US is 606-283-5000.
73 de W1AEL

5172. Re: PC boards from Inkjet

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <Y0WlGAAkBVQ3EwUA@ifwtech.demon.co.uk>
Source record: 70161

Leon Heller wrote:
>
>VINCENT COPPOLA wrote in message <374036BD.FE9@snet.net>...
>>I have an Hp 694C Inkjet. This following FAQ talks about plotting the
>>board to tracing paper and then exposing the board using the standard
>>positive pre-sensitized method.
>>
>>Has anyone had any experience with this? Results versus a laser?
>>
>>I am also thinking instead of tracing paper maybe trying the InkJet
>>transparencies, although they are more costly. That might reduce
>>exposure time.
>>
>>This site says much about the various processes.
>>
>>http://darkportal.com/cc/pcbfaq.htm#PCBFAQ_021
>
>
>I've tried this, and it works reasonably well. It's a bit tricky getting the
>correct UV exposure time, as the paper is a bit opaque and the print isn't
>really opaque enough. I think I could get a single track between IC pads,
>with a bit of care.

Good results depend on getting the best possible "black/white" contrast.
The better the contrast is, the less tricky it is to find an acceptable
range of exposure times.

Printing on tracing paper will probably give better contrast than
transparent film, because the black is denser on paper. Some grades of
tracing paper will be more UV-transparent than others, so you may have
to experiment if quality is critical.

Obviously you need to set the printer to give the densest possible
black. A laser printer will generally give a denser black than an
inkjet, so it may be worth asking a friend to print your final version
on a laser.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5173. Re: Looking for Drake stuff. R7, TR7, 4245, SSR, etc INOP or parts units

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: "Chris A. Dennis" <chris.dennis@N*O*S*P*A*M*wcom.com>
Message-ID: <npg03.3846$Az3.129755@PM01NEWS>
Source record: 70162
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boartanchors

BOB DUCKWORTH wrote:

> Hi-
>
> I have a Drake R7 basket case that I'm working on resurrecting and am
> looking for parts radio or perhaps other inoperative Drake radio to use
> this as donor for. Basically interested in any of the 70's/80's
> ham or commercial HF RX or transceivers in inoperative or parts
> donor condition. Also if you have any spare boards for any of these
> radios, please write.
>
> Please email with what you have and I'll make an offer. If radio is
> incomplete (parts donor), let me know what is missing. If lightening
> damages or reverse polarity damages, please le tme know as this makes
> a big difference in repair effort required. If it has been in a fire
> and has smoke damage or has been in a marine environment and is
> corroded, please let me know this as well.
>
> please reply by email.
>
> Thank you.
>
> -bob
> wb4mnf

5174. Help With Harrison Labs 6456 0-36v 0-100amp PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-18 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7htae8$ja5$1@news2.bit-net.com>
Source record: 70163
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I am in need of a regulated 0-50v 0-50 amp power supply.

I have been offered a Harrison Laboratories model 6456
which is a 0-36v 0-100a supply for $100.

Does anyone know if this could readily be converted to
a 0-50v 0-50a supply?

Does anyone have a schematic with component list and/
or a manual?

Is Harrison Labs still in business?

Thanks! & 73,
~~~

\ ~ / .... DavidC K1YP@qsl.net
~~~

5175. April issue of QRP Quarterly?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: g345cde@aol.com
Message-ID: <19990519120907.03516.00002292@ng-fb1.aol.com>
Source record: 70081

Has anyone received the April issue of QRP Quarterly yet? I still am looking for mine. Maybe lost in the mail? George
G345CDE

5176. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <1Q205GAnvqQ3Ewir@virgin.net>
Source record: 70082
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <YEx03.1493$G4.5545@news1.iquest.net>, D Best
<dbest@iquest.net> writes
>
>Keith Bennett <trojanhorse@virgin.net> wrote in message
>news:eNKu+VBWQnQ3EwXQ@virgin.net...
>> In article <3742378C.BB38546A@rconnect.com>, Mark Brown
>> <kb0pyo@rconnect.com> writes
>> >When are you idiots going to learn some nettiquette, CROSS
>> >POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
>> >PLEASE CEASE & DESIST.
>>
>> I AM IN ENTIRE AGREEMENT WITH YOU, THIS IS REALLY BAD FORM.
>> WE HAVE GOT TO STOP THIS CRAZY CROSSPOSTING TO REC.TELEVISION.AMATEURS
>> ONLY WHERE WILL IT ALL END?
>
>
>It won't, so I think you might save yourselves some heartache and look at
>the subject before you read the message -- or just ignore the thread
>altogehter. Is that really so difficult?
>
Well naturally I read the subject matter and thought here is an item
about Inspector Morse. No doubt you have heard of Inspector Morse?

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5177. *** Motorola TP3021 - Any info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <3742f781.1280140@news.interbusiness.it>
Source record: 70083

Need infos about this RF UHF Motorola transistor in case 319
(metal-ceramic rectangular,base and collector opposite, emitter as 2 +
2 straps on sides).
Seems to be used as medium power driver on cellular repeaters, but it
is no mentioned at all on Motorola RF devices Web page nor in the Web
with usual search engines.

Need Vce, gain, Fmax, Pmax and pin assignment.

Anyone can help an experimenter on 23cm?

TNX de Vanni I8JJB

vannir@usa.net

http://www.qsl.net/i8jjb/index.html

5178. WTB:CHEAP 222mhz and up transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: okieman <okieman@innocent.com>
Message-ID: <dQC03.608$ql.72257@typ12.nn.bcandid.com>
Source record: 70084

Looking for 220 and up tranverters hombrew working not working anything considered !!
Thanks...Chuck...KC0EH...

5179. Re: please explain "terminations" in ARRL Radio Designer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <PnBQEuAV4nQ3EwX5@jmwa.demon.co.uk>
Source record: 70085
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.cad,sci.electronics.design

<ZNj03.2727$Pk.833897@news2.mia>, Bert Douglas
<bertdNOSPAM@bellsouth.net> inimitably wrote:
>I am very confused right now by the whole issue of "terminations" in Radio
>Designer, and would really appreciate it if someone can tell me what is
>going on.
>
>I am using a simple network of two resistors to try to understand what is
>going on. Here it is:
>
>BLK
>RES 1 2 R=100
>RES 2 0 R=100
>TEST: 2POR 1 2 0
>END
>
>In the Report Editor I set the following terminations:
> port 1 = 200 + j0
> port 2 = 10000 + j0
>
>And I plot VG (voltage gain), which has a value of -12dB.
>
>I am expecting a value of -3dB. So what is happening?

What is happening is that you are relying on software to such an extent
that you are unable to think. You have a 200 ohm source feeding a
potential divider made from two 100 ohm resistors, and 10 kohms across
the lower one. Neglecting the 10 k, you have 300 ohms in series with 100
ohms, so the output voltage is a quarter of the source voltage, or -12
dB. You wouldn't ever get 3 dB, which is half **power**, not half
voltage.

Realising that attenuations are measured with respect to the *source*
voltage may well lead you to the solutions to your other questions.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?

5180. Re: Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <374305EE.1E5C@ixpres.com>
Source record: 70086

Con Daly wrote:
... but it seems that certain people
> are just determined to get rid of something that they never embraced
> because they never saw it in the right way. Morse is not a code, it
> is a language. That is the first mistake a lot of people make in the
> way they approach it. Certainly those people more musically inclined
> will tend to like it more than others (I play 5 string Banjo), but
> like learning an instrument, it takes a lot of time and effort and
> can be frustrating.
> At least ask yourselves is it really the
> requirement you are trying to get rid of or is it the whole art form
> itself. I hope I have at least provided some food for thought and
> that it will add some new and interesting insights.
>
> 73's
>
> Conor Daly EI5IK
> Dublin
> Ireland.
>

Conor OM,

Your post is the most eloquent one I have read on this
beaten-to-death subject. 'Nuff said!

73,
Don, W6JL

5181. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Allan Kaplan <akaplan@fallschurch.esys.com>
Message-ID: <37431A49.3994CBC3@fallschurch.esys.com>
Source record: 70087

I AM proficient on CW, but I still find it hazardous to my health when I am driving! Maybe it's the way I drive....
YMMV, 73 de W1AEL!

5182. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: David <dmartin@net1inc.net>
Message-ID: <37432CE7.ABB004E8@net1inc.net>
Source record: 70088
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Please remove the cross post to rec.radio.amateur.dx

"H. Adam Stevens" wrote:

> No, I'm saying that if you want the same license I have, pass comparable tests.
> Is CW relevant? The Navy thinks not. It's still valid and satisfying.
> I'm no 35 WPM Extra, just an Advanced. I took my last code test at the Dallas
> FCC office in April of 1964, 13 WPM. The damn government already stole my First
> Phone, I don't want it to redefine my ham license, too. Just create a new
> ticket? Been done.
> The service does need to evolve with technology, no one uses spark much.
> I have no simple solution.
> 73
> H.
> WA5IGW
>
> RADIO MAN wrote:
>
> > Sir wrote:
> > >
> > > > What apparently is not obvious to you is that the rest of us don't care.
> > >
> > > You all contribute to the thread, so you DO all care, else I would be
> > > the only one and there would be no thread. I did not start the thread,
> > > and it appears to be the most popular topic here right now. Even YOU
> > > can not resist reading and replying to this.
> > The thing about Morse Code is that it seems that the OLD TIMERS are
> > saying that we did it and you should too. That is baloney. What some
> > cheese with that wine?
> > --
> > RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> > FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5183. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: David <dmartin@net1inc.net>
Message-ID: <37432D5E.5E460A09@net1inc.net>
Source record: 70089
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Please remove cross post to rec.radio.amateur.dx

RADIO MAN wrote:

> Mother Nature wrote:
> >
> > Hi from soc.penpals and let me say that all of this technical talk is
> > making me hot......<g>
> >
> > "H. Adam Stevens" wrote:
> > >
> > > No, I'm saying that if you want the same license I have, pass comparable tests.
> > > Is CW relevant? The Navy thinks not. It's still valid and satisfying.
> > > I'm no 35 WPM Extra, just an Advanced. I took my last code test at the Dallas
> > > FCC office in April of 1964, 13 WPM. The damn government already stole my First
> > > Phone, I don't want it to redefine my ham license, too. Just create a new
> > > ticket? Been done.
> > > The service does need to evolve with technology, no one uses spark much.
> > > I have no simple solution.
> > > 73
> > > H.
> > > WA5IGW
> > >
> > > RADIO MAN wrote:
> > >
> > > > Sir wrote:
> > > > >
> > > > > > What apparently is not obvious to you is that the rest of us don't care.
> > > > >
> > > > > You all contribute to the thread, so you DO all care, else I would be
> > > > > the only one and there would be no thread. I did not start the thread,
> > > > > and it appears to be the most popular topic here right now. Even YOU
> > > > > can not resist reading and replying to this.
> > > > The thing about Morse Code is that it seems that the OLD TIMERS are
> > > > saying that we did it and you should too. That is baloney. What some
> > > > cheese with that wine?
> > > > --
> > > > RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> > > > FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!
> OOOHHH!!!
> --
> RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5184. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: r_buschner@KNUUT.de
Message-ID: <7H972KVYkEB@r_buschner.knuut.de>
Source record: 70090

Don W6JL wrote in <3741C2EA.17A8@ixpres.com>:

> Been running mobile CW here for 18 years. I have seen several
> mishaps with cell phone users and women putting on makeup in that
> time, but no problem with CW mobile at all. CW mobile is very
> relaxing and effortless to do if you are proficient in CW. And, it
> works very well for ragchewing.

You should compare the number of driving cell phone users and the number
of driving cw op's. Maybe this explains the small number of accidents
involving the cw op's.
I mean, when you are a good, experienced cw op, you may have no prob's,
but if yozu are still on training in cw, you must pay much more
attention to the cw sigs, as it would be wise on a full highway...

cu, Ralf

--
Was fuer 'ne Signatur?

5185. 10 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: bullmeat@my-dejanews.com
Message-ID: <7hvhoardj1@nnrp1.deja.com>
Source record: 70091

Looking for an easy to build 10 meter qrp radio.I've built the
cheapie-quikie ten'r but looking for something else to build,thanks.

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5186. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <3743423D.7069@sir.com>
Source record: 70092
Cross-posted to: rec.radio.amateur,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Mark Brown wrote:
>
> When are you idiots going to learn some nettiquette, CROSS
> POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
> PLEASE CEASE & DESIST.

I don't see any groups listed where the Morse Code issue would not be appropriate.

All but two are amateur radio related, and shortwave and scanner listeners have to listen to (or try to avoid) Morse Code too.

5187. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <3743440D.7F2B@sir.com>
Source record: 70093
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> Yeah. I found this really interesting. But what has all this got to do
> with Soc Penpals? I don't really care anything about radio
> communications of any sort. So why not just keep this on the boards that
> apply and take it off soc.penpals.

Let me try to explain. When people reply to a post on a newsgroup, they don't usually read what newsgroups are all listed and delete the ones they THINK are not appropriate. They just hit send, and it goes to all the newsgroups the original post was on. Blaming the person who replied to the post is silly, he did not choose the newsgroups listed.

And to delete any of the groups would be just as silly, because you are sending a reply to the post and don't know which of the groups he will be checking back to read your reply, so it makes sense to leave everything as is.

Why do people hate logic and common sense so much?

5188. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <374344B0.7EB9@sir.com>
Source record: 70094
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

H. Adam Stevens wrote:
>
> Well said.
> I'm thinking of one area where I use Morse outside of ham radio: flying. Navigation
> aids identify in Morse, but a 5 WPM proficiency suffices.

Two of my friends are pilots and say this is a bunch of bullshit.
Neither of them had to learn morse code to get their pilot's license and
don't know of anything used in flying their planes that would need to
recieve morse code for any reason.

5189. Help with using PSpice

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Mark Jones <mark@umr.edu>
Message-ID: <37434d2c.0@news.cc.umr.edu>
Source record: 70095

I am trying to figure out how to use an op amp in PSpice using the text based way of design (writing a .cir file yourself instead of using Schematics and drawing the circuit) and I can't figure out how to use the standard uA741 op-amp or a downloaded model of the National Semiconductor LF 356 op-amp. Does anyone know how to do what I want to do?

Thanks,

Mark

PS Part of my .out file from the analyis program is below:

```
Vin 1 0 AC 1
Vcc 101 0 DC 12
OA 0 1 101 0 2 uA741
--------------------------------$
ERROR -- Unknown parameter
R1 1 2 100k
C1 1 2 3p
R2 2 3 10k
C2 3 0 0.082u
R3 3 4 10k
C3 4 0 0.068u
R4 4 5 10k
R5 4 6 20k
C4 5 6 0.0056u
OB 0 5 101 0 6 uA741
--------------------------------$
ERROR -- Unknown parameter
```

I don't know what letter I'm supposed to start it with so I chose O hoping that might be right. And if I get the right letter for the name of them, what is the format for using them, because what is above doesn't work obviously.

5190. Re: Linear with 4CX-250s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Woody White <woody.white@att.net>
Message-ID: <37435A4F.2C5FB21A@att.net>
Source record: 70096

Steve,

Are you interested in being a "tube tester"? I have a
number of 4CX300s in the junque boxe. I have no idea what
condition they are in.... If you are intereseted in testing
them let me know. You can keep half of any good ones. If
only one turns up good it would be yours for the testing
effort.

Woody

"R.Steven Smith" wrote:
>
> having built an amplifier using a pair of 4cx300a's,

SNIP
> Steve

-- ----------- de Woody, WB4QXE -----------

Ham Homebrew/ATV Circuits -*- Scanning Electron
Microscope Images

http://www.geocities.com/capecanaveral/3722

5191. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Danny <dnottis@negia.net>
Message-ID: <37435AAA.201775FB@negia.net>
Source record: 70097
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mother Nature wrote:
>
> Hi from soc.penpals and let me say that all of this technical talk is
> making me hot......<g>

Well then 350 KHz, AM, FM. Are you butter yet?

Danny
--
Computers are like Old Testament gods; lots of rules and no mercy. -
Joseph Campbell

5192. Dentron Clipperton L WARC Conversion ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Jacquis <jaclyn@tiac.net>
Message-ID: <7hvp0u$q4d@news-central.tiac.net>
Source record: 70098
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Has anyone done a conversion of the Clipperton-L so it will cover the WARC bands?

5193. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: RADIO MAN <theoldbrookltnkid@ameritech.net>
Message-ID: <37437ED5.4BE4@ameritech.net>
Source record: 70099
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

David wrote:
>
> Please remove cross post to rec.radio.amateur.dx
>
> RADIO MAN wrote:
>
> > Mother Nature wrote:
> > >
> > > Hi from soc.penpals and let me say that all of this technical talk is
> > > making me hot......<g>
> > >
> > > "H. Adam Stevens" wrote:
> > > >
> > > > No, I'm saying that if you want the same license I have, pass comparable tests.
> > > > Is CW relevant? The Navy thinks not. It's still valid and satisfying.
> > > > I'm no 35 WPM Extra, just an Advanced. I took my last code test at the Dallas
> > > > FCC office in April of 1964, 13 WPM. The damn government already stole my First
> > > > Phone, I don't want it to redefine my ham license, too. Just create a new
> > > > ticket? Been done.
> > > > The service does need to evolve with technology, no one uses spark much.
> > > > I have no simple solution.
> > > > 73
> > > > H.
> > > > WA5IGW
> > > >
> > > > RADIO MAN wrote:
> > > >
> > > > > Sir wrote:
> > > > > >
> > > > > > What apparently is not obvious to you is that the rest of us don't care.
> > > > > >
> > > > > > You all contribute to the thread, so you DO all care, else I would be
> > > > > > the only one and there would be no thread. I did not start the thread,
> > > > > > and it appears to be the most popular topic here right now. Even YOU
> > > > > > can not resist reading and replying to this.
> > > > > > The thing about Morse Code is that it seems that the OLD TIMERS are
> > > > > > saying that we did it and you should too. That is baloney. What some
> > > > > > cheese with that wine?
> > > > > > --
> > > > > > RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> > > > > > FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!
> > OOOHHH!!!

> > --
> > RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
> > FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

--
RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5194. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: RADIO MAN <theoldbrookltnkid@ameritech.net>
Message-ID: <37438191.5704@ameritech.net>
Source record: 70100
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Keith Bennett wrote:
>
> In article <YEx03.1493$G4.5545@news1.iquest.net>, D Best
> <dbest@iquest.net> writes
> >
> >Keith Bennett <trojanhorse@virgin.net> wrote in message
> >news:eNKu+VBWQnQ3EwXQ@virgin.net...
> >> In article <3742378C.BB38546A@rconnect.com>, Mark Brown
> >> <kb0pyo@rconnect.com> writes
> >> >When are you idiots going to learn some nettiquette, CROSS
> >> >POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
> >> >PLEASE CEASE & DESIST.
> >>
> >> I AM IN ENTIRE AGREEMENT WITH YOU, THIS IS REALLY BAD FORM.
> >> WE HAVE GOT TO STOP THIS CRAZY CROSSPOSTING TO REC.TELEVISION.AMATEURS
> >> ONLY WHERE WILL IT ALL END?
> >>
> >
> >It won't, so I think you might save yourselves some heartache and look at
> >the subject before you read the message -- or just ignore the thread
> >altogehter. Is that really so difficult?
> >
> Well naturally I read the subject matter and thought here is an item
> about Inspector Morse. No doubt you have heard of Inspector Morse?
>
> --
> From the ORIGINAL Trojan Horse!
> Please note that correct e-mail address is:-
> trojan.horse@virgin.net
> [Copyright 1999 by Trojan Horse]
> http://albums.photopoint.com/j/AlbumList?u=24561
> UIN #3457372
> http://members.home.net/magickal1/soc/
> wwp.mirabilis.com/3457372
> 3457372@pager.mirabilis.com
No, but i have heard of Inspector Gadget.
--
RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!

5195. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Mother Nature <m_nature@hotmail.com>
Message-ID: <37438215.1DB5FBEE@hotmail.com>
Source record: 70101
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Danny wrote:
>
> Mother Nature wrote:
> >
> > Hi from soc.penpals and let me say that all of this technical talk is
> > making me hot......<g>
>
> Well then 350 KHz, AM, FM. Are you butter yet?
>
> Danny
> --

I'm melting as we speak.....I might just need a cold shower...oops, not
a good idea. I might get a spark and get tingly all over!!!!!!!

> Computers are like Old Testament gods; lots of rules and no mercy. -
> Joseph Campbell

5196. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: RADIO MAN <theoldbrookltnkid@ameritech.net>
Message-ID: <374382F3.66E6@ameritech.net>
Source record: 70102
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

```
Jim Wayda wrote:
>
> Morse Code is a "turd in a punch bowl". It is the reason that ham radio
> will die. It is really unfortunate.
>
> D Best wrote:
> >
> > Keith Bennett <trojanhorse@virgin.net> wrote in message
> > news:eNKu+VBWQnQ3EwXQ@virgin.net...
> > > In article <3742378C.BB38546A@rconnect.com>, Mark Brown
> > > <kb0pyo@rconnect.com> writes
> > > >When are you idiots going to learn some nettiquette, CROSS
> > > >POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
> > > >PLEASE CEASE & DESIST.
> > > >
> > > I AM IN ENTIRE AGREEMENT WITH YOU, THIS IS REALLY BAD FORM.
> > > WE HAVE GOT TO STOP THIS CRAZY CROSSPOSTING TO REC.TELEVISION.AMATEURS
> > > ONLY WHERE WILL IT ALL END?
> > >
> > It won't, so I think you might save yourselves some heartache and look at
> > the subject before you read the message -- or just ignore the thread
> > altogehter. Is that really so difficult?
> >
> > >
> > > --
> > > From the ORIGINAL Trojan Horse!
> > > Please note that correct e-mail address is:-
> > > trojan.horse@virgin.net
> > > [Copyright 1999 by Trojan Horse]
> > > http://albums.photopoint.com/j/AlbumList?u=24561
> > > UIN #3457372
> > > http://members.home.net/magickal1/soc/
> > > wwp.mirabilis.com/3457372
> > > 3457372@pager.mirabilis.com
It is all about the fact that we did it and so should you
--
RADIO SCANNERS, CITIZENS' BAND RADIOS, SHORTWAVE RADIOS,
FAMILY RADIO SERVICE RADIOS, HAM RADIOS ARE FUN!!!!
```

5197. FS Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: brigode@ibm.net
Message-ID: <7htbho$90b$1@nnrp1.deja.com>
Source record: 70164

Tubes For sale.

$65 for the whole lot.

1AP4 NOS Silvertone 6 Pin OB Bottom of box
roughed up
1C6 NOS Silvertone 6 Pin OB $10.00

3DG4 NOS GE 8 Pin OB $4.00
6AV5GA NOS Sylvania 8 Pin OB $4.00
6AV5GA NOS Sylvania 8 Pin OB $4.00
6CD6GA NOS Sylvania 8 Pin OB $6.00
6DQ6B/ NOS GE 8 Pin OB $8.00 6GW8/
6GW8 NOS GE 8 Pin OB $8.00 6DQ6B
12AV5GA NOS GE 8 Pin OB $4.00
12CU6 NOS Sylvania 8 Pin OB $10.00
12DQ6B NOS Sylvania 8 Pin OB $18.00

25DN6 NOS Sylvania 8 Pin OB $8.00

6JB6 NOS GE 12 Pin OB $25.00
38HK7 NOS Sylvania 12 Pin OB $8.00

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5198. Dual Needle Meter FS on eBay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: franbarb@my-dejanews.com
Message-ID: <7hu19pnpe1@nnrp1.deja.com>
Source record: 70165

Thank you for looking, I have a great buy for someone interested
in a Dual Needle meter. fran, wa3kkm
http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=106000667

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5199. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <MtpqGBBYHnQ3Ew2l@virgin.net>
Source record: 70166
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

>Jim Kehler wrote:
>>
>> Sir <sir@sir.com> wrote:
>>
>> >There are going to be a lot of posts to newsgroups that don't happen to
>> >have subject matter that is of personal interest to you. Lots of YOUR
>> >posts will not have any interest to lots of other people too.
>>
>> You appear to be so engrossed in your efforts to convince the rest
>> of the world that you are incapable of attaining anything in life that
>> requires effort that you seem to have totally missed the point.
>>
>> The reason we have thousands of newsgroups is because the world is
>> filled with millions of people with different interests.
>>
>> Although your inability to learn Morse code seems to be the current
>> focus in YOUR life, the rest of us don't necessarily view your lack
>> of motivation as an earthshaking event.
>>
>> REC.RADIO.AMATUER.POLICY was created with the sole intent
>> of giving you a forum in which to air your views. Please feel free to
>> use it to your hearts content.
>>
>> Posting your Morse code dribble in multiple newsgroups is not going
>> to gain you any support. Many unmotivated whiners before you have
>> proven this point.
>>
>> Some people have things they want in life because they are willing to
>> expend the effort required to obtain those things, whatever that effort
>> may be. It is obvious to us that you are not one of those people.
>>
>> What apparently is not obvious to you is that the rest of us don't care.
Yeah. I found this really interesting. But what has all this got to do
with Soc Penpals? I don't really care anything about radio
communications of any sort. So why not just keep this on the boards that
apply and take it off soc.penpals. As far as I am concerned amateur
radio is atrocious, even worse than CB used to be here. I have never
heard of so much crap on any wavebands before. How these people get
operating licenses is beyond me.

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-

trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5200. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <Dtep2IBEKnQ3EwWL@virgin.net>
Source record: 70167
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <3741F33E.170EA658@net1inc.net>, David <dmartin@net1inc.net>
writes
>Please remove the cross post to rec.radio.amateur.dx
>
Where is that at then?

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5201. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <EdtoKMBLMnQ3EwUH@virgin.net>
Source record: 70168
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <37421E2F.E0FFF6F8@hotmail.com>, Mother Nature
<m_nature@hotmail.com> writes
>Hi from soc.penpals and let me say that all of this technical talk is
>making me hot......<g>
Yeah, but rec.radio.amateur.dx is still listed.
Wern't we supposed to take this off the listings?
CQ-CQ-CQ2!!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5202. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <Bt9pGQBIOnQ3EwXF@virgin.net>
Source record: 70169
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <3741F33E.170EA658@net1inc.net>, David <dmartin@net1inc.net>
writes
>Please remove the cross post to rec.radio.amateur.dx
Yeah. Can yo'all remove the crosspostings to Soc.Penpals as well please.
All this radio crap is upsetting my digestion!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5203. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <eNKu+VBWQnQ3EwXQ@virgin.net>
Source record: 70170
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <3742378C.BB38546A@rconnect.com>, Mark Brown
<kb0pyo@rconnect.com> writes
>When are you idiots going to learn some nettiquette, CROSS
>POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
>PLEASE CEASE & DESIST.

I AM IN ENTIRE AGREEMENT WITH YOU, THIS IS REALLY BAD FORM.
WE HAVE GOT TO STOP THIS CRAZY CROSSPOSTING TO REC.TELEVISION.AMATEURS
ONLY WHERE WILL IT ALL END?

--
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trojan.horse@virgin.net
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UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5204. Literature about microstrip construction

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: hb9dnn@gmx.net
Message-ID: <37428b56.1194335363@news.hasler.ascom.ch>
Source record: 70171

Hello,

does anybody know of literature about microstrip construction?

All I have found up to now are books like the ARRL microwave
experimenters/projects manuals one one side (only very basic coverage
of the topic) and on the other side very abstract textbooks covering
transmission lines and/or microwave filters in a more theoretical and
mathematical way.
What I'm actually looking for is some kind of 'cookbook' dealing with
the structures used in microstrip circuits.
In other words, I could simlpy build one of the famous KK7B circuits
and have fun working with them. What I'm looking for, however, is
how these circuits work, how You calculate and construct these
structures, etc.

Thanks in advance for any pointer

Robert

--

Robert M. Ganter HB9DNN

5205. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: D Best <dbest@iquest.net>
Message-ID: <YEx03.1493$G4.5545@news1.iquest.net>
Source record: 70172
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Keith Bennett <trojanhorse@virgin.net> wrote in message
news:eNKu+VBWQnQ3EwXQ@virgin.net...
> In article <3742378C.BB38546A@rconnect.com>, Mark Brown
> <kb0pyo@rconnect.com> writes
> >When are you idiots going to learn some nettiquette, CROSS
> >POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
> >PLEASE CEASE & DESIST.
>
> I AM IN ENTIRE AGREEMENT WITH YOU, THIS IS REALLY BAD FORM.
> WE HAVE GOT TO STOP THIS CRAZY CROSSPOSTING TO REC.TELEVISION.AMATEURS
> ONLY WHERE WILL IT ALL END?

It won't, so I think you might save yourselves some heartache and look at
the subject before you read the message -- or just ignore the thread
altogehter. Is that really so difficult?

>
> --
> From the ORIGINAL Trojan Horse!
> Please note that correct e-mail address is:-
> trojan.horse@virgin.net
> [Copyright 1999 by Trojan Horse]
> http://albums.photopoint.com/j/AlbumList?u=24561
> UIN #3457372
> http://members.home.net/magickal1/soc/
> wwp.mirabilis.com/3457372
> 3457372@pager.mirabilis.com

5206. Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Con Daly <radioman27@hotmail.com>
Message-ID: <M%y03.5961$xa.54353@c01read02-admin.service.talkway.com>
Source record: 70173

Hello everyone,

I don't read the posts from this group much and am'nt as active as much
I would like to be on the air. However I see a lot of debate going on
about morse. It seems to be the most passionate issue among amateur
and professional radio operators these days. I sailed as a merchant
marine radio officer from 1991-1997. I found morse to be absolutely
invaluable at that time (not terribly long ago). There were times
when I really could not have managed without it. This was not just
a matter of equipment on board as I often sailed with Inmarsat
terminals, both A and C systems which were supposed to be well
established at that time.
I have countless stories about satellite null zones along the equator
and many other areas, extremely weak signals on SSB etc, where the
only option available was to use morse. Indeed on one particular voyage
on board an Inmarsat-C equipped vessel I was using CW 90% of the time.
When the first changes started to appear with the introduction of the
new maritime radio system (GMDSS), there was any
number of mishaps occuring with ships normally having no communication
problems suddenly "dissapearing" from the air for days on end.
The ones which still had radio officers had no problems, as with the
ones with electronics officers who were former radio officers.
Having come close to shipwreck on 2 occasions I expressed great concern
about the changes taking place, as they seemed to be rather
premature and rushed and there was a desperate drive to get it all into
place before the millenium.
Now don't get me wrong, I'm no old salt and am always
keeping up to date with electronics and the latest innovations, but
morse should not be seen as simply old technology, it is just another
method of communication, proved itself very reliable again and again up
to the present day, I can vouch for that. Certainly
new communications technology should be introduced to all fields,
amateur or commercial. Especially when the high traffic needs of todays
industry are demanding it, but it seems that certain people
are just determined to get rid of something that they never embraced
because they never saw it in the right way. Morse is not a code, it
is a language. That is the first mistake a lot of people make in the
way they approach it. Certainly those people more musically inclined
will tend to like it more than others (I play 5 string Banjo), but
like learning an instrument, it takes a lot of time and effort and
can be frustrating.
Ok, so I'm obviously an advocate of CW but you may
be surprised to hear that I'm not in favour of keeping the requirement
for a proficiency test, if thats what people want. I just wish that

those against the code requirement would take a long hard look at what they are really campaigning against. It seems like it is really based on an irrational belief that it's too old fashioned, but really fashion shouldn't come into it. It certainly didn't matter for me in the Mid atlantic when we were taking on water faster than the pumps could get rid of it down in the engine room. That was in 1992 and there were other less urgent incidents right up to the time I left in 1997.

Certainly the amateur service is'nt as important as a shipboard radio installation or a coastal station but all you anti code people out there, please, take a good look at what you are starting. Because there will be no going back and it will be dead within 20-30 years of a no code requirement. The commercial people made a mistake, based on purely financial motives. 12 WPM is not difficult to obtain if it is learned the right way. At least ask yourselves is it really the requirement you are trying to get rid of or is it the whole art form itself. I hope I have at least provided some food for thought and that it will add some new and interesting insights.

73's

Conor Daly EI5IK
Dublin
Ireland.

PS, if there are any other musicians on this group I would like to hear how much you relate music to CW.
--
Posted via Talkway - http://www.talkway.com
Exchange ideas on practically anything (tm).

5207. FS: Some neat tube type transmitter kits!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3742bdd7.13223523@news.earthlink.net>
Source record: 70174
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap,rac.antiques.radio+phono

For Sale:

Some neat tube type transmitter kits!

See:

http://home.earthlink.net/~af4k/vintage.htm

5208. QRP AM and CW transmitters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <3742bfdf.13743877@news.earthlink.net>
Source record: 70175
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

QRP AM and CW transmitters for the homebrewers!!!

http://home.earthlink.net/~af4k/ham/ecl80.htm

Fee: Plans on-line 4 U!

5209. Re: For Sale "C" Band Reflectometer

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: x <x@x>
Message-ID: <3742c9ee.0@kastagir.senet.com.au>
Source record: 70176
Cross-posted to: uk.radio.amateur,tw.bbs.rec.radio.amateur,rec.radio.amateur.space,rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.dx

For Sale : Andrew Antenna C-Band reflectometer 3.7 Ghz - 4.2 Ghz , standard
wg flanges ,
complete with matched load , bridge coupler,siemens 90 deg elbows ,
excellent condition , $1500.00 ausD, freight not included, images available
on request , apply via EMAIL :

g4924@hotmail.com

5210. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Jim Wayda <jwayda@home.com>
Message-ID: <3742D0BA.1FBCBBB4@home.com>
Source record: 70177
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Morse Code is a "turd in a punch bowl". It is the reason that ham radio
will die. It is really unfortunate.

D Best wrote:
>
> Keith Bennett <trojanhorse@virgin.net> wrote in message
> news:eNKu+VBWQnQ3EwXQ@virgin.net...
> > In article <3742378C.BB38546A@rconnect.com>, Mark Brown
> > <kb0pyo@rconnect.com> writes
> > >When are you idiots going to learn some nettiquette, CROSS
> > >POSTING TO GROUPS WHERE THIS DOESN'T BELONG IS IN BAD FORM
> > >PLEASE CEASE & DESIST.
> >
> > I AM IN ENTIRE AGREEMENT WITH YOU, THIS IS REALLY BAD FORM.
> > WE HAVE GOT TO STOP THIS CRAZY CROSSPOSTING TO REC.TELEVISION.AMATEURS
> > ONLY WHERE WILL IT ALL END?
>
> It won't, so I think you might save yourselves some heartache and look at
> the subject before you read the message -- or just ignore the thread
> altogehter. Is that really so difficult?
>
> >
> > --
> > From the ORIGINAL Trojan Horse!
> > Please note that correct e-mail address is:-
> > trojan.horse@virgin.net
> > [Copyright 1999 by Trojan Horse]
> > http://albums.photopoint.com/j/AlbumList?u=24561
> > UIN #3457372
> > http://members.home.net/magickal1/soc/
> > wwp.mirabilis.com/3457372
> > 3457372@pager.mirabilis.com

5211. Re: MRF-455 @ 50 Mhz.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: jstrohm@texas.net
Message-ID: <7humqr$74e$1@nnrp1.deja.com>
Source record: 70178

In article <hjd03.178$wz.7407@news12.ispnews.com>,
"okieman" <okieman@innocent.com> wrote:
>
> Does anyone have any experience using this transistor at this
frequency
> or is the cutoff of 30 Mhz pretty accurate ???

Motorola only characterized this device to 30 MHz, but since it's
pretty linear to the end of characterization, you have to assume
the linearity continues for a ways.

Motorola has published some test set schematics for their HF RF
transistors, and you could easily adapt any of them for use with
the '455 if there's not one already out there.

My experimentation with this device and with harmonic-rich HF
input signals suggests good usability at 6 meters, although you should
expect somewhat lower output. Would you be happy with 50 watts out
from a push-pull pair at 6 meters, driven with 4 watts?

N6OTQ

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5212. Re: VHF PA Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7huqf6$a7b$1@nnrp1.deja.com>
Source record: 70179

The BLY33 is a Philips transistor. Not sure of the ratings, but I have
a few BLY88's, and they are VHF at 20watts.
73 de VE6INM
In article <7hsa2fqdp1@uranium.btinternet.com>,
"David Cunningham" <D.L.C@btinternet.com> wrote:
> I have recently dismantled a couple of old PMR radios, and have the
> following PA transistors:
>
> BLY33
> ZRF0112
> ZRF0113
> I assume the latter two are a complementary pair.
> Please let me know if you have any info on these devices.
> Many thanks, John
>
>

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5213. Re: Idiot Question On FET Parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-19 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3742DCA7.7817@pop.valley.net>
Source record: 70180

Robin Birch wrote:
>
> Dear All,
> Idiot question time again I'm afraid.
>
> I have got very frustrated by looking at devices which initially look
> just what I want but when I come to work the details out only half, or
> even none, of the parameters I am after appear in the data sheets.
> Usually these are capacitance's or so on that I am looking for to
> calculate matching impedance's.
>
> Now, I have found some devices that have things that look like what I am
> after but I just need to confirm that the names actually mean what I
> think they mean.
>
> Ciss Capacitance between gate and source of common source JFET
> Crss Capacitance between gate and drain of common source JFET
> Coss Capacitance between drain and source of common source JFET
>
> Is this correct?.
>
Hello--
Your interpretations are correct.

73,
Brad AA1IP

5214. WTD:Club newsletter with 3 Part CB to 6 meter article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <37436c27.3686328@news.revealed.net>
Source record: 70103

I saw mention of someone's online club newsletter which mentioned part
3 of a 3 part article on converting CB set to 6 meters.

I've lost the address, as I could not get into it that night.

Does anyone have the address for it???

Terry-WB0VQP

5215. Re: MFJ-1798

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: Michael Young <nobody@all.org>
Message-ID: <927186986.671.86@news.remarQ.com>
Source record: 70104

I put one up on the roof about a month ago. So far, I've worked (from Illinois using 100 watts) 30 states including Hawaii, Argentina, Spain, Portugal, Costa Rica, Guatemala, Caribbeans, Germany, and Norway. That's not saying much, since it depends very much on the bands. When the bands are open, the antenna will do the job. VSWR bandwidth is a bit narrow on 40m and 80m, but fits my needs there. Twenty meters and above are plenty wide.

It's a good antenna. The parts are generally good quality, and looks to a layman (me) to be well thought out. The only real problem I had during assembly was with the threaded aluminum rods. The rolled threads are not fully formed; you should run a die (I think a #10) down the threads before trying to install them. Also, the kit was missing 4 split lock washers. Otherwise, it's pretty straightforward and goes together well.

The top counterpoise makes it somewhat wobbly in a breeze. In 40 mph winds, the top sways a good 6 to 8 feet. I'm not certain what effect the sway has on the radiation pattern. I was also concerned enough that I added guy wires to the TV antenna tripod. I don't know if this was necessary, since it's still up there and holding.

In all, I'm pleased with it. It meets, maybe exceeds, my expectations, but I have nothing to compare it to. The band coverage fits well with the new multi-band all mode radios. I think it's an excellent choice for HF through VHF coverage.

Michael.

Howard James <howardj@hamrad.swinternet.co.uk> wrote in message news:7hn98uueh1@news6.svr.pol.co.uk...
> Has anybody had experience of using the MFJ-1798 10 band 80 to 2 vertical?
> It seems to do a lot but does it actually do it?
> Thanks.
> Howard.
> G3UPZ
>
>

5216. Re: WTD:Club newsletter with 3 Part CB to 6 meter article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: John Russell <longjohn@revealed.net>
Message-ID: <7i0lmc$2ugq@enews3.newsguy.com>
Source record: 70105

http://www.qsl.net/vk4wss/main.htm Southside Amateur Radio Society Inc. Look for the link to their newsletter

John
<TLNixon@revealed.net> wrote in message news:37436c27.3686328@news.revealed.net...
I saw mention of someone's online club newsletter which mentioned part 3 of a 3 part article on converting CB set to 6 meters.

I've lost the address, as I could not get into it that night.

Does anyone have the address for it???

Terry-WB0VQP

5217. Re: WTD:Club newsletter with 3 Part CB to 6 meter article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: benedict69@hotmail.com
Message-ID: <3744faf5.5385237@news.bigpond.com>
Source record: 70106

It's difficult to see. Can you be a bit more specific please?

Thanks
Richard

On Thu, 20 May 1999 04:46:55 -0500, "John Russell"
<longjohn@revealed.net> wrote:

>http://www.qsl.net/vk4wss/main.htm Southside Amateur Radio Society Inc. Look
>for the link to their newsletter
>
>John
><TLNixon@revealed.net> wrote in message
>news:37436c27.3686328@news.revealed.net...
>I saw mention of someone's online club newsletter which mentioned part
>3 of a 3 part article on converting CB set to 6 meters.
>
>I've lost the address, as I could not get into it that night.
>
>Does anyone have the address for it???
>
>Terry-WB0VQP
>

5218. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <NR2q5CAmW7Q3EwVC@virgin.net>
Source record: 70107
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <3743440D.7F2B@sir.com>, Sir <sir@sir.com> writes
>> Yeah. I found this really interesting. But what has all this got to do
>> with Soc Penpals? I don't really care anything about radio
>> communications of any sort. So why not just keep this on the boards that
>> apply and take it off soc.penpals.
>
>
>Let me try to explain. When people reply to a post on a newsgroup, they
>don't usually read what newsgroups are all listed and delete the ones
>they THINK are not appropriate. They just hit send, and it goes to all
>the newsgroups the original post was on. Blaming the person who replied
>to the post is silly, he did not choose the newsgroups listed.
>
>And to delete any of the groups would be just as silly, because you are
>sending a reply to the post and don't know which of the groups he will
>be checking back to read your reply, so it makes sense to leave
>everything as is.
>
>Why do people hate logic and common sense so much?
I am the first to agree that many lack common sense these days, but what
happened to all those complaints we used to get from newsgroups that
your posting was 'inappropriate' to the newsgroup in question!
Let's suppose we broadcast this thread in say uk.misc or talk.bizarre,
or maybe even soc.culture.israel then they would soon let us know about
it!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5219. FS: MFJ-969 Antenna Tuner..

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: William Phinizy <k6whp@gte.net>
Message-ID: <1pV03.250$kn6.10191@dfiatx1-snr1.gtei.net>
Source record: 70108

Cleaning out the shack..

300 watts, roller inductor, three-position antenna switch x 2 (direct or through tuner plus dummy load position), black finish, immaculate with no dings or scratches..

..best offer takes it.

5220. Re: Help With Harrison Labs 6456 0-36v 0-100amp PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: "R. Sherry" <RSherry@metricom.com>
Message-ID: <37442D73.4C41@metricom.com>
Source record: 70109
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

DavidC wrote:
>
> I am in need of a regulated 0-50v 0-50 amp power supply.
>
> I have been offered a Harrison Laboratories model 6456
> which is a 0-36v 0-100a supply for $100.
>
> Does anyone know if this could readily be converted to
> a 0-50v 0-50a supply?
>
> Does anyone have a schematic with component list and/
> or a manual?
>
> Is Harrison Labs still in business?
>
> Thanks! & 73,
> ~~~
> ï¿½ï¿½ï¿½
> \ ~ / .... DavidC K1YP@qsl.net
Harrison Labs was a Hewlett Packard owned company that stopped operating in the early seventies as I remember. They (HP) also had a company called Dymec that made power supplies. The Dymec symbol was the HP logo turnned upside down. Lower case letters were used for both symbols. Dymec was a mid sixties company.

It is unlikely that the unit would be easily convertable to 50 volt operation. It is most likely a linear supply with a pre-regulator or a tracking Variac on the input. It will also not use silicon transistors. It will be very heavy and either single phase 220 volt or possibly 3 phase 208.

Russ

5221. Yaesu VX-5R or Kenwood TH-D7A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: Vic <iden1000@hotmail.com>
Message-ID: <xIX03.14608$J74.2112060@news2.rdc1.on.home.com>
Source record: 70110
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave

Hi! How are you doing? I'm going to get a new HT either Yaesu VX-5R or Kenwood TH-D7A(since I may try to operate packet radio). Any suggestion? Thanks!!

73,
Vic

5222. Re: WTD:Club newsletter with 3 Part CB to 6 meter article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: John Russell <longjohn@revealed.net>
Message-ID: <7i1elj$hmi@enews4.newsguy.com>
Source record: 70111

http://www.qsl.net/vk4wss/sarsnews.htm Thjis page has the current issue as well as links to past issues. Sorry I wasn't more specific, it was early and I hadn't downed my first cup of coffee yet ;-)

John

<benedict69@hotmail.com> wrote in message news:3744faf5.5385237@news.bigpond.com...
It's difficult to see. Can you be a bit more specific please?

Thanks
Richard

5223. Re: Yaesu VX-5R or Kenwood TH-D7A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: Jeff Johns <jeffj@scott.net>
Message-ID: <199904201448.PNR05852@scott.net>
Source record: 70112
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave

Vic writes:

> Hi! How are you doing? I'm going to get a new HT either Yaesu VX-5R or
> Kenwood TH-D7A(since I may try to operate packet radio). Any suggestion?
> Thanks!!

Although I have no preference of the two radios you listed, they both will
work for packet radio, at least at speeds of 1200bps.

73 Jeff W4JEF

--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------
jeffj@scott.net w4jef@amsat.org	Reserve Patrol Captain
Satellite: Mir R0MIR-1, AO-27	Jefferson County Sheriff's Dept
200LX+BayPac+FT50=Portable Packet	QTH Birmingham, AL USA
------------ Finger jeffj@scott.net for my PGP RSA key -----------

5224. Mitsubushi shogun/pajero radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: JAMES NEALE <james@jneale.freeserve.co.uk>
Message-ID: <7i1t85jir1@news8.svr.pol.co.uk>
Source record: 70113

Hello All, A friend of mine has bought an imported second hand Mitsubushi pajero(shogun in UK), The radio Tuner in it only goes up to about 100Mhz on FM rather than the the usual of about 108 Mhz.
My friend has been told that it cost a lot of money to have a "frequency expander card" fitted.
Dopes anyone know just what this conversion entails and is it possible for me to get the parts and do it for him?

73 Jamie G7OJZ / M0CHD

james@jneale.freeserve.co.uk

5225. Re: WTD:Club newsletter with 3 Part CB to 6 meter article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: benedict69@hotmail.com
Message-ID: <37448d65.1121403@news.bigpond.com>
Source record: 70114

I know that problem!

Many thanks.
Richard

On Thu, 20 May 1999 11:53:11 -0500, "John Russell"
<longjohn@revealed.net> wrote:

>http://www.qsl.net/vk4wss/sarsnews.htm Thjis page has the current issue as
>well as links to past issues. Sorry I wasn't more specific, it was early and
>I hadn't downed my first cup of coffee yet ;-)
>
>John
>
><benedict69@hotmail.com> wrote in message
>news:3744faf5.5385237@news.bigpond.com...
>It's difficult to see. Can you be a bit more specific please?
>
>Thanks
>Richard
>
>
>

5226. Re: Help With Harrison Labs 6456 0-36v 0-100amp PS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: jadney@vwtype3.org
Message-ID: <37437368.13981674@news.doit.wisc.edu>
Source record: 70115
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

"DavidC" <davidc@bit-net.com> wrote:

>I am in need of a regulated 0-50v 0-50 amp power supply.
>
>I have been offered a Harrison Laboratories model 6456
>which is a 0-36v 0-100a supply for $100.
>
>Does anyone know if this could readily be converted to
>a 0-50v 0-50a supply?

Unlikely. The transformer would not have the voltage necessary to do
this. I don't think these were switching supplies.

>Is Harrison Labs still in business?

It has long been a part of Hewlett Packard.

Jim
-

Jim Adney jadney@vwtype3.org
Madison,Wisconsin USA

5227. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7i27kt$rvu@news.Hawaii.Edu>
Source record: 70116
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

D Best <dbest@iquest.net> wrote:
>It won't, so I think you might save yourselves some heartache and look at
>the subject before you read the message -- or just ignore the thread
>altogehter. Is that really so difficult?

So are you saying that you wouldn't mind if the 200,000+ newsgroups were
lumped together as just one NG? After all, one would only need to inspect
the subject line as one waded through the 10 million posts each day,
right?

5228. projects-info homebrew slicers,q-multipliers,xtal filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: bige77@webtv.net
Message-ID: <21672-37449DF3-67@newsd-131.iap.bryant.webtv.net>
Source record: 70117

deo gratia

5229. Re: Yaesu VX-5R or Kenwood TH-D7A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: Dan <n9drm@nospam.tcon.net>
Message-ID: <3744c5a5@news.oaktree.net>
Source record: 70118
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave

...
> Hi! How are you doing? I'm going to get a new HT either Yaesu VX-5R or
> Kenwood TH-D7A(since I may try to operate packet radio). Any suggestion?
> Thanks!!

I'm kinda partial to the VX5-R. I bought one a couple of weeks ago and cannot put it down. The small size and the 5 watt output were big sellers for me. I'm burnt out on packet, so that wasn't an issue. I also like the ability to program the radio as I like it using either ADMS or EVE software. It does a good job even on AM broadcast and the SW bands with a good antenna. It is am amazing little radio given its' size.

Dan

5230. Re: Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: Gord Skiffington <skiffing@nbnet.nb.ca>
Message-ID: <3744D008.3F7@nbnet.nb.ca>
Source record: 70119

Howdy Con....BRAVO!!!! I to have somewhat paralleled your shipboard time.....R/O from 1979-1998....still have my RGMC and picked up the rinkydink GOC GMDSS, installed (I used to work as installation tech and then R/O) my first GMDSS in 1997 and had a chance to work with it for a year.....(the semi-submersible drill rig I was on required R/O's up here off of Canada).....been a ham since 71 and have seen the changes and EVERYTHING you echo is true bro.....shame that the GMDSS didn't provide for bringing over something (or exactly) like Q sigs just for the universality of that part of our language. I remember many times when I was unable to contact a radar target on collision course with us by voice but was able to get a reply from my TTT or XXX on morse directed at the target. I could go on and on as you to could....at the end of 1997 I shook my head as I counted nearly 700 FALSE or undetermined distress messages on the GMDSS....no wonder so many turn it down or..... Morse transcended our voice language/accent/dialect barriers by causing us to sound alike (sort of heheh).....relatively simple gear that could be troubleshot and repaired at sea. I guess my own point is as yours is that those who won't use it will never know how good it is....and those that will and have, know better...truely a shame to hear the cursing over a mode/language/method of communication that HAS stood the test of time by being useful for a hundred years.....

73

Gord Skiffington - VE1AJF...and R/O in modern times

5231. Re: Doug Hall Interface serial protocol needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: Cyberhax <cyberhax@thegrid.net>
Message-ID: <ZI413.358$f4.28889@alfalfa.thegrid.net>
Source record: 70120

Hey Ron,

You have likely found out by now but I think the info your looking for is posted on the Link Communications web site.

Ciao,

Shawn WB6JWB
R. E. Curry wrote in message ...
>Does anybody know where to get information on the "DHE Generice Data Stream"
>protocol most all the repeater controllers use to interface to the Doug Hall
>Interface? I'd rather not reverse engineer it. I want to be able to control
>one from a PC.
>
>Regards,
>Ron
>ke6wed
>
>

5232. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-20 00:00:00 UTC
From: kh2d@my-dejanews.com
Message-ID: <7i3afnhdb1@brokaw.wa.com>
Source record: 70121
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Keith Bennett <trojanhorse@virgin.net> wrote:

>This is all very well but it does not answer my question as to what do
>they talk about on rec.radio.amateur.dx?

Well, Keith, we used to talk about DX. But then all these Morse code
geeks and hot women from SOC.PENPALS started posting here and
looks like everybody who was interested in DX left. Haven't seen
anything DX related for quite a while.....

73, Jim KH2D

5233. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Harry <spam@hotmail.com>
Message-ID: <01bea34f$c0f9e8e0$8534d693@e0060b0eb282a>
Source record: 70031
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> Why do people hate logic and common sense so much?

That is a silly question since the answer itself is common sense. If people were logical then who would have babies? Betamax video recorders would still be in use in Europe and Jesus may not have been nailed to a tree! If there is a God then perhaps she is sitting up there having a damn good laugh at us all - I am.

5234. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <Hj6mHHANWQR3EwvH@virgin.net>
Source record: 70032
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <01bea34f$c0f9e8e0$8534d693@e0060b0eb282a>, Harry
<spam@hotmail.com> writes
>> Why do people hate logic and common sense so much?
>
>That is a silly question since the answer itself is common sense. If people
>were logical then who would have babies? Betamax video recorders would
>still be in use in Europe and Jesus may not have been nailed to a tree! If
>there is a God then perhaps she is sitting up there having a damn good
>laugh at us all - I am.
>
Well Harry I'm glad that somebody has something to laugh about!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5235. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <FDfmfKAbXQR3EwMF@virgin.net>
Source record: 70033
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <7i27kt$rvu@news.Hawaii.Edu>, Jeffrey Herman
<jeffreyh@Hawaii.Edu> writes
>D Best <dbest@iquest.net> wrote:
>>It won't, so I think you might save yourselves some heartache and look at
>>the subject before you read the message -- or just ignore the thread
>>altogehter. Is that really so difficult?
>
>So are you saying that you wouldn't mind if the 200,000+ newsgroups were
>lumped together as just one NG? After all, one would only need to inspect
>the subject line as one waded through the 10 million posts each day,
>right?
Now THAT is an interesting proposition. Let's ask the Association of
Internet Service Providers what they think!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5236. Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <KTnlbMA6ZQR3EwNr@virgin.net>
Source record: 70034
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

I'm having problems with receiving the Isle of Wight monochrome TV
transmitter on Channel BBC-1 from this location. Has anybody based in
Holland any tips on the subject?

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5237. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <PT8krSAWbQR3EwNO@virgin.net>
Source record: 70035
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <7i28d5$sm3@news.Hawaii.Edu>, Jeffrey Herman
<jeffreyh@Hawaii.Edu> writes
>Keith Bennett <trojan.horse@virgin.net> wrote:
>>Well naturally I read the subject matter and thought here is an item
>>about Inspector Morse. No doubt you have heard of Inspector Morse?
>
>Listen to the theme song at the end of the program; you'll hear
>the violins sending M O R S E over and over (in Morse code, of course).

This is all very well but it does not answer my question as to what do
they talk about on rec.radio.amateur.dx?

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5238. Re: Yaesu VX-5R or Kenwood TH-D7A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Vic <ke4qjk@qsl.net>
Message-ID: <b0b13.782$J3.31624@news15.ispnews.com>
Source record: 70036
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave

Dan,

You mentioned "EVE" software ... can you provide us with more
info?
Never heard of it, is it shareware? On the web?

Vic

Dan <n9drm@nospam.tcon.net> wrote in message
news:3744c5a5@news.oaktree.net...
:
: ...
: > Hi! How are you doing? I'm going to get a new HT either Yaesu
VX-5R or
: > Kenwood TH-D7A(since I may try to operate packet radio). Any
suggestion?
: > Thanks!!
:
: I'm kinda partial to the VX5-R. I bought one a couple of weeks
ago and
: cannot put it down. The small size and the 5 watt output were
big sellers
: for me. I'm burnt out on packet, so that wasn't an issue. I
also like the
: ability to program the radio as I like it using either ADMS or
EVE software.
: It does a good job even on AM broadcast and the SW bands with a
good
: antenna. It is am amazing little radio given its' size.
:
: Dan
:
:
:

5239. Ham Homebrew Club Formed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: wa4uso@aol.com
Message-ID: <19990521085028.03866.00003086@ng-cr1.aol.com>
Source record: 70037

Hams in the Louisville , KY area have formed a small
group of about 15 or so that enjoy building ham related
projects. No dues, No officers, just plain do it your-self
building fun. All ham related subjects are welcome.
Join the fun of (hands on radio). Please email me for
more info at WA4USO@aol.com

73 D. Darby

5240. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7i4070$c83$1@its.hooked.net>
Source record: 70038
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
>
>
>Danny wrote:
>>
>> Mother Nature wrote:
>> >
>> > Hi from soc.penpals and let me say that all of this technical talk is
>> > making me hot......<g>
>>
>> Well then 350 KHz, AM, FM. Are you butter yet?
>>
>> Danny
>> --
>
>I'm melting as we speak.....I might just need a cold shower...oops, not
>a good idea. I might get a spark and get tingly all over!!!!!!!

Finally something good comes from the endless Morse debate!

... resonance, Kirchoff, reactance, transconductance, Thevenin, bipolar ...
stay tuned while I get out the electronics dictionary...

Mike

5241. Re: Yaesu VX-5R or Kenwood TH-D7A

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Darryl Wagoner <darryl@sai.com>
Message-ID: <374591B7.94445439@sai.com>
Source record: 70039
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,rec.radio.noncomm,rec.radio.scanner,rec.radio.shortwave

It is a freeware package for the VX5. It seems like a good program, but

I haven't had a chance to use it much.

The URL is http://www.geol.com/vx5/

Vic wrote:

> Dan,
>
> You mentioned "EVE" software ... can you provide us with more
> info?
> Never heard of it, is it shareware? On the web?
>
> Vic
>
> Dan <n9drm@nospam.tcon.net> wrote in message
> news:3744c5a5@news.oaktree.net...
> :
> : ...
> : > Hi! How are you doing? I'm going to get a new HT either Yaesu
> VX-5R or
> : > Kenwood TH-D7A(since I may try to operate packet radio). Any
> suggestion?
> : > Thanks!!
> :
> : I'm kinda partial to the VX5-R. I bought one a couple of weeks
> ago and
> : cannot put it down. The small size and the 5 watt output were
> big sellers
> : for me. I'm burnt out on packet, so that wasn't an issue. I
> also like the
> : ability to program the radio as I like it using either ADMS or
> EVE software.
> : It does a good job even on AM broadcast and the SW bands with a
> good
> : antenna. It is am amazing little radio given its' size.
> :
> : Dan
> :
> :
> :

5242. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Don W6JL <W6JL@ixpres.com>
Message-ID: <3745B5B7.7D69@ixpres.com>
Source record: 70040

Allan Kaplan wrote:
>
> I AM proficient on CW, but I still find it hazardous to my health when I
> am driving! Maybe it's the way I drive....
> YMMV, 73 de W1AEL!

Allan,

Perhaps it is, HI.

Don, W6JL

5243. Manual needed for CSI Super 32

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: tswisher@gcfn.org
Message-ID: <7i4eh7$dnp@acme.freenet.columbus.oh.us>
Source record: 70041

All;

Picked up a CSI (Communication Systems Inc) Super 32 controller at Dayton
for a nice price and need a manual for it, or at least programming and I/O
parameter information. All assistance appreciated.

Tom WA8PYR
--
* Tom Swisher, WA8PYR | tswisher @ gcfn.org *
* The Ohio Railway Museum | "Save Our Roads.. Ship It By Rail" *
* ORM WWW http://members.aol.com/orm578/page/ormhome.htm *
* Central Ohio Scanning http://www.qsl.net/wa8pyr/index.html *

5244. Help with Mitrek?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: DavidC <davidc@bit-net.com>
Message-ID: <7i4kglcik1@news2.bit-net.com>
Source record: 70042
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a Mitrek in the 2m range complete with head
and cables and three freq. modules.

I am looking for a kit, a design for, an already built, or
recommendation for a readily-modifiable VFO so that I
can free the rig from freq. modules ... anyone know of
such a thing?

If not, anyone know what the requirements would be to
implement a VFO for the Mitrek in the 2m range? Any
gotchas?

Thanks! & 73,
~~~
���
\ ~ / .... DavidC K1YP@qsl.net
~~~

5245. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3745E1EC.383C@ameritech.net>
Source record: 70043
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Mike Silva wrote:
>
> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> >
> >
> >Danny wrote:
> >>
> >> Mother Nature wrote:
> >> >
> >> > Hi from soc.penpals and let me say that all of this technical talk is
> >> > making me hot......<g>
> >>
> >> Well then 350 KHz, AM, FM. Are you butter yet?
> >>
> >> Danny
> >> --
> >
> >I'm melting as we speak.....I might just need a cold shower...oops, not
> >a good idea. I might get a spark and get tingly all over!!!!!!!
>
> Finally something good comes from the endless Morse debate!
>
> ... resonance, Kirchoff, reactance, transconductance, Thevenin, bipolar ...
> stay tuned while I get out the electronics dictionary...
>
> Mike
Don't foget Spark Gap. For those of you who do not know what DX is; it
means receiveing a radio/television signal from far away. From far away
as in you usually do not get a signal from this place. DX can also mean
how far your siganl is getting out. From everything that I read; if you
can run just 10 watts, and your siganl is getting out 300 to 400 miles
then that is better DX then somebody running 1000 watts and doing th
same thing.
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5246. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3745E2A0.1CC9@ameritech.net>
Source record: 70044
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Harry wrote:
>
> > Why do people hate logic and common sense so much?
>
> That is a silly question since the answer itself is common sense. If people
> were logical then who would have babies? Betamax video recorders would
> still be in use in Europe and Jesus may not have been nailed to a tree! If
> there is a God then perhaps she is sitting up there having a damn good
> laugh at us all - I am.
That is he
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5247. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3745E2BE.4DC7@ameritech.net>
Source record: 70045
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Harry wrote:
>
> > Why do people hate logic and common sense so much?
>
> That is a silly question since the answer itself is common sense. If people
> were logical then who would have babies? Betamax video recorders would
> still be in use in Europe and Jesus may not have been nailed to a tree! If
> there is a God then perhaps she is sitting up there having a damn good
> laugh at us all - I am.
Actyually; I thought that Betamax was better then VHS
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5248. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3745E425.1FDF@ameritech.net>
Source record: 70046
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Keith Bennett wrote:
>
> I'm having problems with receiving the Isle of Wight monochrome TV
> transmitter on Channel BBC-1 from this location. Has anybody based in
> Holland any tips on the subject?
>
> --
> From the ORIGINAL Trojan Horse!
> Please note that correct e-mail address is:-
> trojan.horse@virgin.net
> [Copyright 1999 by Trojan Horse]
> http://albums.photopoint.com/j/AlbumList?u=24561
> UIN #3457372
> http://members.home.net/magickal1/soc/
> wwp.mirabilis.com/3457372
> 3457372@pager.mirabilis.com
Since when do TV station broadcast in one colo(u)r as the name
Monochrome would imply. Heck, even Black and White is two colo(u)rs.
By the way, the best Black and White is what is know as a Twistee cone.
That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5249. Re: Help-QST/QEX articles urgently wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: maddog@io.com
Message-ID: <3745ef8e.67158772@news.io.com>
Source record: 70047

On Fri, 21 May 1999 00:42:12 -0700, oxf01@ukmax.com wrote:

>I urgently need a copy of two articles in QST & QEX. The months are QST
>may 96 and QEX jan 95.
>
>Is there anyone out there who would be able to send me a photocopy (or
>even fax) of the articles concerned? I will pay all copy and mail
>charges (I have a US bank account).
>
>Please e-mail me directly to oxf01@ukmax.com.
>
>tia,
>
>Mike, G4COA
>

Did you know you can get reprints of articles from ARRL for a nominal
fee?

e-mail: reprints@arrl.org
more info: http://www..arrl.org

73,
monty N5FC

5250. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Mother Nature <m_nature@hotmail.com>
Message-ID: <3745FC39.FED576DA@hotmail.com>
Source record: 70048
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Jim Kehler wrote:
>
> Keith Bennett <trojanhorse@virgin.net> wrote:
>
> >This is all very well but it does not answer my question as to what do
> >they talk about on rec.radio.amateur.dx?
>
> Well, Keith, we used to talk about DX. But then all these Morse code
> geeks and hot women from SOC.PENPALS started posting here and
> looks like everybody who was interested in DX left. Haven't seen
> anything DX related for quite a while.....
>
> 73, Jim KH2D

Party poopers......you mean they don't like us hot women from
soc.penpals?

5251. Re: AMIDON iron powder cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <3745f075.0@news.imaxx.net>
Source record: 70049

Try;

http://www.bytemark.com/amidon/content1.htm

73 Chuck KD9JQ

http://www.imaxx.net/~kd9jq

Alain wrote in message <3745EC92.284DD749@wanadoo.fr>...
>Hello,
>
>Could anyone tell me what is the MAX Flux Density
>that can be supported by the Amidon iron powder cores.
>
>Especially for the "red" and "yellow" one.
>
>If you have the information for the others "colors"
>it will be welcome.
>
>
>I manage to use the following formula
>
>Flux Density=(Epk x 10^2) / (4.44 x Ae x N x f)
>
>Where
> Epk = applied peak RMS volts
> AE = cross section in cm^2
> N = number of turns
> f = frequency in MHz
>
>I found this formula a long time ago in this news group.
>I hoppe is correct and give the flux in same unit than Amidon give it.
>
>
>Thank you
>
>73's from Alain F6CAX

5252. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Mother Nature <m_nature@hotmail.com>
Message-ID: <3745FE5E.F3D61312@hotmail.com>
Source record: 70050
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

OBI-WAN PEROGI wrote:
>
> Mike Silva wrote:
> >
> > Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> > >
> > >
> > >Danny wrote:
> > >>
> > >> Mother Nature wrote:
> > >> >
> > >> > Hi from soc.penpals and let me say that all of this technical talk is
> > >> > making me hot......<g>
> > >>
> > >> Well then 350 KHz, AM, FM. Are you butter yet?
> > >>
> > >> Danny
> > >> --
> > >
> > >I'm melting as we speak.....I might just need a cold shower...oops, not
> > >a good idea. I might get a spark and get tingly all over!!!!!!!
> >
> > Finally something good comes from the endless Morse debate!
> >
> > ... resonance, Kirchoff, reactance, transconductance, Thevenin, bipolar ...
> > stay tuned while I get out the electronics dictionary...
> >
> > Mike
> Don't foget Spark Gap. For those of you who do not know what DX is; it
> means receiveing a radio/television signal from far away.

<snip>

I try not to worry about these things as I've got cable.....<g>

5253. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: "H. Adam Stevens" <alien@jump.net>
Message-ID: <37460E85.4F368A6F@jump.net>
Source record: 70051
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

First of all I have a commercial pilot's license with airplane single and multiengine land and instrument ratings. I have been flying since 1967. I own and fly a Baron. No I didn't have to learn Morse to identify navigation aids, the CW is printed right on the chart or approach plate. The statement "don't know of anything used in flying their planes that would need to recieve (sic) morse code for any reason" is fascinating. What do your friends fly? Ultralights? What are their license numbers? Mine is 1774847. My Baron's call sign is N502TB. When you tune in an NDB, a VOR, or an ILS you are taught to listen to the CW identification to confirm that you have the correct station. This takes more time if you have to look at the chart or approach plate to see what the CW is rather than just hear the ID.
H.
WA5IGW

Sir wrote:

> H. Adam Stevens wrote:
> >
> > Well said.
> > I'm thinking of one area where I use Morse outside of ham radio: flying. Navigation
> > aids identify in Morse, but a 5 WPM proficiency suffices.
> >
> Two of my friends are pilots and say this is a bunch of bullshit.
> Neither of them had to learn morse code to get their pilot's license and
> don't know of anything used in flying their planes that would need to
> recieve morse code for any reason.

5254. Re: 10 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Randy and Cara Randall <crrandal@seidata.com>
Message-ID: <37461E3C.169C6E8B@seidata.com>
Source record: 70052

Where can I get info on the cheapie-quikie ten'r?
Thanks,
Randy KB8ASO
--
This message comes to you from Milan, IN, USA. Home of no traffic
lights, lots of fields, and clean air!
For now.....

bullmeat@my-dejanews.com wrote:

> Looking for an easy to build 10 meter qrp radio.I've built the
> cheapie-quikie ten'r but looking for something else to build,thanks.
>
> --== Sent via Deja.com http://www.deja.com/ ==--
> ---Share what you know. Learn what you don't.---

5255. help power from coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: redrum <try-this@nowhere.com>
Message-ID: <7i599i$9pu@journal.concentric.net>
Source record: 70053

how do you pull power from the transmission line of a radio with out changing the swr. I would like to make a remote antenna switch for switching around my preamp. would appreciate and help.

email
scandog@concentric.net

5256. Re: AMIDON iron powder cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Donaly <dtdonaly@pacbell.net>
Message-ID: <3746005F.3747@pacbell.net>
Source record: 70054

Alain wrote:
>
> Hello,
>
> Could anyone tell me what is the MAX Flux Density
> that can be supported by the Amidon iron powder cores.
>
> Especially for the "red" and "yellow" one.
>
> If you have the information for the others "colors"
> it will be welcome.
>
> I manage to use the following formula
>
> Flux Density=(Epk x 10^2) / (4.44 x Ae x N x f)
>
> Where
> Epk = applied peak RMS volts
> AE = cross section in cm^2
> N = number of turns
> f = frequency in MHz
>
> I found this formula a long time ago in this news group.
> I hoppe is correct and give the flux in same unit than Amidon give it.
>
> Thank you
>
> 73's from Alain F6CAX

The formula will give you the flux density all right, but it
won't tell you the maximum flux density a core will handle.
The Amidon book gives a table of maximum flux density versus
frequency: 500 Gauss @ 100 khz, 150 gauss @ 1 Mhz, etc. down to
30 Gauss @ 28 Mhz. The information should be on the Amidon
website.

Tom Donaly KA6RUH

5257. SO42P IC info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Norman Gillaspie <norman@pcseng.com>
Message-ID: <37465195@jolt.pagesat.net>
Source record: 70055

I have seen a couple of articles in VHF Communications magazine
using a SO42P mixer oscillator IC. Does anyone know who makes this part and
where I can get
a data sheet?

Thanks Norman

norman@pcseng.com
--
Usenet Newhostsing and Newsfeeds for info see
www.pc-sat.com or send email to info@pc-sat.com

5258. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <MHmK8GAhWdR3Ew80@virgin.net>
Source record: 70056
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <375f4b9b.6604563@news.lineone.net>, Walt Davidson
<no.junk.mail@thank.you> writes
>On Fri, 21 May 1999 08:08:42 +0100, Keith Bennett
><trojanhorse@virgin.net> wrote:
>
>>I'm having problems with receiving the Isle of Wight monochrome TV
>>transmitter on Channel BBC-1 from this location. Has anybody based in
>>Holland any tips on the subject?
>
>Yes. Buy a time-travel machine and use it to either:
>
>(1) take you back 10 years, or
>
>(2) take you for a very quick trip in space to a location at least 10
>light years away from Earth.
>
>Then you will start picking up the BBC-1 405-line monochrome
>transmissions from Rowridge.
Is Walt trying to take the urine out of me?

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5259. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <OXFKIKAsXdR3EwcJ@virgin.net>
Source record: 70057
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <7i3afnhdb1@brokaw.wa.com>, Jim Kehler <kh2d@my-
dejanews.com> writes
>Keith Bennett <trojanhorse@virgin.net> wrote:
>
>>This is all very well but it does not answer my question as to what do
>>they talk about on rec.radio.amateur.dx?
>
>Well, Keith, we used to talk about DX. But then all these Morse code
>geeks and hot women from SOC.PENPALS started posting here and
>looks like everybody who was interested in DX left. Haven't seen
>anything DX related for quite a while.....

But Jim, this is all very well, but I still don't know what DX means as
EP will not tell me!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5260. Help-QST/QEX articles urgently wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: oxf01@ukmax.com
Message-ID: <37450E54.5757@ukmax.com>
Source record: 70122

I urgently need a copy of two articles in QST & QEX. The months are QST may 96 and QEX jan 95.

Is there anyone out there who would be able to send me a photocopy (or even fax) of the articles concerned? I will pay all copy and mail charges (I have a US bank account).

Please e-mail me directly to oxf01@ukmax.com.

tia,

Mike, G4COA

5261. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7i28d5$sm3@news.Hawaii.Edu>
Source record: 70123
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Keith Bennett <trojan.horse@virgin.net> wrote:
>Well naturally I read the subject matter and thought here is an item
>about Inspector Morse. No doubt you have heard of Inspector Morse?

Listen to the theme song at the end of the program; you'll hear
the violins sending M O R S E over and over (in Morse code, of course).

Jeff KH6O

5262. Need Stainless Steel quick links

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19990520204806.18187.00003178@ng-cq1.aol.com>
Source record: 70124

Need some stainless steel quick links, size not too important, but 1/4 inch diameter stock would be fine.

73

Evan

5263. Re: Help-QST/QEX articles urgently wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19990520210432.25677.00002788@ng-fc1.aol.com>
Source record: 70125

>
>I urgently need a copy of two articles in QST & QEX. The months are QST
>may 96 and QEX jan 95.
>
>Is there anyone out there who would be able to send me a photocopy (or
>even fax) of the articles concerned? I will pay all copy and mail
>charges (I have a US bank account).
>
>Please e-mail me directly to oxf01@ukmax.com.
>
>tia,
>
>Mike, G4COA
>
May I help? W4ZCB

5264. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7i2jos$78l@news.Hawaii.Edu>
Source record: 70126
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <3743423D.7069@sir.com>, Sir <sir@sir.com> wrote:
>I don't see any groups listed where the Morse Code issue would not be
>appropriate.

That's because you're not familiar with the rec.radio hierarchy; here's
a reminder:

Subject: List of the rec.radio newsgroups
Followup-To: poster
Approved: news-answers-request@mit.edu,rec.radio.info-moderator@primenet.com
Distribution: world
Expires: 01 June 1999
Summary: This article provides a list of the rec.radio newsgroups; it is
posted alternately with the longer "Guide to the Rec.radio NGs"
Keywords: radio amateur ham cb scanner shortwave netiquette
X-Last-Updated: 1998/03/29
Version: 1.1 created 98/03/05 03:50:23
Posting-Frequency: posted on the 1st of each month

Archive-name: radio/personal-brief-introduction

In an effort help ensure a poster's article reaches the appropriate
audience, below is a list of the rec.radio newsgroups. In most cases,
a group's name will explain its purpose. Cross-posting should rarely
be necessary.

rec.radio.broadcasting (devoted to the broadcast industry; moderated)
rec.radio.cb
rec.radio.info (periodic informational bulletins; moderated)
rec.radio.scanner
rec.radio.shortwave
rec.radio.swap (for buying, selling, and trading; not a discussion group)

rec.radio.amateur.antenna
rec.radio.amateur.boatanchors (tube-type communications equipment)
rec.radio.amateur.digital.misc (packet, pactor and other digital modes)
rec.radio.amateur.dx (long-distance amateur communications)
rec.radio.amateur.equipment (questions, comments regarding commercially-
built amateur gear; not for buying/selling)
rec.radio.amateur.homebrew (devoted to home-building ham gear)
rec.radio.amateur.policy (issues include code, restructuring, local
restrictions in conflict with FCC R&R)
rec.radio.amateur.space (satellites, meteor scatter, EME)
rec.radio.amateur.misc (any topic not covered in the above groups)

(At least two other English language radio hierarchies exist, prefixed with "uk" (United Kingdom), and "aus" (Australia), in place of "rec.")

Again, cross-posting should rarely be necessary. Many times, a long-running thread results from a single cross-posted article, and the contents of such a thread drift further and further away from being "on-topic" in the various NGs that receive each and every followup.

For more detailed information, see "Guide to the Rec.radio Newsgroups" posted on the 15th of each month.

Jeffrey Herman, KH6O, and your friendly rec.radio.amateur working-group

5265. Re: Doug Hall Interface serial protocol needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: "R. E. Curry" <recurry@curry.org>
Message-ID: <fj513.156$Nb2.292@news.rdc1.sfba.home.com>
Source record: 70127

Shawn,
Actually it's not but I did manage to get some info on it. Now I need the
Kenwood serial protocol but my guess is I'll have to figure that out myself.

Regards,
Ron
ke6wed

Cyberhax <cyberhax@thegrid.net> wrote in message
news:Zl413.358$f4.28889@alfalfa.thegrid.net...
> Hey Ron,
>
> You have likely found out by now but I think the info your looking for is
> posted on the Link Communications web site.
>
> Ciao,
>
> Shawn WB6JWB
> R. E. Curry wrote in message ...
> >Does anybody know where to get information on the "DHE Generice Data
> Stream"
> >protocol most all the repeater controllers use to interface to the Doug
> Hall
> >Interface? I'd rather not reverse engineer it. I want to be able to
control
> >one from a PC.
> >
> >Regards,
> >Ron
> >ke6wed
> >
> >
>
>

5266. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3744E47A.42FC@ameritech.net>
Source record: 70128
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Jeffrey Herman wrote:
>
> D Best <dbest@iquest.net> wrote:
> >It won't, so I think you might save yourselves some heartache and look at
> >the subject before you read the message -- or just ignore the thread
> >altogehter. Is that really so difficult?
>
> So are you saying that you wouldn't mind if the 200,000+ newsgroups were
> lumped together as just one NG? After all, one would only need to inspect
> the subject line as one waded through the 10 million posts each day,
> right?
Well that is true
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5267. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3744E49F.27BC@ameritech.net>
Source record: 70129
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Jeffrey Herman wrote:
>
> Keith Bennett <trojan.horse@virgin.net> wrote:
> >Well naturally I read the subject matter and thought here is an item
> >about Inspector Morse. No doubt you have heard of Inspector Morse?
>
> Listen to the theme song at the end of the program; you'll hear
> the violins sending M O R S E over and over (in Morse code, of course).
>
> Jeff KH6O
What program?
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5268. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-21 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3744E9AA.34A2@ameritech.net>
Source record: 70130
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,soc.penpals,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Keith Bennett wrote:
>
> In article <3743440D.7F2B@sir.com>, Sir <sir@sir.com> writes
> >> Yeah. I found this really interesting. But what has all this got to do
> >> with Soc Penpals? I don't really care anything about radio
> >> communications of any sort. So why not just keep this on the boards that
> >> apply and take it off soc.penpals.
> >
> >
> >Let me try to explain. When people reply to a post on a newsgroup, they
> >don't usually read what newsgroups are all listed and delete the ones
> >they THINK are not appropriate. They just hit send, and it goes to all
> >the newsgroups the original post was on. Blaming the person who replied
> >to the post is silly, he did not choose the newsgroups listed.
> >
> >And to delete any of the groups would be just as silly, because you are
> >sending a reply to the post and don't know which of the groups he will
> >be checking back to read your reply, so it makes sense to leave
> >everything as is.
> >
> >Why do people hate logic and common sense so much?
> I am the first to agree that many lack common sense these days, but what
> happened to all those complaints we used to get from newsgroups that
> your posting was 'inappropriate' to the newsgroup in question!
> Let's suppose we broadcast this thread in say uk.misc or talk.bizarre,
> or maybe even soc.culture.israel then they would soon let us know about
> it!
>
> --
> From the ORIGINAL Trojan Horse!
> Please note that correct e-mail address is:-
> trojan.horse@virgin.net
> [Copyright 1999 by Trojan Horse]
> http://albums.photopoint.com/j/AlbumList?u=24561
> UIN #3457372
> http://members.home.net/magickal1/soc/
> wwp.mirabilis.com/3457372
> 3457372@pager.mirabilis.com
Don't forget soc.culture.polish
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5269. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <374765E6.37B0@sir.com>
Source record: 69981
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> Baron's call sign is N502TB. When you tune in an NDB, a VOR, or an ILS you are taught to
> listen to the CW identification to confirm that you have the correct station.

Apparently not any more. Neither of my friends ever HEARD of this BS
and they both have licenses and fly planes. Perhaps back in the 60's
things were different.

5270. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <374764EA.173C@sir.com>
Source record: 69982
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

> Computers are like Old Testament gods; -

They are not alike at all. One is real, one is fiction. BIG
difference.

5271. Re: VHF PA Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <MFnfEIA65oR3EwM9@g3uda.demon.co.uk>
Source record: 69983

In article <7huqf6$a7b$1@nnrp1.deja.com>, ve6inm@telusplanet.net writes
>The BLY33 is a Philips transistor. Not sure of the ratings, but I have
>a few BLY88's, and they are VHF at 20watts.
>73 de VE6INM
>In article <7hsa2fqdp1@uranium.btinternet.com>,
> "David Cunningham" <D.L.C@btinternet.com> wrote:
>> I have recently dismantled a couple of old PMR radios, and have the
>> following PA transistors:
>>
>> BLY33
>> ZRF0112
>> ZRF0113
>> I assume the latter two are a complementary pair.
>> Please let me know if you have any info on these devices.
>> Many thanks, John
>>
>>
>
>
>--== Sent via Deja.com http://www.deja.com/ ==--
>---Share what you know. Learn what you don't.---

Hi David

Re the BLY33:

Vces max (peak rf >1.0Mhz) 66V

Vceo max 33V

Icm max (peak rf >1.0Mhz)..... 1.5A

Ptot max (Tcase <100degC)..... 2.0W

Tj max 150degC

fT min (Ic = 0.2A), Vce=5V, f=100Mhz 250Mhz

Performance in a 175Mhz common emitter amp:-

Vcc Supply 13.8V

Po Output Power 2.0W

Gp Typ. Power Gain 8.0dB

"Nu" Typ. efficiency 80%

... Ken

5272. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: "H. Adam Stevens" <alien@jump.net>
Message-ID: <37477A39.2453AD98@jump.net>
Source record: 69984
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Right now. Right here. You don't know anyone in aviation. I flew my last IFR cross country Thursday. Damn if the Centex VOR didn't go _. _. ._ _ _._ "CWK". Then the Waco VOR went ._ _._. _ "ACT". Then the Waco ILS went .. ._ _._. "IACT". The Navaids that don't do it (CW ID) are LORAN and GPS. Pack up any sectional aeronautical chart or approach plate and the
CW is printed next to the Navaid identifier. That's the last for your troll, wankstain.
H.

Sir wrote:

> > Baron's call sign is N502TB. When you tune in an NDB, a VOR, or an ILS you are taught to
> > listen to the CW identification to confirm that you have the correct station.
>
> Apparently not any more. Neither of my friends ever HEARD of this BS
> and they both have licenses and fly planes. Perhaps back in the 60's
> things were different.

5273. Re: Morse code/Trying to reach Hawaii

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <jIRxPHA$5yR3Ewo6@virgin.net>
Source record: 69985
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <7i76i8$52s@news.Hawaii.Edu>, Jeffrey Herman
<jeffreyh@Hawaii.Edu> writes
>Keith Bennett <trojan.horse@virgin.net> wrote:
>>Hey Jeff, what are the chances of you sending me a Hawaii'an beach
>>shirt?
>
>Email me with your size and postal address. // Jeff KH6O
They won't allow us packages here in Wormwood Scrubs. Nice to offer
though!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5274. AMIDON iron powder cores

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Alain <alain.dumont@wanadoo.fr>
Message-ID: <3745EC92.284DD749@wanadoo.fr>
Source record: 70058

Hello,

Could anyone tell me what is the MAX Flux Density
that can be supported by the Amidon iron powder cores.

Especially for the "red" and "yellow" one.

If you have the information for the others "colors"
it will be welcome.

I manage to use the following formula

Flux Density=(Epk x 10^2) / (4.44 x Ae x N x f)

Where
Epk = applied peak RMS volts
AE = cross section in cm^2
N = number of turns
f = frequency in MHz

I found this formula a long time ago in this news group.
I hoppe is correct and give the flux in same unit than Amidon give it.

Thank you

73's from Alain F6CAX

5275. JENNINGS vaccum relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Alain <alain.dumont@wanadoo.fr>
Message-ID: <3745F043.358B3456@wanadoo.fr>
Source record: 70059

Hello,

I found at flea market some vaccum relays from JENNINGS
Models are:

RF4D-26D2495 and RB1D-26N300

I would like to know the following informations for each:

- Max HF current flowing through the contacts (when closed)
- Max voltage between contacts (when open)

AND MORE

The model RB1D-26N300 seems to switch fast enough for operating
in full QSK (for CW at 25WPM)
I have tested it and found a closing time of 15ms and opening time of 10ms
BUT, i don't know if this relay is able to switch on/off millions of times
as it will be necessary in QSK CW.

Does anyone know the "life time " given by JENNINGS for this relay ?

Thank's a lot for any informations

73'S from Alain F6CAX

5276. Re: WTD:Club newsletter with 3 Part CB to 6 meter article

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: TLNixon@revealed.net
Message-ID: <37460557.14754383@news.revealed.net>
Source record: 70060

Thanks All!!!!
I've visited the site, and it looks pretty good.

Terry-WB0VQP

On Thu, 20 May 1999 22:32:26 GMT, benedict69@hotmail.com wrote:

>I know that problem!
>
>Many thanks.
>Richard
>
>On Thu, 20 May 1999 11:53:11 -0500, "John Russell"
><longjohn@revealed.net> wrote:
>
>>http://www.qsl.net/vk4wss/sarsnews.htm Thjis page has the current issue as
>>well as links to past issues. Sorry I wasn't more specific, it was early and
>>I hadn't downed my first cup of coffee yet ;-)
>>
>>John
>>
>><benedict69@hotmail.com> wrote in message
>>news:3744faf5.5385237@news.bigpond.com...
>>It's difficult to see. Can you be a bit more specific please?
>>
>>Thanks
>>Richard
>>
>>
>>
>

5277. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7i53th$isd@news.Hawaii.Edu>
Source record: 70061
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

OBI-WAN PEROGI <theoldbrooklynkid@ameritech.net> wrote:
>Jeffrey Herman wrote:
>> Keith Bennett <trojan.horse@virgin.net> wrote:

>> >Well naturally I read the subject matter and thought here is an item
>> >about Inspector Morse. No doubt you have heard of Inspector Morse?

>> Listen to the theme song at the end of the program; you'll hear
>> the violins sending M O R S E over and over (in Morse code, of course).

>What program?

Inspector Morse. (A&E, Tuesday evenings) // Jeff KH6O

5278. Re: help power from coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37468BFB.A366477E@bellsouth.net>
Source record: 70062

redrum wrote:
> how do you pull power from the transmission line of a radio with out
> changing the swr. I would like to make a remote antenna switch for
> switching around my preamp. would appreciate and help.

You couple DC (or low-frequency AC) power into the coax in the house,
using a RF choke to keep the radio signals from getting into the power
supply and a capacitor to keep the DC from feeding back into your
radio. Then, you use the same circuit in reverse at the antenna/antenna
switch. The diagram is pretty simple, and inexpensive to build, but I'm
REALLY bad at ASCII art! If you want, I can email you a .GIF file of a
schematic.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

5279. Replacement Pin Diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: peter@xkeys.demon.co.uk
Message-ID: <37466469.6983694@news.demon.co.uk>
Source record: 70063

I need to replace a pin diode (KS4522 or M1308) in my Ten Tec 1210 transverter (self built).

Can anyone suggest a suitable replacement for this diode. It seems that both the KS4522 and M1308 are absolete and no longer available in the UK.

Peter

5280. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: The English Patient <englishpatient@england.com>
Message-ID: <WIv13.7441$%x.5784@wards>
Source record: 70064
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Keith Bennett wrote in message ...
>In article <7i3afnhdb1@brokaw.wa.com>, Jim Kehler <kh2d@my-
>dejanews.com> writes
>>Keith Bennett <trojanhorse@virgin.net> wrote:
>>
>>>This is all very well but it does not answer my question as to what do
>>>they talk about on rec.radio.amateur.dx?
>>
>>Well, Keith, we used to talk about DX. But then all these Morse code
>>geeks and hot women from SOC.PENPALS started posting here and
>>looks like everybody who was interested in DX left. Haven't seen
>>anything DX related for quite a while.....
>
>But Jim, this is all very well, but I still don't know what DX means as
>EP will not tell me!
>

I told you trojan...Dx is cleared up easily with creams
If you keep picking at it......well...it'll scar.

The English Patient
>--
>From the ORIGINAL Trojan Horse!
>Please note that correct e-mail address is:-
> trojan.horse@virgin.net
>[Copyright 1999 by Trojan Horse]
>http://albums.photopoint.com/j/AlbumList?u=24561
>UIN #3457372
>http://members.home.net/magickal1/soc/
>wwp.mirabilis.com/3457372
>3457372@pager.mirabilis.com

5281. Re: Help with Mitrek?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Reed Park <reedpark@nbnet.nb.ca>
Message-ID: <3746A19F.EF9CFFDC@nbnet.nb.ca>
Source record: 70065
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

DavidC wrote:

> I have a Mitrek in the 2m range complete with head
> and cables and three freq. modules.
>
> I am looking for a kit, a design for, an already built, or
> recommendation for a readily-modifiable VFO so that I
> can free the rig from freq. modules ... anyone know of
> such a thing?
>
> If not, anyone know what the requirements would be to
> implement a VFO for the Mitrek in the 2m range? Any
> gotchas?
>
> Thanks! & 73,
> ~~~
> ï¿½ï¿½ï¿½
> \ ~ / .... DavidC K1YP@qsl.net

I don't know if they are still around, but GLB used to make a
synthesizer kit. It selected TX and RX frequencies separately.
You could also select reverse at the flick of a switch. I used
one on a Mocom 70 for many years.

Sorry I couldn't be of more help. I think the synthesizer would be
much better than a VFO, as at least you could then use any
repeater in your area.

7 3
Reed

--

ARROW Research (Avro CF-105)
Reed Park
252 Gauvin Road
Dieppe, New Brunswick
Canada E1A1M1

Amateur Radio VE1NU
WW II, # 19 SET user
I.C.Q. # 4138282

5282. Morse code/Trying to reach Hawaii

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <aMH$uGAmAmR3EwPW@virgin.net>
Source record: 70066
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <7i53th$isd@news.Hawaii.Edu>, Jeffrey Herman
<jeffreyh@Hawaii.Edu> writes
>OBI-WAN PEROGI <theoldbrooklynkid@ameritech.net> wrote:
>>Jeffrey Herman wrote:
>>> Keith Bennett <trojan.horse@virgin.net> wrote:
>
>>> >Well naturally I read the subject matter and thought here is an item
>>> >about Inspector Morse. No doubt you have heard of Inspector Morse?
>
>>> Listen to the theme song at the end of the program; you'll hear
>>> the violins sending M O R S E over and over (in Morse code, of course).
>
>>What program?
>
>Inspector Morse. (A&E, Tuesday evenings) // Jeff KH6O
Hey Jeff, what are the chances of you sending me a Hawaii'an beach
shirt?

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5283. Re: Replacement Pin Diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7i6bge$c37$1@news1.fast.net>
Source record: 70067

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

<peter@xkeys.demon.co.uk> wrote in message
news:37466469.6983694@news.demon.co.uk...
> I need to replace a pin diode (KS4522 or M1308) in my Ten Tec 1210
> transverter (self built).
>
> Can anyone suggest a suitable replacement for this diode. It seems
> that both the KS4522 and M1308 are absolete and no longer available in
> the UK.
>
> Peter

Check HP's web site at http://www.hp.com and look under
electronic components.

Also check Alpha at http://www.alphaind.com .

Also try Infineon Technologies (formerly Siemens
Microelectronics at http://www.infineon.com .

I don't know the characteristics of the PIN diodes you've
referenced above, but both HP, Alpha, and Infineon (ex-
Siemems) have wide selections.

As a last resort, you could try the 1N4007 ... while it's
a high PIV 1A rectifier, it has a PIN structure (it's the
only one of the 1N400x series which does). It may work,
but may not be the optimum choice for your application,
depending on frequency, power level, available drive
current, etc.

73,

- --
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

```
-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN0axEpe+N6+q84HiEQJfwQCeLCZVFEnazP4RNtnAa6J1aW/JpCcAniHH
xa669CQ//a+Jvkk2p0Ef7y2V
=385v
-----END PGP SIGNATURE-----
```

5284. Re: Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <3746B9F2.AA5EE63E@tir.com>
Source record: 70068

Hi,

Yours is a very strong testimonial. I have never participated in any of the debates beyond reading other peoples' comments and watching flames erupt.

In spite of your irrefutable points there are folks who will scream. I'll share some of the heat this time around (grin).

I haven't seen any anti-morse statements that didn't appear to be lame excuses from lazy people. Never mind about reason or logic.

73

Bill KU8H

5285. Re: Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: beroset@mindspring.com
Message-ID: <3746d37b.39038471@news.mindspring.com>
Source record: 70069

Bill <wrc@tir.com> wrote:

>I haven't seen any anti-morse statements that didn't appear to be lame
>excuses from lazy people. Never mind about reason or logic.

I wouldn't characterize myself as "anti-morse" at all -- in fact, I'm actively working on that skill now -- but I think it's too facile to dismiss the debate as "lame excuses from lazy people." Incentive licensing makes sense to me, but consider the upgrade from Advanced to Extra. The written test is actually easier than the Advanced exam, but we require 20wpm code. Is 20wpm code speed more important than, say, more technical knowledge about microprocessors? Why not a soldering test? How about a DSP programming test? Among those who aren't just "lazy people" the debate, IMHO, is more about which skills are most valuable, and which skills are less valuable. Personally, I'll continue to work on my code speed regardless, since I intend to use it, but not every amateur does. A friend of mine refers to himself as a "no-code Extra" because it has been so long since he used code, he no longer remembers it.

Ed
KF4UQX

5286. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Barry Smith <baz@g4iat.demon.co.uk>
Message-ID: <ant2216210b0nGS$@g4iat.demon.co.uk>
Source record: 70070
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <3745E425.1FDF@ameritech.net>, OBI-WAN PEROGI
<URL:mailto:theoldbrookltnkid@ameritech.net> wrote:

> Since when do TV station broadcast in one colo(u)r as the name
> Monochrome would imply. Heck, even Black and White is two colo(u)rs.
> By the way, the best Black and White is what is know as a Twistee cone.
> That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.

If you're going to be pedantic at least check your facts first.
Monochrome - (of, using or being) reproduction or execution in 1 colour,
black and white, or shades of grey.
And technically speaking, black and white, being the absorbtion or reflection
of the whole spectrum, are not colours.

Barry
--
Support the Acorn User RC5-64 cracking effort
See http://www.acornusers.org/rc5/

5287. Boonton standard inductors for "Q" meters, 160, 260

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: Chuck O'Neal <coneal@ultranet.com>
Message-ID: <IXB13.6539$AL5.26075@ndnws01.ne.mediaone.net>
Source record: 70071
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

513A "Q" standard, 249uH, in the felt lined Boonton mahogony box
with application instructions. Looks excellent, almost new. $20

4 standard inductors, Model 103A for the following frequency ranges:
.8 to 2 MC - 100uH
1.5 to 4.5 MC - 25 uH
5 to 14 MC - 2.5 uH
20 to 35 MC - .5 uH
$10 each

3 older style standard inductors, silver plated cases
50 to 150KC - 22.5 mH
4.8 to 17.5MC - 2.44 uH
14.2 to 50 MC - .28 uH
$5 each

$70 shipped for all of them. If you want less, then indicated price
plus shipping.

regards,
Chuck...

5288. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: stevens@mindspring.com
Message-ID: <3746f444.8577771@news.mindspring.com>
Source record: 70072
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

DX is ,technically,making 'contact' with a station in another Country.

On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
<theoldbrookltnkid@ameritech.net> wrote:

>Mike Silva wrote:
>>
>> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
>> >
>> >
>> >Danny wrote:
>> >>
>> >> Mother Nature wrote:
>> >> >
>> >> > Hi from soc.penpals and let me say that all of this technical talk is
>> >> > making me hot......<g>
>> >>
>> >> Well then 350 KHz, AM, FM. Are you butter yet?
>> >>
>> >> Danny
>> >> --
>> >
>> >I'm melting as we speak.....I might just need a cold shower...oops, not
>> >a good idea. I might get a spark and get tingly all over!!!!!!!
>>
>> Finally something good comes from the endless Morse debate!
>>
>> ... resonance, Kirchoff, reactance, transconductance, Thevenin, bipolar ...
>> stay tuned while I get out the electronics dictionary...
>>
>> Mike
>Don't foget Spark Gap. For those of you who do not know what DX is; it
>means receiveing a radio/television signal from far away. From far away
>as in you usually do not get a signal from this place. DX can also mean
>how far your siganl is getting out. From everything that I read; if you
>can run just 10 watts, and your siganl is getting out 300 to 400 miles
>then that is better DX then somebody running 1000 watts and doing th
>same thing.
>--
>REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
>ESPECIALLY WHEN YOUR ON A DATE. BURP

5289. Re: Oscillator problem with HB tube xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: n2ey@aol.com
Message-ID: <19990522165056.10853.00003670@ngol04.aol.com>
Source record: 70073

In article <19990517114359.12426.00001606@ng30.aol.com>, cartercook@aol.com (CarterCook) writes:

>I need some ideas from you who know tube transmitters.

That'd be me, for one.
>
>I have built a 6DQ5 transmitter from the 1962 ARRL Handbook and am having
>difficulty with the 6AG7 oscillator section. The lower half of the 6AG7 acts
>as
>a xtal oscillator. Top half of the tube is connected to a tuned circuit and
>is
>supposed to amplify the signal for the output tube grid.

Or multiply it to a higher band.
>
>The lower section of the 6AG7 works great. I can hear it fine on an adjacent
>receiver. However, I can't get the 6AG7 to induce the necessary 2 mils of
>current onto the grid of the final.

No grid current at all?
>
>I've checked the wiring and verified with a grid dipper that the 6AG7 tuned
>circuit is resonant. I have rechecked associated components for value, opens
>and shorts.
>
>What's my next troubleshooting steps? Any suggestions will be gratefully
>received.
>
Hello Carter,

1962 Handbook, pages 178 to 181, I presume. I need more info, though.

First question: Are you using crystals or VFO, and what band(s) are involved? (both frequency of xtal/VFO and frequency of output circuit). For example, "40 meter xtal tripling to 15 meters" - "80 meter xtal operating straight through".

Second question: Is the metering circuit in your rig an exact copy of the Handbook circuit? If not, how has it been modified? The original shows a 15 mil meter - 2 mils will hardly budge it. Old meters can be inaccurate - you might want to check the metering setup before you do anything else. Here's how:

Disconnect the rig from the power lines and antenna, and remove the 6DQ5 tube. Get a known good meter (VOM is handy for this) a 1.5 volt battery, and fixed resistors of about 150 and 750 ohms. Hook the battery, resistor, and VOM in series - you can compute the current by I = E/R (A 1.5 volt battery and a 150 ohm resistor will produce a flow of 1.5/150 or 1/100 amp - 10 milliamperes).

The VOM should read about 10 mills, or a little less (the VOM has some resistance). Now disconnect the negative side of the battery from the series circuit, and connect it to the rig's chassis. Put the lead removed from the negative side of the battery into Pin 1 (the grid) of the 6DQ5. This puts the VOM/resistor/battery circuit in series with the metering circuit of the rig. You should get a very low reading, if any. Now short out the 47 K grid resistor - you should read about 10 mils on the VOM and 10 mils on the rig's meter. Substitute the 750 ohm resistor to see what 2 mils looks like. If the VOM reads but not the rig's meter, you've got a bad metering circuit. If the rig meter works fine, something else is wrong.

Third question: Have you tried various 6AG7s and 6DQ5s? Old bottles that look good may not be, particularly in RF circuits. But don't chuck out a suspect until you KNOW it's bad.

Fourth question: Have you checked the plate and screen voltages on the 6AG7? The circuit shows 400 volts on the plate, and an adjustable screen voltage. The circuit will still oscillate with the plate circuit open, and with very low screen voltage. RFC2 may be open, or the wrong value.

Fifth question: Listen to the signal on a receiver. Does it peak sharply when the 6DQ5 grid circuit is tuned to resonance? A dipper's calibration has to be checked against a receiver - they are notoriously inaccurate.

A single 6AG7 crystal oscillator of the type in this rig (it's a "grid-plate" type) will produce well over 8 mills of grid current, when doubling to 20 meters - enough to drive a pair of 807s. Higher order multiplication efficiency frops fast, though.

My suspicions are:

- Bad tube or other component
- Defect in the metering circuit
- Inadequate drive to 6AG7
- Bad bypass or coupling capacitor
- Bad grid leak resistor
- Wrong voltages on the 6AG7

Note that you have to close the key to ground the 6DQ5 cathode to get any grid current flow.

I have lots and lots more suggestions - the above is just a start.

73 de Jim, N2EY

5290. Plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: G8ASO <bajones@worcester.demon.co.uk>
Message-ID: <37471955@dnews.tpgi.com.au>
Source record: 70074
Cross-posted to: alt.pirate.radio,alt.radio.pirate,aus.radio.amateur.misc,nl.radio.amateur,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Greetings

Yes a blatant plug for our club site!

http://www.laughingpoliceman.com

Check it out without further delay!

73s G8ASO

5291. Re: Morse code/Trying to reach Hawaii

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7i76i8$52s@news.Hawaii.Edu>
Source record: 70075
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Keith Bennett <trojan.horse@virgin.net> wrote:
>Hey Jeff, what are the chances of you sending me a Hawaii'an beach
>shirt?

Email me with your size and postal address. // Jeff KH6O
--
Fingerprint Classification Services, Inc.: Your own personal copy
of your fingers' inked impressions, classified utilizing the Henry
classification formula (with FBI extensions), $15 + postage.

5292. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37474D64.3E01@ameritech.net>
Source record: 70076
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

Steven wrote:
>
> DX is ,technically,making 'contact' with a station in another Country.
>
> On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
> <theoldbrookltnkid@ameritech.net> wrote:
>
> >Mike Silva wrote:
> >>
> >> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> >> >
> >> >
> >> >Danny wrote:
> >> >>
> >> >> Mother Nature wrote:
> >> >> >
> >> >> > Hi from soc.penpals and let me say that all of this technical talk is
> >> >> > making me hot......<g>
> >> >>
> >> >> Well then 350 KHz, AM, FM. Are you butter yet?
> >> >>
> >> >> Danny
> >> >> --
> >> >
> >> >I'm melting as we speak.....I might just need a cold shower...oops, not
> >> >a good idea. I might get a spark and get tingly all over!!!!!!!
> >>
> >> Finally something good comes from the endless Morse debate!
> >>
> >> ... resonance, Kirchoff, reactance, transconductance, Thevenin, bipolar ...
> >> stay tuned while I get out the electronics dictionary...
> >>
> >> Mike
> >Don't foget Spark Gap. For those of you who do not know what DX is; it
> >means receiveing a radio/television signal from far away. From far away
> >as in you usually do not get a signal from this place. DX can also mean
> >how far your siganl is getting out. From everything that I read; if you
> >can run just 10 watts, and your siganl is getting out 300 to 400 miles
> >then that is better DX then somebody running 1000 watts and doing th
> >same thing.
> >--
> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;

> >ESPECIALLY WHEN YOUR ON A DATE. BURP
No, it is a long distance contant or reception. It is all in how you
view it
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5293. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37474ED4.58D3@ameritech.net>
Source record: 70077
Cross-posted to: soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Brian wrote:
>
> In article <7i3afnhdb1@brokaw.wa.com>,
> kh2d@my-dejanews.com wrote:
> > Keith Bennett <trojanhorse@virgin.net> wrote:
> >
> > >This is all very well but it does not answer my question as to what
> do
> > >they talk about on rec.radio.amateur.dx?
> >
> > Well, Keith, we used to talk about DX. But then all these Morse code
> > geeks and hot women from SOC.PENPALS started posting here and
> > looks like everybody who was interested in DX left. Haven't seen
> > anything DX related for quite a while.....
> >
> > 73, Jim KH2D
>
> Jim, nothing wrong with hot women interested in dx. Sounds like just
> what we need in amateur radio. Those topless Polish QSL cards are
> getting kind of worn, you know. ;^)
>
> 73,
> Brian/N0iMD
>
> --== Sent via Deja.com http://www.deja.com/ ==--
> ---Share what you know. Learn what you don't.---
SO ARE THE FRENCH, CHINESE, ENGLISH, AMERICAN, AND RUSSIAN ONES.
NOW THAT TAKES CARE OF THE SECUITY COUNCIL.
HOW ABOUT THOSE ITALIAN, SICILIAN, GERMAN, SPANISH, IRISH, BELGIUM,
GOING FOR ECC AND NATO NOW
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5294. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37474FA6.1655@ameritech.net>
Source record: 70078
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Barry Smith wrote:
>
> In article <3745E425.1FDF@ameritech.net>, OBI-WAN PEROGI
> <URL:mailto:theoldbrookltnkid@ameritech.net> wrote:
>
> > Since when do TV station broadcast in one colo(u)r as the name
> > Monochrome would imply. Heck, even Black and White is two colo(u)rs.
> > By the way, the best Black and White is what is know as a Twistee cone.
> > That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.
>
> If you're going to be pedantic at least check your facts first.
> Monochrome - (of, using or being) reproduction or execution in 1 colour,
> black and white, or shades of grey.
> And technically speaking, black and white, being the absorbtion or reflection
> of the whole spectrum, are not colours.
>
> Barry
> --
> Support the Acorn User RC5-64 cracking effort
> See http://www.acornusers.org/rc5/
Well then tell that to my eyes.
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5295. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <374750F0.4DAD@ameritech.net>
Source record: 70079
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Mother Nature wrote:
>
> Jim Kehler wrote:
> >
> > Keith Bennett <trojanhorse@virgin.net> wrote:
> >
> > >This is all very well but it does not answer my question as to what do
> > >they talk about on rec.radio.amateur.dx?
> >
> > Well, Keith, we used to talk about DX. But then all these Morse code
> > geeks and hot women from SOC.PENPALS started posting here and
> > looks like everybody who was interested in DX left. Haven't seen
> > anything DX related for quite a while.....
> >
> > 73, Jim KH2D
>
> Party poopers......you mean they don't like us hot women from
> soc.penpals?
Well I like you hot women.
...---...
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5296. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-22 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3747513C.535D@ameritech.net>
Source record: 70080
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Jeffrey Herman wrote:
>
> OBI-WAN PEROGI <theoldbrooklynkid@ameritech.net> wrote:
> >Jeffrey Herman wrote:
> >> Keith Bennett <trojan.horse@virgin.net> wrote:
>
> >> >Well naturally I read the subject matter and thought here is an item
> >> >about Inspector Morse. No doubt you have heard of Inspector Morse?
>
> >> Listen to the theme song at the end of the program; you'll hear
> >> the violins sending M O R S E over and over (in Morse code, of course).
>
> >What program?
>
> Inspector Morse. (A&E, Tuesday evenings) // Jeff KH6O
Well what happens if you do not have cable, subscription, or satellite
Television, huh?
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5297. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Brian <brianburke@my-dejanews.com>
Message-ID: <7i7ggi$a9o$1@nnrp1.deja.com>
Source record: 69986
Cross-posted to: soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7i3afnhdb1@brokaw.wa.com>,
kh2d@my-dejanews.com wrote:
> Keith Bennett <trojanhorse@virgin.net> wrote:
>
> >This is all very well but it does not answer my question as to what
do
> >they talk about on rec.radio.amateur.dx?
>
> Well, Keith, we used to talk about DX. But then all these Morse code
> geeks and hot women from SOC.PENPALS started posting here and
> looks like everybody who was interested in DX left. Haven't seen
> anything DX related for quite a while.....
>
> 73, Jim KH2D

Jim, nothing wrong with hot women interested in dx. Sounds like just
what we need in amateur radio. Those topless Polish QSL cards are
getting kind of worn, you know. ;^)

73,
Brian/N0iMD

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5298. Looking for 2N5109 Spice Model

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: im@home.now
Message-ID: <37475ed5.5477957@news.atl.mindspring.com>
Source record: 69987

Can anyone direct me to where I might get a spice model
for a Mot 2n5109 transistor...

thanks JD..

5299. FS: New 5-pin Nuvistor sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: mmoss@mindspring.com
Message-ID: <374778be.6619394@news.mindspring.com>
Source record: 69988
Cross-posted to:
rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Cinch Jones 5NS Ring type 5-pin Nuvistor sockets. New. $1 each plus shipping.

Compare to Antique Electronic Supply 1999 price of $2.70 each.

Marv

5300. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Mother Nature <m_nature@hotmail.com>
Message-ID: <3747A608.6144E3F8@hotmail.com>
Source record: 69989
Cross-posted to: soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Brian wrote:
>
> In article <7i3afnhdb1@brokaw.wa.com>,
> kh2d@my-dejanews.com wrote:
> > Keith Bennett <trojanhorse@virgin.net> wrote:
> >
> > >This is all very well but it does not answer my question as to what
> do
> > >they talk about on rec.radio.amateur.dx?
> >
> > Well, Keith, we used to talk about DX. But then all these Morse code
> > geeks and hot women from SOC.PENPALS started posting here and
> > looks like everybody who was interested in DX left. Haven't seen
> > anything DX related for quite a while.....
> >
> > 73, Jim KH2D
>
> Jim, nothing wrong with hot women interested in dx. Sounds like just
> what we need in amateur radio. Those topless Polish QSL cards are
> getting kind of worn, you know. ;^)
>
> 73,
> Brian/N0iMD
>
> --== Sent via Deja.com http://www.deja.com/ ==--
> ---Share what you know. Learn what you don't.---

They love us, they really love us.....<g>

5301. Re: Morse code/Trying to reach Hawaii

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <aWGf4CAiB8R3EwOU@virgin.net>
Source record: 69990
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <3750e247.4091347@news.lineone.net>, Walt Davidson
<no.junk.mail@thank.you> writes
>On Sat, 22 May 1999 08:43:34 +0100, Keith Bennett
><trojanhorse@virgin.net> wrote:
>
>>Hey Jeff, what are the chances of you sending me a Hawaii'an beach
>>shirt?
>
>Probably about the same as the chances of him sending you a QSL card!
Hey, Walt baby! I know what a QSL card is! Used to send them out myself!
LOL

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5302. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Keith Bennett <trojanhorse@virgin.net>
Message-ID: <LWeb4EACR8R3EwMk@virgin.net>
Source record: 69991
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

In article <3746f444.8577771@news.mindspring.com>, Steven
<stevens@mindspring.com> writes
>DX is ,technically,making 'contact' with a station in another Country.
Okay then, let me see you make 'contact' with Leighton Buzzard station!

--
From the ORIGINAL Trojan Horse!
Please note that correct e-mail address is:-
trojan.horse@virgin.net
[Copyright 1999 by Trojan Horse]
http://albums.photopoint.com/j/AlbumList?u=24561
UIN #3457372
http://members.home.net/magickal1/soc/
wwp.mirabilis.com/3457372
3457372@pager.mirabilis.com

5303. Re: SO42P IC info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37472784.957268655@news.online.no>
Source record: 69992

On Fri, 21 May 1999 23:39:48 -0700, "Norman Gillaspie"
<norman@pcseng.com> wrote:

>I have seen a couple of articles in VHF Communications magazine
>using a SO42P mixer oscillator IC. Does anyone know who makes this part and
>where I can get
>a data sheet?
>
it was made by Siemens, but is now obsolete device
It has similar but perhaps simpler functions compared to NE612, at
least it is easier to connect the xtal in the oscillator part of
NE602/612

Jan-Martin LA8AK

5304. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <374726ee.957118759@news.online.no>
Source record: 69993
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 May 1999 18:54:29 -0400, OBI-WAN PEROGI
<theoldbrookltnkid@ameritech.net> wrote:

>Since when do TV station broadcast in one colo(u)r as the name
>Monochrome would imply. Heck, even Black and White is two colo(u)rs.
>
no, you are wrong!
Black is absense of any colour, but white is at least 3 colours

5305. Motorola MC10154 Prescaler.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Torbj&#65533;rn Morka <scanman@c2i.net>
Message-ID: <7i8ns7$gr7$1@romeo.dax.net>
Source record: 69994
Cross-posted to: no.teknologi.elektronikk,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Are there anyone with info about this prescaler, i've searched in vain for it in the big blue from Motorola it selfe...

Also some extra info about prescaling technique in the 128/129 or above is much apreciated.
I intend to use the MC145152P when designing a 6-meter cw transceiver...

LC3RBT

5306. 12VDC Lineair Amplifier for 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Peter en Helma Kerklaan <helma.kerklaan@icu.nl>
Message-ID: <7i8t5o$1ees$1@beast.euro.net>
Source record: 69995

Hi,

Does anybody know a diagram for a 12VDC Lineair Amplifier for 6 meters. I am looking for an amplifer that provides me approx. 120 watt output with 8 watt drive.

If you know where to find this information please drop me a line.

73, de Peter
PE1SAK (soon PA5KE)

5307. Cellular Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Zorn Jr Robert L <zorn@bucknell.edu>
Message-ID: <Pine.OSF.3.91.990523093244.7709A-100000@coral.bucknell.edu>
Source record: 69996

I am trying to decide what to do with some older cellular phones.
Are there any useable parts or modifications?
Any market value?

Thanks,
Bob, KF3DF

5308. Re: Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Bill <wrc@tir.com>
Message-ID: <37480A3F.95DE931A@tir.com>
Source record: 69997

Hi Ed,

Lets see now...

You are working on your code and you have some reasonable comments (grin).

There are a lot of hams who do not intend to use code and are happy with no-code licenses. They do not complain about the *other* priveleges they do not have because they do not want to learn or use morse. I don't have any argument with those folks either. The lame excuse approach comes from wannabe's who want the priveleges without the responsibilities.

I remember having to learn a little about how to make a satellite transponder and a little about how to make a repeater. I have no intension of building either, but the questions were there on my exams. No complaints from me. I just did what I had to and promptly forgot about building satellite transponders and repeaters.

Much of the additional extra class frequency spectrum is at the cw end of the bands :). I guess morse proficiency would be appropriate for that exam. I seem to remember answering a couple of questions about non-morse issues on the extra exam. Easier and tougher are subjective, but I agree about the extra exam being easier for me. Maybe by the time we get that far all of it is getting easier. I thought a question about installing sound bars on a neighbor's TV was ludicrous, but if one knows nothing about TVI.....

Your no-code extra friend learned the code well enough to pass the exam. No excuses from him (her?). I know some hams who achieved the license they wanted and promptly abandoned morse code and some who didn't even have to learn morse for their ticket. They are all happy and none of them ever complains about the morse requirements.

I still dismiss the anti-code folks as lazy excuse-makers.

Bill KU8H

5309. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: stevens@mindspring.com
Message-ID: <374811c3.2069180@news.mindspring.com>
Source record: 69998
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

The term 'DX' was originated by amateur radio ops.Others use it to
mean different things.The original meaning of DX is to make contact
with a station in another country.This is required to qualify for any
of the ARRL DX awards that many Hams persue.You can call a dog a cat
if you wish...it dosnt change the fact that its still a dog....:>)

On Sat, 22 May 1999 20:35:48 -0400, OBI-WAN PEROGI
<theoldbrookltnkid@ameritech.net> wrote:

>Steven wrote:
>>
>> DX is ,technically,making 'contact' with a station in another Country.
>>
>> On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
>> <theoldbrookltnkid@ameritech.net> wrote:
>>
>> >Mike Silva wrote:
>> >>
>> >> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
>> >> >
>> >> >
>> >> >Danny wrote:
>> >> >>
>> >> >> Mother Nature wrote:
>> >> >> >
>> >> >> > Hi from soc.penpals and let me say that all of this technical talk is
>> >> >> > making me hot......<g>
>> >> >>
>> >> >> Well then 350 KHz, AM, FM. Are you butter yet?
>> >> >>
>> >> >> Danny
>> >> >> --
>> >> >
>> >> >I'm melting as we speak.....I might just need a cold shower...oops, not
>> >> >a good idea. I might get a spark and get tingly all over!!!!!!!
>> >>
>> >> Finally something good comes from the endless Morse debate!
>> >>
>> >> ... resonance, Kirchoff, reactance, transconductance, Thevenin, bipolar ...
>> >> stay tuned while I get out the electronics dictionary...
>> >>
>> >> Mike
>> >Don't foget Spark Gap. For those of you who do not know what DX is; it

>> >means receiveing a radio/television signal from far away. From far away
>> >as in you usually do not get a signal from this place. DX can also mean
>> >how far your siganl is getting out. From everything that I read; if you
>> >can run just 10 watts, and your siganl is getting out 300 to 400 miles
>> >then that is better DX then somebody running 1000 watts and doing th
>> >same thing.
>> >--
>> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
>> >ESPECIALLY WHEN YOUR ON A DATE. BURP
>No, it is a long distance contant or reception. It is all in how you
>view it
>--
>REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
>ESPECIALLY WHEN YOUR ON A DATE. BURP

5310. Re: Looking for 2N5109 Spice Model

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7i94rf$90t$1@news1.fast.net>
Source record: 69999

```
-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

JD <im@home.now> wrote in message
news:37475ed5.5477957@news.atl.mindspring.com...
> Can anyone direct me to where I might get a spice model
> for a Mot 2n5109 transistor...
>
> thanks JD..

This should do the trick ...

.model Q2N5109 NPN(Is=5f Ise=10n Ne=4 Isc=10n Nc=4 Bf=90 Ikf=.2 Vaf=240
+ Cjc=5p Cje=10p Rb=.25 Re=.25 Rc=1.5 Tf=.1n Tr=20n Kf=1f)

I tried to e-mail it to you and didn't notice your "anti-
spam address" ... if you're asking for help, it would be
helpful to include your correct e-mail address somewhere
in your post.

73,
- --
Carl - wa6vse
mailto:wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
Visit NCI's web site at: http://www.nocode.org

-----BEGIN PGP SIGNATURE-----
Version: PGP for Personal Privacy 5.5.3

iQA/AwUBN0gWepe+N6+q84HiEQLY0QCcCk+b4BqMhExJ9kdGoN8/Sxu0ci8AoJ2m
iYMaygFxpFV8JeBfSUho+LTR
=kH8y
-----END PGP SIGNATURE-----
```

5311. Upcoming Long Island Hamfest

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: hmnadel@banet.net
Message-ID: <374817C5.C7BBA74D@banet.net>
Source record: 70000

Check out http://www.qsl.net/w2ufo for information on the upcoming
June 13th Long Island NY hamfest.

5312. WTB:JPS NIR12 Dsp

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Steve Massey <N6TT@jps.net>
Message-ID: <374888de@news1.jps.net>
Source record: 70001

looking to buy the JPS NIR-12 Dsp unit....Tnxs Steve N6TT@jps.net

5313. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37482EEA.64AB@ameritech.net>
Source record: 70002
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

MSteven wrote:
>
> The term 'DX' was originated by amateur radio ops.Others use it to
> mean different things.The original meaning of DX is to make contact
> with a station in another country.This is required to qualify for any
> of the ARRL DX awards that many Hams persue.You can call a dog a cat
> if you wish...it dosnt change the fact that its still a dog....:>)
>
> On Sat, 22 May 1999 20:35:48 -0400, OBI-WAN PEROGI
> <theoldbrookltnkid@ameritech.net> wrote:
>
> >Steven wrote:
> >>
> >> DX is ,technically,making 'contact' with a station in another Country.
> >>
> >> On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
> >> <theoldbrookltnkid@ameritech.net> wrote:
> >>
> >> >Mike Silva wrote:
> >> >>
> >> >> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> >> >> >
> >> >> >
> >> >> >Danny wrote:
> >> >> >>
> >> >> >> Mother Nature wrote:
> >> >> >> >
> >> >> >> > Hi from soc.penpals and let me say that all of this technical talk is
> >> >> >> > making me hot......<g>
> >> >> >>
> >> >> >> Well then 350 KHz, AM, FM. Are you butter yet?
> >> >> >>
> >> >> >> Danny
> >> >> >> --
> >> >> >
> >> >> >I'm melting as we speak.....I might just need a cold shower...oops, not
> >> >> >a good idea. I might get a spark and get tingly all over!!!!!!!
> >> >>
> >> >> Finally something good comes from the endless Morse debate!
> >> >>
> >> >> ... resonance, Kirchoff, reactance, transconductance, Thevenin, bipolar ...
> >> >> stay tuned while I get out the electronics dictionary...

> >> >>
> >> >> Mike
> >> >Don't foget Spark Gap. For those of you who do not know what DX is; it
> >> >means receiveing a radio/television signal from far away. From far away
> >> >as in you usually do not get a signal from this place. DX can also mean
> >> >how far your siganl is getting out. From everything that I read; if you
> >> >can run just 10 watts, and your siganl is getting out 300 to 400 miles
> >> >then that is better DX then somebody running 1000 watts and doing th
> >> >same thing.
> >> >--
> >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> >No, it is a long distance contant or reception. It is all in how you
> >view it
> >--
> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> >ESPECIALLY WHEN YOUR ON A DATE. BURP
MEOW MEOW ROOF ROOF
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5314. Re: Looking for 2N5109 Spice Model

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Brian <schousek@geocities.com>
Message-ID: <7i9bgu$30i$1@jair.pressenter.com>
Source record: 70003

Somewhat irrelevant to the 2n5109 request: Zetex makes available their entire library of spice models available along with graphical symbols usable in the PSPICE evaluation software. www.zetex.com I find that this causes me to design in Zetex parts to the exclusion of others. They are available from DigiKey.

Now for a little trivia- does anybody know how Digi-Key got started before they became a parts distributor? And why that question is relevant in a ham newsgroup? Brief history at: http://www.digikey.com/MKT/C_Hist.html

You know, historically if a person requested a response via email there was a flurry of 'if you don't have the time to check the newsgroup I don't have time to help you' flames. It seems that lately someone who doesn't put a valid email address gets the same flurry. You just can't win for trying I guess.

Carl R. Stevenson wrote in message <7i94rf$90t$1@news1.fast.net>...
<snip>
>I tried to e-mail it to you and didn't notice your "anti-
>spam address" ... if you're asking for help, it would be
>helpful to include your correct e-mail address somewhere
>in your post.
>
<snip>

5315. ECL BCD Decade counter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7i9dbj$12j$1@news4.svr.pol.co.uk>
Source record: 70004

Does anyone know of an ECL BCD Decade Counter chip ?

There are a number of ECL divide by 10 prescaler IC's about but they dont have BCD output. Plessey used to make one (SP8635) but this is now obsolete. I am looking for a chip that will work to at least 1 GHz preferably higher.

John

5316. *** Motorola TP3021 - Any info?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <37483c14.389327@news.interbusiness.it>
Source record: 70005

Need infos about this RF UHF Motorola transistor in case 319
(metal-ceramic rectangular,base and collector opposite, emitter as 2 +
2 straps on sides).
Seems to be used as medium power driver on cellular repeaters, but it
is no mentioned at all on Motorola RF devices Web page nor in the Web
with usual search engines.

Need Vce, gain, Fmax, Pmax and pin assignment.

Anyone can help an experimenter on 23cm?

TNX de Vanni I8JJB

vannir@usa.net

http://www.qsl.net/i8jjb/index.html

5317. Re: Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: r_buschner@KNUUT.de
Message-ID: <7HPLoDonkEB@r_buschner.knuut.de>
Source record: 70006

Bill wrote in <37480A3F.95DE931A@tir.com>:

> There are a lot of hams who do not intend to use code and are happy
> with no-code licenses. They do not complain about the *other*
> priveleges they do not have because they do not want to learn or use
> morse. I don't have any argument with those folks either. The lame
> excuse approach comes from wannabe's who want the priveleges without
> the responsibilities.

The same game as here in Germany.... :-(

73 de Ralf

--
Was fuer 'ne Signatur?

5318. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7i9hkk$nm4@news.Hawaii.Edu>
Source record: 70007
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <3745E425.1FDF@ameritech.net>, OBI-WAN PEROGI
<URL:mailto:theoldbrookltnkid@ameritech.net> wrote:
> Since when do TV station broadcast in one colo(u)r as the name
> Monochrome would imply. Heck, even Black and White is two colo(u)rs.

"Monochrome" refers to the CRT having a single electron-beam gun and
a single-color phosphor on the CRT's screen.

Mono = single.

Depending upon the CRT's grid voltage, the beam+phosphor can create dozens
and dozens shades of grey.

Jeff KH6O
--
Fingerprint Classification Services, Inc.: Your own personal copy
of your fingers' inked impressions, classified utilizing the Henry
classification formula (with FBI extensions), $15 + postage.

5319. Re: Cellular Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: davem@groucho.cs.ubc.ca
Message-ID: <7i9l7r$k5e@groucho.cs.ubc.ca>
Source record: 70008

Zorn Jr Robert L <zorn@bucknell.edu> writes:
>
>I am trying to decide what to do with some older cellular phones.
>Are there any useable parts or modifications?
>Any market value?

There's likely a TCXO (temperature compensated crystal oscillator) in there,
though it might not be a convenient frequency. There is a VCO or two that
will operate up to 900 MHz, plus the other chips needed to produce a PLL
at that frequency. There's a power amplifier that operates at 800+ MHz,
good of 0.6 W output. There is a crystal filter or two.

Some of this stuff might work at 440 MHz, and some might work up at
900+ MHz.

Dave

5320. Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: "Larry D. Clark" <buddycl@onramp.net>
Message-ID: <3748646E.9A80118F@onramp.net>
Source record: 70009
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hi

I just ran across an antenna named "big wheel". The only
design info I've been able to find so far is in German.
Unfortuantely, my ability to read/speak German left me
20 years ago. Could someone point me to some info
on the net that is in Engrlish?

larry
kd5foy
em12

5321. Re: VHF PA Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3747cf17.3381323@news.online.no>
Source record: 70010

>>In article <7hsa2fqdp1@uranium.btinternet.com>,
>> "David Cunningham" <D.L.C@btinternet.com> wrote:

>>> I have recently dismantled a couple of old PMR radios, and have the
>>> following PA transistors:
>>>
>>> BLY33
>>> ZRF0112
>>> ZRF0113
>>> I assume the latter two are a complementary pair.
connected in series and assumed to be 'complimentary pair'.......,
why?
assume they are for different stages, perhaps 'ZRF' is a TRW prefix,
they made some series of RF transistors, usually with the "PT"
prefix, have seen some "ZRF" devices, but they are 30-35 years old.
Usually it isn't worth keeping unknown and old smaller RF devices, if
it looks like an output power transistor it may not be much value for
2m PA, but it is a wonderful device on 6m, possibly 20dB gain
>>> I assume the latter two are a complementary pair.

5322. 4-1/2" round meter movements f/s

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: wadley@showhill.com
Message-ID: <374888BF.54E@showhill.com>
Source record: 70011

I have at least 20 round meter movements from military v.o.m.s. Rugged steel constr with AC V, DC V, and ohms scales. 4-1/2" o.d. with 3-1/2" face, $4.00 each plus UPS. All are 50 uA movements made by Bruno, QVS, or Phaostron. The unit can be opened up to remove or painted over the scale for a custom power meter, ammeter, etc. Four styles available, with blue or black bezel, and with entire meter visible under clear cover or with bottom third coverd by the bezel. Also have a few with an extra set of terminals to detect a "pegged" condition, for $6 ea. Call 334-347-5281.

5323. Re: ECL BCD Decade counter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: rick@area.com
Message-ID: <7ia8fmnti1@vax.area.com>
Source record: 70012

In article <7i9dbj$12j$1@news4.svr.pol.co.uk>,
John Mortlock <jmort@global.freeserve.co.uk> wrote:
>Does anyone know of an ECL BCD Decade Counter chip ?
>
>There are a number of ECL divide by 10 prescaler IC's about but they dont
>have BCD output. Plessey used to make one (SP8635) but this is now
>John

Try connecting a Motorola 10EP016 as a divide by 10 using feedback
gates. It should easily do 1 GHz and put out BCD.

Rick Karlquist N6RK
rick@area.com

>
>
>

5324. Filter evaluation

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Henry Knoll <knoll003@tc.umn.edu>
Message-ID: <3748B343.32AB@tc.umn.edu>
Source record: 70013

Looking in the ARRL Handbook in the Filter section, I see graphs of low pass filter responses that have as the ordinant all of the following: transmission loss, equivalent loss in percent and SWR. I don't see any information in the Handbook relating these quantities. Does anyone know where to find the equations that inter-relate these quantities please? If there is a good article on this in a past issue of QST or other radio magazine, I'd appreciate any references.

I'm interested in how to evaluate filters for insertion loss using it's relationship to SWR. That is, if I measure the SWR of a properly terminated filter, can I calculate the insertion loss of the filter?

Thanks for your help.

Henry Knoll
WA0GOZ

5325. Keesler AFB ARC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Jim <ad4xx@kfcu.org>
Message-ID: <bl323.3$sk.240@news.ntr.net>
Source record: 70014

If you were ever a member of the Keesler AFB ARC, please check out
http://web.intelispan.com/~ad4xx/k5typ.html

Jim, AD4XX

5326. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Rick Kissell <rkissell@execpc.com>
Message-ID: <7iahu7$po2@newsops.execpc.com>
Source record: 70015
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

"Larry D. Clark" wrote:

> Hi
>
> I just ran across an antenna named "big wheel". The only
> design info I've been able to find so far is in German.
> Unfortuantely, my ability to read/speak German left me
> 20 years ago. Could someone point me to some info
> on the net that is in Engrlish?
>
> larry
> kd5foy
> em12

As far as I know, the only U.S. manufacturer to produce a big wheel was Cushcraft, and that was decades ago. You can find some information on it in "The Radio Amateur's V.H.F. Manual" by Ed Tilton, W1HDQ. My version (the first edition) was published by the ARRL in 1965. It carries an ad from Cushcraft showing, among others, a big wheel. On Page 214, under the section titled "Omnidirectional 144-Mc. Antennas", there is a fairly long piece on "The Big Wheel".

More recently, Dave Clingerman (W6OAL) of the "Olde Antenna Lab", 4725 W. Quincy Avenue, Denver CO 80236 phone (303) 798-5926 in 1995 quoted me a price of $400 plus shipping for a 6m Big Wheel.

Hope this helps.

73 de WB9GYT

5327. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3748CF70.1F15@pop.removethistomailme.net>
Source record: 70016

Doug Smith wrote:
>
> Am I going to regret using Duco cement to hold the VFO tank coil in my
> Ten-Tec transceiver in place? (unfortunately my local Wal-Mart was sold
> out of aromatic candles so no candle wax!)
> --
> Doug Smith W9WI
> Pleasant View (Nashville), TN EM66
> http://personal.bellsouth.net/~w9wi

That's the standard stuff, should be no problem.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

5328. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: larryc@northwest.com
Message-ID: <3748D9FA.7A2B@northwest.com>
Source record: 70017
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

it also appears in the 1970 ARRL Antenna book.

LarryC, n3ccw
==========

Rick Kissell wrote:
>
> "Larry D. Clark" wrote:
>
> > Hi
> > >
> > I just ran across an antenna named "big wheel". The only
> > design info I've been able to find so far is in German.
> > Unfortuantely, my ability to read/speak German left me
> > 20 years ago. Could someone point me to some info
> > on the net that is in Engrlish?
> > >
> > larry
> > kd5foy
> > em12
>
> As far as I know, the only U.S. manufacturer to produce a big wheel was
> Cushcraft, and that was decades ago. You can find some information on
> it in "The Radio Amateur's V.H.F. Manual" by Ed Tilton, W1HDQ. My
> version (the first edition) was published by the ARRL in 1965. It
> carries an ad from Cushcraft showing, among others, a big wheel. On
> Page 214, under the section titled "Omnidirectional 144-Mc. Antennas",
> there is a fairly long piece on "The Big Wheel".
>
> More recently, Dave Clingerman (W6OAL) of the "Olde Antenna Lab", 4725
> W. Quincy Avenue, Denver CO 80236 phone (303) 798-5926 in 1995 quoted me
> a price of $400 plus shipping for a 6m Big Wheel.
>
> Hope this helps.
>
> 73 de WB9GYT

5329. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: tcrpe <tcrpe@yahoo.com>
Message-ID: <qH523.35132$5e2.603242@news2.giganews.com>
Source record: 70018

Gee, I have been using 'hot glue' for gluing down small toroids in HF
applications, and never thought about RF losses. Thanks for giving me,
one - something else to worry about, and two - something else to brainstorm.

Will the projects never end?

TR

Barry L. Ornitz wrote in message
<1s423.517$733.13887@typ11.nn.bcandid.com>...
>
>Doug Smith wrote in message <3748E8DB.ABB32622@bellsouth.net>...
>>Am I going to regret using Duco cement to hold the VFO tank coil in my
>>Ten-Tec transceiver in place? (unfortunately my local Wal-Mart was sold
>>out of aromatic candles so no candle wax!)
>
>
>Living over on the border between the two real states of Tennessee, eh. [I
>am in Kingsport.]
>
>Duco cement is cellulose nitrate with plasticizer. It will work OK. For a
>lower loss coil dope, get a small glass bottle and fill it 3/4 full of
>acetone. Stuff in as many stryfoam peanuts as it will hold.
>Then let it sit for a week or so for all the "fuzzballs" to dissolve. The
>resulting glue will have about as low an RF loss as is possible.
>
> 73, Dr. Barry L. Ornitz WA4VZQ ornitz@tricon.net
>
>
>

5330. Re: Motorola MC10154 Prescaler.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFC8xM9.B7p@netcom.com>
Source record: 70019
Cross-posted to: no.teknologi.elektronikk,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <7i8ns7$gr7$1@romeo.dax.net>,
Torbj&#65533;rn Morka <scanman@c2i.net> wrote:
>Are there anyone with info about this prescaler, i've searched in vain for
>it in the big blue from Motorola it selfe...
>
>Also some extra info about prescaling technique in the 128/129 or above is
>much apreciated.
>I intend to use the MC145152P when designing a 6-meter cw transceiver...

It's not a prescaler, it's an ECL binary counter, so it would be in
the MECL databook. Their prescalers are in the MC12xxx number range
and (I think) are in the Communications databook (or web page section).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

5331. FS B&W 600 GDM with coil pack

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-23 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <Q2323.3465$ql.354810@typ12.nn.bcandid.com>
Source record: 70020

FS B & K model 600 Grid Dip Meter and full coil pack. This meter is collecter quality, Coils are in original B&W box. This is the bullet shape meter with tuning knob on front and meter on left side. Has a piece of yellow tape
near top above meter with small scratch in corner of tape. Has very small scratch (less than 1/16 inch) above 90 to 100 mhz on outer edge of dial in pink section for coil 600-A-5. Coil pack is in original B&W box which is perfect. Yellow (600-A-3 14-36 mhz) coil has a few scratches and White (600-A-3 5-14 mhz) coil has 2 small (less than 1/8 inch) scratches on it. Thats it! otherwise perfect as when it came from B&K years ago Serial number 3384 Works great! Reason for selling is I use it and want to buy a MFJ-259B to replace it. Make an offer. No reasonable offer refused.
Marty
N5KBP

--
Marty Duplissey
Lone Star Business Systems
Specializing in development for the credit report retrieval industry
Desktop, Networks, Intranets and Internet Delivery
http://www.lsbs.com

5332. Re: 12VDC Lineair Amplifier for 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990524085546.15583.00000282@ng-fy1.aol.com>
Source record: 69932

Not exactly what you asked for but try 73 magazine sep 1989 if you can find a copy. Aricle is about a 50 watter but suggest you could use a seventy watt transistor too.

5333. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: cschuler@usaor.net
Message-ID: <37494cc8.176563849@news.usaor.net>
Source record: 69933
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Ah yes, the free power radio ... takes me back a few. If you are near a transmitter and can erect an efficient antenna, these work well. I used a long wire antenna (about 80 feet) in Pittsburgh, PA years ago. It was loud enough that my parents could hear it at night from their bedroom and they (needless to say) were not as enthralled with the project as I was. By the way, bigger loudspeakers tend to be more efficient.

Rectify (germanium/Schottky diodes work better) and filter the output of a tuned antenna circuit to power a one transistor amplifier. You can use a second tuned circuit to select another station to be detected and amplified.

If you can find older magazines, you can perhaps dig up a schematic. Good Luck!

On Mon, 24 May 1999 04:59:50 GMT, swabbie@hotmail.com (Swabbie) wrote:

>Along time ago, I saw a crystal radio with no external
>power that drove a small speaker, like that in a PC
>computer. It wasn't very loud, but all you needed in
>a quiet room. There was some sort of a transistor that
>was used as an amplifier, powered by the stray RF from
>the antenna. It was a very cool way to hear the local
>AM station.
>
>I'm guessing that someone here knows where I can find
>info and maybe even a print for such a crystal radio,
>that can power a small loud speaker with no external
>power. (other than that brought in on the long wire)
>
>Thanks for your reply.
>
>Swabbie
>
>
>
>

5334. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: jpnoll@aol.com
Message-ID: <19990524093828.23716.00004203@ng-ci1.aol.com>
Source record: 69934

Doug,

Duco Cement is not realy good for holding down Torroids you would be better off getting a tube of DAP bathroom caulk and putting a little under the coil ond pressing it into place. RTV (Silicone Adhesive) works well too.

5335. 3sk184 data sheet needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "Craig A. Ferris" <cferris@aeronix.com>
Message-ID: <37495E79.34EED722@aeronix.com>
Source record: 69935

Any help finding this data sheet is appreciated.

73
Craig NR4E

5336. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <37499E75.E614E1A1@bellsouth.net>
Source record: 69936
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Swabbie wrote:
> I'm guessing that someone here knows where I can find
> info and maybe even a print for such a crystal radio,
> that can power a small loud speaker with no external
> power. (other than that brought in on the long wire)

JF1OZL's Web page (do a search on his callsign) has a bunch of - shall we say "exotic"? - circuits, I'll bet he's got one to do what you're looking for here.

Once you get it working, take a look at his voice-powered transmitter. You could build a full two-way radio with no batteries, commercial power, or solar cells...
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

5337. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <3749662C.A0061D02@erols.com>
Source record: 69937

RTV, including silicone bathroom caulk, is corrosive during the curing process - not good for copper wire used in toroids. There is an "electronic grade" RTV which is not corrosive.

JPNOLL wrote:
>
> Doug,
>
> Duco Cement is not realy good for holding down Torroids you would be better off
> getting a tube of DAP bathroom caulk and putting a little under the coil ond
> pressing it into place. RTV (Silicone Adhesive) works well too.

5338. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7ibrsj$83e$1@news1.rmi.net>
Source record: 69938
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In rec.radio.amateur.antenna larryc@northwest.com wrote:
:>
:> More recently, Dave Clingerman (W6OAL) of the "Olde Antenna Lab", 4725
:> W. Quincy Avenue, Denver CO 80236 phone (303) 798-5926 in 1995 quoted me
:> a price of $400 plus shipping for a 6m Big Wheel.

Dave is 'still at it' at The Olde Antenna Lab. I believe he can build
Big Wheels up thru 432 mcs., or higher.
I do not have his email address at hand, but if you would like it --
send me an email request and I'll dig it out.
Note the hack in my address(es) here.

Jonesy W3DHJ

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
221 days to go until the Year 2000 -- So what!
587 days to go until the 3rd Millennium of the C.E.

5339. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <37496DFE.C7CFFB61@alliedsignal.com>
Source record: 69939

What is "PVC glue"? If you are referring to the stuff used to join PVC pipes together, to the best of my knowledge, that's a solvent, not a glue. It bonds pipes together by dissolving the PVC, allowing the pipes to chemically "weld" together.

I'm not certain what the original poster's "VFO tank coil in my Ten-Tec transceiver" looks like, but I would be concerned that a solvent might damage the enamel on the coil windings or damage the coil form.

At the very least, I wouldn't depend on the structural integrity of dried solvent. There are probably better materials to use.

Just my .02 worth...
Pete

Murray Kelly wrote:

> Dunno about Duco cement but I used plumber's PVC glue and
> a .25" slice of a cork to keep it off the metal. Glooped
> it all over and it seems fine..
>
> Doug Smith wrote:
> >
> > Am I going to regret using Duco cement to hold the VFO tank coil in my
> > Ten-Tec transceiver in place? (unfortunately my local Wal-Mart was sold
> > out of aromatic candles so no candle wax!)
>
> --
> **
> * Murray Kelly vk4aok mkelly@powerup.com.au *
> * 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
> * ph/fax Intl+ 61 7 3379 3307 *
> **

--

| The opinions expressed here are my own, |
| and not necessarily those of my employer. |

5340. NE41137/3SK124 Replacement

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <37496FFF.6A33A82F@cig.mot.com>
Source record: 69940

INFO:

For all those asking about my 2Mtr Preamp using the
3SK124 GaAsFET....this device is no longer produced
in the "pill" package.

The NE25339/3SK206 is a very close substitute but now
in Surface mount only. The board layout will need
to change for the device.

A new 3sk206.dat file can be generated using the
MAKDAT4.EXE utility that comes with the ASP 4.0
Preamp Freeware program.

Order the 40 - 80mA IDss for best NF, IP3 results.

73 Chuck KD9JQ

http://www.imaxx.net/~kd9jq

mailto:kd9jq@imaxx.net

5341. Re: 12VDC Lineair Amplifier for 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: michael smoot <n3qxc@home.com>
Message-ID: <37498389.56669E0@home.com>
Source record: 69941

Hello

Here is a page that I found from Motorola. The spec sheets on all their RF transistor include test circuit schematics to test to 30 mhz and beyond. You'll need a PDF file reader. (Acrobat is the only reader that I know of that will display these properly). If you don't have Acrobat, just do a lycos search on it and you will find many sites that you can download it from.
Take time to look through all the sheets, there are about 100 or so, all of them are RF related.

The address is:
http://mot2.mot-sps.com/books/html/dl110_index.html
or
http://mot2.mot-sps.com/rf/dslist/list.html#MRF

Hope this helps
N3QXC

Peter en Helma Kerklaan wrote:

> Hi,
>
> Does anybody know a diagram for a 12VDC Lineair Amplifier for 6 meters. I am
> looking for an amplifer that provides me approx. 120 watt output with 8 watt
> drive.
>
> If you know where to find this information please drop me a line.
>
> 73, de Peter
> PE1SAK (soon PA5KE)

5342. FS: CVM-1 Output Transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: William B <wmollard@dowco.com>
Message-ID: <3749866b@news.vphos.net>
Source record: 69942

Hello,
I have a pair of UTC CVM-1 output transformers taken from some RCA
broadcast amplifiers using 6550 tubes. Offers welcome

best
bill

5343. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7ic7pqdfl1@nnrp1.deja.com>
Source record: 69943
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <a1523.948$%l6.7075799@rsnws01.mn.mediaone.net>,
swabbie@hotmail.com (Swabbie) wrote:
> Along time ago, I saw a crystal radio with no external
> power that drove a small speaker, like that in a PC
> computer. It wasn't very loud, but all you needed in
> a quiet room. There was some sort of a transistor that
> was used as an amplifier, powered by the stray RF from
> the antenna. It was a very cool way to hear the local
> AM station.
>
> I'm guessing that someone here knows where I can find
> info and maybe even a print for such a crystal radio,
> that can power a small loud speaker with no external
> power. (other than that brought in on the long wire)
>
> Thanks for your reply.
>
> Swabbie
>
>
Hi,
I saw a site (sorry, but don't remember URL) with lots of German crystal
radios from 1930 and up.
One of the schematics presented two detectors (may be two tuned
circuits too), one was used to rectify and feed a germanium transistor
amplifier which amplifies the signal one must hear.

When I was a kid and didn't know anything about impedance matching, I
made a small crystal radio using a loudspeaker connected directly to the
output.(no amplifier)
I lived in Rio de Janeiro, 1Km apart of a broadcast station (820Khz -
Radio Ministerio da Educacao e Cultura) and every morning I waked up
with this radio, listening a gymnastic program, very loud.

My antenna was the refrigerator body and there was a connection to the
ground. The radio stayed in the kitchen and could be heard
more than 4m (13ft) apart.

Cheers.

--
Gilson Puppin - PU5MPL

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5344. Marconi Counter - Printer Output

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: tom.bratton@btinternet.com
Message-ID: <374ca1ed.9102047@news.btinternet.com>
Source record: 69944

have an ancient, but very accurate, Marconi TF1417/2 Counter/Frequency Meter that has a Printer Output multi-way socket on the back. Can anyone help with information on the connections and data format , please? It probably pre-dates Centronics - perhaps it is a Marconi special?

TIA

5345. Re: Shorted coax stub-notch filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3748f56b.78740286@news.online.no>
Source record: 69945
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Sun, 25 Apr 1999 11:36:52 -0400, "ma_locksmith"
<ma_locksmith@email.msn.com> wrote:

>Shorted stubs are 1/2 wave, open stubs are 1/4 wave. Both reflect a short
>at the driving end.
>
>
>Michael Smith wrote in message <3wFU2.10076$5E.168699@news7.ispnews.com>...
>>Does any one have info on building notch filters to be used as a low power
>>notch duplexer. I have heard you can make a notch out of shorted coax
>>stubs. Are the stubs 1/4 waves at the notch frequency? Anyone have plans
>>for these types of filters.
>>
>>Mike
>>
I've tested 1/4, 1/2, 3/4-wave notch filters - what you choose depends
on the prupose. Second harmonic filter is 1/2-wave on the undesired
frequency

Tried some 2m repeater filter improvement, 600kHz between RX and TX,
3/4 wave configuration with 2.2pF series capacitors. Result 12-15dB
notch, but you must use some extra stubs to optimize impedance for
minimum loss. 12-15dB is not much, it is low, and result of the small
coupling capacitor or 2.2pF.

In an ordinary quarterwave band notch filter you achieve easily 40dB
with a single tuned circuit, and possibly 90-100dB with two tuned
circuits. It is very wide, the series capacitor is used to build a
narrower filter, but has not so much attenuation, the larger capacitor
the deeper notch, but also broader. The coax-stub is inductive on the
frequency you operate, and it is tuned with a tapped trimming
capacitor 1/3-1/5 from the shorted side.

believe the velocity factor for 7/8" heliax(hardline) is 0.82,
cellflex is somewhat higher, possibly 0.9

Quite frequently simple quarterwave filter is a nuissance because it
attennuates every odd harmonic above first resonnance, a 3/4-wave
filter is even worse. This calls for LC-filters. Made a two-section
filter for 2m with 45dB attenuation.
LC notch-filters are particularly important to use for 50MHz, but
because of ch.2 tx in neighbourhood I cannot transmit on 6m

73
Jan-Martin LA8AK

reduced x-post to 3 most valid groups

5346. Is hot glue Polyethylene?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bea630$972b7040$cfb14d0c@default>
Source record: 69946

If hot glue is polyethylene it should have low loss
and a low dielectric constant.
I hope we hear from Barry L Ornitz on this.

Mike

5347. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3749c3a6.131543403@news.online.no>
Source record: 69947
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On 24 May 1999 15:40:03 GMT, Jonesy <jonz@rmi.nospam.net> wrote:

>In rec.radio.amateur.antenna larryc@northwest.com wrote:
>:>
>:> More recently, Dave Clingerman (W6OAL) of the "Olde Antenna Lab", 4725
>:> W. Quincy Avenue, Denver CO 80236 phone (303) 798-5926 in 1995 quoted me
>:> a price of $400 plus shipping for a 6m Big Wheel.
>
>Dave is 'still at it' at The Olde Antenna Lab. I believe he can build
>Big Wheels up thru 432 mcs., or higher.
>I do not have his email address at hand, but if you would like it --
>send me an email request and I'll dig it out.
>Note the hack in my address(es) here.
>
>Jonesy W3DHJ
>
>--
>Marvin L. Jones jonz<AT>rmi.net
>Gunnison, Colorado
>221 days to go until the Year 2000 -- So what!
>587 days to go until the 3rd Millennium of the C.E.
BW antennas are popular mainly for beacons. Bought a 2m BW in Germany
for mobile operation, but driving in 100mph with a BW isn't too
practical and it reduces miles per gallon considerably, so I now stick
to the the old J-beam halo aerial with 6dB lower gain - was available
for on 2.50 UK pounds 25 years ago

5348. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <Vak23.37548$5e2.651011@news2.giganews.com>
Source record: 69948

Bob Lewis wrote in message <3749662C.A0061D02@erols.com>...
>RTV, including silicone bathroom caulk, is corrosive during the curing
>process - not good for copper wire used in toroids. There is an
>"electronic grade" RTV which is not corrosive.

I was worried about RTV -- I've got plenty of it, but had been told it was bad news for use on connectors due to corrosive gases released during curing. Figured it'd be even worse on toroids. Ten-Tec does suggest hot-melt glue as an alternative. I don't do much wood work so didn't think it'd be worth my while to buy a glue gun for one coil...

So far the Duco seems to be doing the trick. (of course, it's only been there for a few hours!)

Thanks to everyone else for the interesting replies! (I'd feel better if there were a consesus to the right thing to use<G>)

73 Doug

5349. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: jonathan@oxfordbromley.u-net.com
Message-ID: <3749d9eb.1185200@news.u-net.com>
Source record: 69949
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

On Mon, 24 May 1999 13:07:35 GMT, cschuler@usaor.net (Chuck Schuler)
wrote:

>Ah yes, the free power radio ... takes me back a few. If you are near
>a transmitter and can erect an efficient antenna, these work well.
>
>Rectify (germanium/Schottky diodes work better) and filter the output
>of a tuned antenna circuit to power a one transistor amplifier. You
>can use a second tuned circuit to select another station to be
>detected and amplified.

I have no experience of trying this, but.... wouldn't it be better to
use an _untuned_ feed to the power rectifier? That way, you get
power from _all_ the transmitters the antenna can receive, not just
one....

Way cool if you can make it work.

Jonathan Bromley

5350. Radio Shack PRO-90 scanner for sale/trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Leo Koerzendoerfer <loki@enteract.com>
Message-ID: <3749E097.1657@enteract.com>
Source record: 69950

I have a radio shack pro-90 scanner for sale/trade at:
http://www.enteract.com/~loki/scanner.htm
loki@enteract.com

5351. wrong url on radio shack scanner

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Leo Koerzendoerfer <loki@enteract.com>
Message-ID: <3749E136.4A8A@enteract.com>
Source record: 69951

I put the wrong url on the last message; it is:
http://www.enteract.com/~loki/trade.htm
loki@enteract.com

5352. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <3749E222.5165@sir.com>
Source record: 69952
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
OBI-WAN PEROGI wrote:
>
> MSteven wrote:
> >
> > On Sat, 22 May 1999 20:35:48 -0400, OBI-WAN PEROGI
> > <theoldbrookltnkid@ameritech.net> wrote:
> >
> > >Steven wrote:
> > >>
> > >> On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
> > >> <theoldbrookltnkid@ameritech.net> wrote:
> > >>
> > >> >Mike Silva wrote:
> > >> >>
> > >> >> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> > >> >> >
> > >> >> >Danny wrote:
> > >> >> >>
> > >> >> >> Mother Nature wrote:
> > >> >> >> >
> > >> >> >> >>
> > >> >> >--
> > >> >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > >> >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> > >> >--
> > >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> > MEOW MEOW ROOF ROOF
> > --
> > REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > ESPECIALLY WHEN YOUR ON A DATE. BURP

Why do people not delete all this crap before posting a reply? Why do
people have to use gay signature files?
```

5353. 6 Meter Halo

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: WA0ETL <WA0ETL@ATT.NET>
Message-ID: <7icp24$9in$1@bgtnsc03.worldnet.att.net>
Source record: 69953

Would appreciate receiving a copy of the manual for what I believe is a HyGain
6 Meter Halo antenna. The parts and stamped aluminum brackets have all the HyGain earmarks. Called Ron at MFJ and they have not sorted out all the documentation on their new line of recently purchased antenna products that used to be HYGain. The antenna has two alum. rings with gamma rods at each end facing the rings and supported by the delrin connector at one center point.
The opposite delrin connector looks like the feed point, with two alum. L brackets and a cross pc. of alum. stock about 1 inch long. Not sure that these
L bkt pcs and cross pc are really part of the product or got added on by someone along the way. The way they were mounted when I got the antenna, would present a short across the feed. Another way to describe the antenna is
two rings stacked on top of each other with the delrin insulators at 0 and 180
degrees . Two gamma rods on the 180 point and the alum. bkts on the 0 side. Would be fun to get it going with my 706 in the car. Thanks for your time in trying to help.

5354. Tunable SAP (secondary audio program) for my Tv?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: wmunsil@aztec.asu.edu
Message-ID: <7icp55ssd1@news.asu.edu>
Source record: 69954

I'm looking for a circuit for a tunable SAP for my TV.
Can anyone out there help?

Thanks
Bil
wmunsil@aztec.asu.edu
W7WKM

--
Lernu La Internacian Lingvon, Esperanto. 1-800-ESPERANTO,
soc.culture.esperanto, www.esperanto-usa.org, Esperanto SIG.

5355. Re: Cellular Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: D Best <dbest@iquest.net>
Message-ID: <Z0n23.273$A4.1049@news1.iquest.net>
Source record: 69955

This brings a question to mind...

I heard someone say once that cell phones could be modified for use on the
900 MHz ham band. Is this possible or just a tall tale?

David, KB9TAL

Zorn Jr Robert L <zorn@bucknell.edu> wrote in message
news:Pine.OSF.3.91.990523093244.7709A-100000@coral.bucknell.edu...
>
> I am trying to decide what to do with some older cellular phones.
> Are there any useable parts or modifications?
> Any market value?
>
> Thanks,
> Bob, KF3DF

5356. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <3749FBBE.2A1D@ameritech.net>
Source record: 69956
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
Sir wrote:
>
> OBI-WAN PEROGI wrote:
> >
> > MSteven wrote:
> > >
> > > On Sat, 22 May 1999 20:35:48 -0400, OBI-WAN PEROGI
> > > <theoldbrookltnkid@ameritech.net> wrote:
> > >
> > > >Steven wrote:
> > > >>
> > > >> On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
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> > > >> >Mike Silva wrote:
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> > > >> >> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> > > >> >> >
> > > >> >> >Danny wrote:
> > > >> >> >>
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> > > >> >> >>
> > > >> >> >--
> > > >> >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > >> >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > >> >>
> > > >> >>--
> > > >> >>REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > >> >>ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > >>
> > > >> MEOW MEOW ROOF ROOF
> > > >
> > > > --
> > > > REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > ESPECIALLY WHEN YOUR ON A DATE. BURP
> > >
> > Why do people not delete all this crap before posting a reply? Why do
> > people have to use gay signature files?
> What are you telling me buddy that your sig files are straight?
> Hey Einstien.
> --
> REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> ESPECIALLY WHEN YOUR ON A DATE. BURP
```

5357. Re: Is hot glue Polyethylene?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Bill <whagen@NOREPLY.inreach.com>
Message-ID: <3749FE16.36D8@NOREPLY.inreach.com>
Source record: 69957

AMDX wrote:
>
> If hot glue is polyethylene it should have low loss
> and a low dielectric constant.
> I hope we hear from Barry L Ornitz on this.
>
> Mike
I believe it is a blend of polymers including polyvinyl acetate and
waxes

--
Please remove the word "NOREPLY" from the email adress. Sorry for the
inconvenience, but it helps keep down the spam.

5358. FS B&W 600 GDO and Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Marty Duplissey <mduplissey@lsbs.com>
Message-ID: <pAn23.1178$K3.47173@news12.ispnews.com>
Source record: 69958

FS B & K model 600 Grid Dip Meter and full coil pack. This meter is collecter quality, Coils are in original B&W box. This is the bullet shape meter with tuning knob on front and meter on left side. Has a piece of yellow tape
near top above meter with small scratch in corner of tape. Has very small scratch (less than 1/16 inch) above 90 to 100 mhz on outer edge of dial in pink section for coil 600-A-5. Coil pack is in original B&W box which is perfect. Yellow (600-A-3 14-36 mhz) coil has a few scratches and White (600-A-3 5-14 mhz) coil has 2 small (less than 1/8 inch) scratches on it. Thats it! otherwise perfect as when it came from B&K years ago Serial number 3384 Works great! Reason for selling is I use it and want to buy a MFJ-259B to replace it. Make an offer. No reasonable offer refused.
Marty
N5KBP

--
Marty Duplissey
Lone Star Business Systems
Specializing in development for the credit report retrieval industry
Desktop, Networks, Intranets and Internet Delivery
http://www.lsbs.com

5359. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "Jerry G." <jerryg50@hotmail.com>
Message-ID: <3Nn23.7032$X5.13720@news.total.net>
Source record: 69959
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Monochrome TV is refered to as a black and white broadcast. Black
is the absence of light, and the white is a high intensity of light
given off from the CRT.

The true defination of a monochrome CRT, is one with a single gun or
channel. You can have a single gun CRT with green or orange phosphor
as in the older computer monochrome screens.

--

Jerry Greenberg

Greetings...

From the land of the " Great Ice Storm Of 1998 ! "
Floods, And Who Knows What ???
See Y'a Soon... Jerry Greenberg
==========
jerryg@total.net
http://www.total.net/~jerryg
http://www.zoom-one.com
http://www.zoom-one.com/electron.htm

Just Looking At You Kid...

If It's Not Broke, Don't Fix It...!
If It Don't Make Noise, Shake It !
If It Don't Move, Smack It !
If It's Broke, Then Fix It ...!
If You Don't Know How To Fix It, Give It Out !
==========

Three Things To Not Take A Crash Course:
1) Flying
2) Driving
3) Computers
4) Marriage???
Your Computer May Be 2000 Ready... But Are You???

========== Message Separator ==========

Jeffrey Herman <jeffreyh@Hawaii.Edu> wrote in message
news:7i9hkk$nm4@news.Hawaii.Edu...
In article <3745E425.1FDF@ameritech.net>, OBI-WAN PEROGI
<URL:mailto:theoldbrookltnkid@ameritech.net> wrote:
> Since when do TV station broadcast in one colo(u)r as the name

> Monochrome would imply. Heck, even Black and White is two
colo(u)rs.

"Monochrome" refers to the CRT having a single electron-beam gun and
a single-color phosphor on the CRT's screen.

Mono = single.

Depending upon the CRT's grid voltage, the beam+phosphor can create
dozens
and dozens shades of grey.

Jeff KH6O
--
Fingerprint Classification Services, Inc.: Your own personal copy
of your fingers' inked impressions, classified utilizing the Henry
classification formula (with FBI extensions), $15 + postage.

5360. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Sir <sir@sir.com>
Message-ID: <374A08FB.7F92@sir.com>
Source record: 69960
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
OBI-WAN PEROGI wrote:
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> Sir wrote:
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> > > MSteven wrote:
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> > > > On Sat, 22 May 1999 20:35:48 -0400, OBI-WAN PEROGI
> > > > <theoldbrookltnkid@ameritech.net> wrote:
> > > >
> > > > >Steven wrote:
> > > > >>
> > > > >> On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
> > > > >> <theoldbrookltnkid@ameritech.net> wrote:
> > > > >>
> > > > >> >Mike Silva wrote:
> > > > >> >>
> > > > >> >> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> > > > >> >> >
> > > > >> >> >Danny wrote:
> > > > >> >> >>
> > > > >> >> >> Mother Nature wrote:
> > > > >> >> >> >> >
> > > > >> >> >> >>
> > > > >> >> >> >--
> > > > >> >> >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > >> >> >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > > >> >> >> >--
> > > > >> >> >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > >> >> >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > > >> >> MEOW MEOW ROOF ROOF
> > > > >> >> --
> > > > >> >> REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > >> >> ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > > >> >>
> > > > >> --
> > > > >> REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > >> ESPECIALLY WHEN YOUR ON A DATE. BURP
```

5361. Re: Cellular Phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "KF4FDJ (Mike in Ft. Myers, FL)" <seven77@gate.net>
Message-ID: <374A0990.68C96D38@gate.net>
Source record: 69961

Give them to your local abuse shelter. Even an unactivated cell phone
can dial 911. A woman with children living in fear will have some peace
of mind.

73, Mike

> Zorn Jr Robert L <zorn@bucknell.edu> writes:
> >
> >I am trying to decide what to do with some older cellular phones.
> >Are there any useable parts or modifications?
> >Any market value?

```
__\/__
| . / ^ _ \ .
| |\| (o)(o) |/|
^ --- * -----------------.OOOo--oo--oOOO.------------------- *
|||  | | * Mike Gilchrist - KF4FDJ ..... AMSAT Area Coordinator *
|X|  | | * P.O. Box 763 ................ AMSAT member #31884 *
[X]~~~|k| * Fort Myers, FL 33902 ....... ARRL member #1781549 *
/ \  |f| * http://www.gate.net/~seven77 telephone 941.772.7907 *
| |  |4| * kf4fdj@amsat.org ............................ EL96ap *
| P  | |f| * I.S. Professional ..... CNA .... Computer Consultant *
| 3  |=|d| * AO10, AO27, FO20, FO29, RS13, RS15, MIR, E Layer *
| D  | |j| * Bringing Oscar demos to the Lee County Schools. *
|_____|=| | * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
/*X*\ | | * Black holes were created when God divided by zero. *
________|_|_______________________________Oooo._________________________
.oooO ( )
( ) ) /
\ ( (_/
\_)
```

5362. Re: Is hot glue Polyethylene?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <sdo23.1313$G3.45429@news13.ispnews.com>
Source record: 69962

AMDX wrote in message +ADw-01bea630+ACQ-972b7040+ACQ-cfb14d0c+AEA-default+AD4-...
+AD4-If hot glue is polyethylene it should have low loss
+AD4-and a low dielectric constant.

Mike and all,

Most hot-melt glues are a mixture of amorphous polypropylene and some tackifier resins. The RF loss properties are almost as good as polyethylene.

Polyethylene hot-melt glues are available but they require temperatures above those of home glue guns. I remember seeing a company that sold emergency connector kits. These consisted of a large collection of different pins and sockets of all sizes. These were fitted to the existing connector and the wires were attached. A form was placed around this and molten polyethylene from a high temperature glue gun was squirted in. It did a wonderful job making connectors to weird military plugs and jacks. I tried using polyethylene in my home glue gun and wound up destroying it. These generally are thermal limited for safety and my gun got hot enough to soften the polyethylene and plug the gun up+ACE-

Roy Lewellyn made some Q measurements on some toroids a while back trying to determine the effect of coatings. A few of the poor materials gave low Q, but most good dielectrics had little effect on the coil Q. Some good ones were: polyethylene, polypropylene hot melt, RTV silicones (after curing), polystyrene, and paraffin wax (not beeswax). The wax is especially nice when experimenting as it is so easy to remove. Cyanoacrylate (super glue), RTV and epoxies do OK for permanent installations.

As someone else pointed out, most common RTV (room temperature vulcanized) silicone sealers release acetic acid when curing. These have a strong vinegar smell, and they can corrode nearby materials. There are silicone materials that do not release acid when curing. I believe GE makes one version in their professional builder's supply line. Read the label carefully to make sure you have the right one.

73, Barry L. Ornitz WA4VZQ ornitz+AEA-dpnet.net

5363. Re: Is hot glue Polyethylene?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <bko23.1314$G3.46022@news13.ispnews.com>
Source record: 69963

Bill wrote in message <3749FE16.36D8@NOREPLY.inreach.com>...
>AMDX wrote:
>>
>> If hot glue is polyethylene it should have low loss
>> and a low dielectric constant.

>I believe it is a blend of polymers including polyvinyl acetate and
>waxes

This combination is used in some glue sticks. They tend to be be somewhat "sticky" at room temperature. The glue sticks that look like RG-8 center dielectric are generally amorphous polypropylene and tackifier resins.

The material using polyvinyl acetate is not a good dielectric, while that using the polypropylene is.

Thanks for mentioning this.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

5364. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <374A162B.68BC@ameritech.net>
Source record: 69964
Cross-posted to: rec.radio.amateur,soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

```
Sir wrote:
>
> OBI-WAN PEROGI wrote:
> >
> > Sir wrote:
> > >
> > > OBI-WAN PEROGI wrote:
> > > >
> > > > MSteven wrote:
> > > > >
> > > > > On Sat, 22 May 1999 20:35:48 -0400, OBI-WAN PEROGI
> > > > > <theoldbrookltnkid@ameritech.net> wrote:
> > > > >
> > > > > >Steven wrote:
> > > > > >>
> > > > > >> On Fri, 21 May 1999 18:45:00 -0400, OBI-WAN PEROGI
> > > > > >> <theoldbrookltnkid@ameritech.net> wrote:
> > > > > >>
> > > > > >> >Mike Silva wrote:
> > > > > >> >>
> > > > > >> >> Mother Nature wrote in message <37438215.1DB5FBEE@hotmail.com>...
> > > > > >> >> >
> > > > > >> >> >Danny wrote:
> > > > > >> >> >>
> > > > > >> >> >> Mother Nature wrote:
> > > > > >> >> >> >
> > > > > >> >> >> >
> > > > > >> >> >> >--
> > > > > >> >> >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > > >> >> >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > > > >> >> >>
> > > > > >> >> >>--
> > > > > >> >> >>REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > > >> >> >>ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > > > >> >>
> > > > > >> >> MEOW MEOW ROOF ROOF
> > > > > >> >
> > > > > >> >--
> > > > > >> >REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > > >> >ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > > > >>
> > > > > >> --
> > > > > >> REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > > >> ESPECIALLY WHEN YOUR ON A DATE. BURP
> > > > > >
> > > > > --
> > > > > REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> > > > > ESPECIALLY WHEN YOUR ON A DATE. BURP
```

--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5365. Re: Is hot glue Polyethylene?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: tcrpe <tcrpe@yahoo.com>
Message-ID: <OKo23.38139$5e2.671368@news2.giganews.com>
Source record: 69965

Good explanation, Barry. Thanks.

For home use, at HF frequencies, I think I'll stick with the 'high
temperature, home type glue'.

Unless I come across a commercial type.

Thanks for your time.

TR

Barry L. Ornitz wrote in message ...
>
>AMDX wrote in message
+ADw-01bea630+ACQ-972b7040+ACQ-cfb14d0c+AEA-default+AD4-...
>+AD4-If hot glue is polyethylene it should have low loss
>+AD4-and a low dielectric constant.
>
>
>Mike and all,
>
>Most hot-melt glues are a mixture of amorphous polypropylene and some
>tackifier resins. The RF loss properties are almost as good as
>polyethylene.
>
>Polyethylene hot-melt glues are available but they require temperatures
>above those of home glue guns. I remember seeing a company that sold
>emergency connector kits. These consisted of a large collection of
>different pins and sockets of all sizes. These were fitted to the existing
>connector and the wires were attached. A form was placed around this and
>molten polyethylene from a high temperature glue gun was squirted in. It
>did a wonderful job making connectors to weird military plugs and jacks. I
>tried using polyethylene in my home glue gun and wound up destroying it.
>These generally are thermal limited for safety and my gun got hot enough to
>soften the polyethylene and plug the gun up+ACE-
>
>Roy Lewellyn made some Q measurements on some toroids a while back trying
>to determine the effect of coatings. A few of the poor materials gave low
>Q, but most good dielectrics had little effect on the coil Q. Some good
>ones were: polyethylene, polypropylene hot melt, RTV silicones (after
>curing), polystyrene, and paraffin wax (not beeswax). The wax is
>especially nice when experimenting as it is so easy to remove.
>Cyanoacrylate (super glue), RTV and epoxies do OK for permanent
>installations.
>
>As someone else pointed out, most common RTV (room temperature vulcanized)

>silicone sealers release acetic acid when curing. These have a strong
>vinegar smell, and they can corrode nearby materials. There are silicone
>materials that do not release acid when curing. I believe GE makes one
>version in their professional builder's supply line. Read the label
>carefully to make sure you have the right one.
>
>
> 73, Barry L. Ornitz WA4VZQ ornitz+AEA-dpnet.net
>
>
>

5366. Re: ECL BCD Decade counter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: rick@area.com
Message-ID: <7id685$3ds$1@vax.area.com>
Source record: 69966

In article <3756edfd.571279726@news.sci.fi>,
Paul Keinanen <keinanen@sci.fi> wrote:
>On 23 May 1999 18:02:46 -0700, rick@area.com (Richard Karlquist)
>wrote:
>
>: Try connecting a Motorola 10EP016 as a divide by 10 using feedback
>: gates. It should easily do 1 GHz and put out BCD.
>
>While you can easily get a divide by 10 functionality from a 4 bit
>counter with asynchronous (ripple) reset at count of ten with some
>external gates, the problem is how to get a stable output from a
>BCD/1-of-10 decoder, since the BCD produced by the counter is stable
>for much less than the clock period when operating near the upper
>frequency limit of counter, especially if the counter is an
>asynchronous (ripple) counter.
>Paul OH3LWR

Yes, but the '016 series is a fully *synchronous* counter. As far
as the output stability is concerned, the BCD output should be valid
for 1/2 to 2/3 of the clock period at 1 GHz. Typical prop delay
is about 1/3 of a nsec.

Rick Karlquist N6RK
rick@area.com

5367. Re: vhf QRP or homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Eamon Skelton <die.all@spammers.org>
Message-ID: <7ifaaf$3pd$1@scotty.tinet.ie>
Source record: 69967

Samuel Rogers wrote in message ...
>Hi!
>
>Does anyone know any good homebrew VHF sites?
>
>thanks in advance
>
>Sam
>

You will find a simple VHF CW transmitter on my website.
JF1OZL has some VHF/UHF stuff on his web page.
Links at: www.qsl.net/ei9gq

73, Ed. EI9GQ

5368. Varicap diode for small voltage FM receiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Van Der Biest <vanderbi@ensta.fr>
Message-ID: <37496911.87E9D0C@ensta.fr>
Source record: 69968

I'm looking for a varicap diode which would be able to range from 5 to
25 pF with only 3 volts.

This is for a portable FM receiver with TDA7021,TDA7040 and TDA7050
[If you are interested, have a look at
http://www-eu2.semiconductors.com/pip/TDA7021T_CNV_2
Thank's a lot.

--
Van Der Biest Franï¿½ois mailto:vanderbi@ensta.fr
http://www.ensta.fr/~vanderbi

"Pour moi toute la notion de "profondeur de l'homme" n'a de profond que
sa prï¿½tention. La "profondeur" est un rapport tragique que l'homme a
avec sa superficialitï¿½ fonciï¿½re, lorsqu'il en prend conscience. La
tragï¿½die profonde de l'homme, c'est sa superficialitï¿½, son
insignifiance." Romain Gary : La nuit sera calme

5369. cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3748E8DB.ABB32622@bellsouth.net>
Source record: 70021

Am I going to regret using Duco cement to hold the VFO tank coil in my
Ten-Tec transceiver in place? (unfortunately my local Wal-Mart was sold
out of aromatic candles so no candle wax!)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

5370. Re: Morse code/Trying to reach Hawaii

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <7iaa6m$b0f@news.Hawaii.Edu>
Source record: 70022
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <3750e247.4091347@news.lineone.net>, Walt Davidson
>On Sat, 22 May 1999 08:43:34 +0100, Keith Bennett

>>Hey Jeff, what are the chances of you sending me a Hawaii'an beach
>>shirt?

>Probably about the same as the chances of him sending you a QSL card!

Hey, Walt -- I QSL 100% *after* I receive the other station's card.
I have two styles of cards: The R-rated card shows a topless Hawaiian
beach girl, and the G-rated cards are a Hawaiian sunset, or a picture
of Diamond Head or Waikiki Beach. (They're really just post cards, with
my call sign scrawled across the top with a felt-tip pen.)

My wire beam points due West; maybe one of these days we'll work each
other *long* path.

73, Jeff KH6O

--
Fingerprint Classification Services, Inc.: Your own personal copy
of your fingers' inked impressions, classified utilizing the Henry
classification formula (with FBI extensions), $15 + postage.

5371. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <3748BBB6.3191@powerup.com.au>
Source record: 70023

Dunno about Duco cement but I used plumber's PVC glue and
a .25" slice of a cork to keep it off the metal. Glooped
it all over and it seems fine..

Doug Smith wrote:
>
> Am I going to regret using Duco cement to hold the VFO tank coil in my
> Ten-Tec transceiver in place? (unfortunately my local Wal-Mart was sold
> out of aromatic candles so no candle wax!)

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

5372. vhf QRP or homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: sam23@hotmail.com
Message-ID: <Ah423.1929$GL4.151623@newsgate.direct.ca>
Source record: 70024

Hi!

Does anyone know any good homebrew VHF sites?

thanks in advance

Sam

5373. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <1s423.517$733.13887@typ11.nn.bcandid.com>
Source record: 70025

Doug Smith wrote in message <3748E8DB.ABB32622@bellsouth.net>...
>Am I going to regret using Duco cement to hold the VFO tank coil in my
>Ten-Tec transceiver in place? (unfortunately my local Wal-Mart was sold
>out of aromatic candles so no candle wax!)

Living over on the border between the two real states of Tennessee, eh. [I
am in Kingsport.]

Duco cement is cellulose nitrate with plasticizer. It will work OK. For a
lower loss coil dope, get a small glass bottle and fill it 3/4 full of
acetone. Stuff in as many stryfoam peanuts as it will hold.
Then let it sit for a week or so for all the "fuzzballs" to dissolve. The
resulting glue will have about as low an RF loss as is possible.

73, Dr. Barry L. Ornitz WA4VZQ ornitz@tricon.net

5374. Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: swabbie@hotmail.com
Message-ID: <a1523.948$%l6.7075799@rsnws01.mn.mediaone.net>
Source record: 70026
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Along time ago, I saw a crystal radio with no external power that drove a small speaker, like that in a PC computer. It wasn't very loud, but all you needed in a quiet room. There was some sort of a transistor that was used as an amplifier, powered by the stray RF from the antenna. It was a very cool way to hear the local AM station.

I'm guessing that someone here knows where I can find info and maybe even a print for such a crystal radio, that can power a small loud speaker with no external power. (other than that brought in on the long wire)

Thanks for your reply.

Swabbie

5375. Re: ECL BCD Decade counter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3756edfd.571279726@news.sci.fi>
Source record: 70027

On 23 May 1999 18:02:46 -0700, rick@area.com (Richard Karlquist)
wrote:

: In article <7i9dbj$12j$1@news4.svr.pol.co.uk>,
: John Mortlock <jmort@global.freeserve.co.uk> wrote:
: >Does anyone know of an ECL BCD Decade Counter chip ?
: >
: >There are a number of ECL divide by 10 prescaler IC's about but they dont
: >have BCD output. Plessey used to make one (SP8635) but this is now
: >John
:
: Try connecting a Motorola 10EP016 as a divide by 10 using feedback
: gates. It should easily do 1 GHz and put out BCD.

While you can easily get a divide by 10 functionality from a 4 bit
counter with asynchronous (ripple) reset at count of ten with some
external gates, the problem is how to get a stable output from a
BCD/1-of-10 decoder, since the BCD produced by the counter is stable
for much less than the clock period when operating near the upper
frequency limit of counter, especially if the counter is an
asynchronous (ripple) counter.

A synchronous counter with synchronous counting and synchronous reset
requires 4 JK-flip-flops, two 2 input and one 3 input NOR gate would
generate a cleaner BCD count suitable for BCD/1-of-10 decoding.

One trick that was used in the CMOS family in the early 1970's, when
CMOS was considered a slow logic, was the Johnson counter, which is
essentially a 5 stage shift register with the output cross coupled to
the input. With ten 2 input gates all ten states can be cleanly
decoded, but this counter does not produce a BCD value, so it is _not_
very practical for using in e.g. frequency counters to drive a 7
segment display (trough a latch), but very easy to use, if you require
some 1-of-10 output(s).

Paul OH3LWR

5376. help: russian tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: frank@antares.ing.unipi.it
Message-ID: <7ib6eggcr2@pisanino.unipi.it>
Source record: 70028

Hello all,
I found a certain number of military transmitting tubes and
I also found a little manual (just four pages) with the tube's
description. Unfortunately I don't read the russian so I'd
appreciate if someone could translate this manual to english.
I scanned the manual and put it at the following addresses:
http://sirius.ccii.unipi.it/~iw8qpi/scan1.tgz (34K very poor quality)
http://sirius.ccii.unipi.it/~iw8qpi/scan2.tgz (250K poor quality)

If someone is interested in actually translating this manual I'll send
photocopies. Also I'm interested in selling some of those tubes if
someone wants them.
Please contact me by email: frank @ ing.unipi.it (remove spaces).
73

Francesco IW8QPI

5377. FS: KENWOOD TS 430S AND EXTRAS!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: fun4sume@aol.com
Message-ID: <19990524071045.11239.00005619@ng-fp1.aol.com>
Source record: 70029

It has am,cw,ssb.No fm boad and comes with the ssb filter,MC-60 desk mike with the Hiel c-5 cartridge,manual and service manual. $350.00 shipped.
Just Email me if interested,Dave.

5378. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-24 00:00:00 UTC
From: "k.t.chan" <ktchan@hk.gin.net>
Message-ID: <3749A66A.5C671376@hk.gin.net>
Source record: 70030
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

I remember one design of such kind by:
grow crystals to make a big crystal speaker.
The crystal is the same used by ear plugs.
May be is it available if you try to find peizo crystals and make a
speaker out of it.
The RF signal have to be stepup by a transformer.

Regards

K.T.Chan

Swabbie wrote:

> Along time ago, I saw a crystal radio with no external
> power that drove a small speaker, like that in a PC
> computer. It wasn't very loud, but all you needed in
> a quiet room. There was some sort of a transistor that
> was used as an amplifier, powered by the stray RF from
> the antenna. It was a very cool way to hear the local
> AM station.
>
> I'm guessing that someone here knows where I can find
> info and maybe even a print for such a crystal radio,
> that can power a small loud speaker with no external
> power. (other than that brought in on the long wire)
>
> Thanks for your reply.
>
> Swabbie

5379. WTB: QEX back issues

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: jvm@inmind.com
Message-ID: <374aa0cb.5107756@news.inmind.net>
Source record: 69882
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

Anyone cleaning out a shack and looking for a home for QEX back issues? I'd like to complete my collection. Let me know what you have & price & whether you will sell by issue or as a set.

Tnx & 73,

Jim W4QE jvm@inmind.com

Issues needed:
1999: any/all 1998: any/all
1997: any/all 1996: Feb
1995: May, June 1993: April
1990 Nov, Dec.

5380. Re: 10 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Mark Nelson <mnelson@pedinc.com>
Message-ID: <374AB199.64A72961@pedinc.com>
Source record: 69883

bullmeat@my-dejanews.com wrote:

> Looking for an easy to build 10 meter qrp radio.I've built the
> cheapie-quikie ten'r but looking for something else to build,thanks.
>
> --== Sent via Deja.com http://www.deja.com/ ==--
> ---Share what you know. Learn what you don't.---

I just got a 1936 magazine with an article for a portable
low-power10-meter rig -- THAT would be a challenge (as it probably was
then)! Just finding 60-year-old parts might take it out of the
"quickie" category, though.

--
Mark Nelson

A collector of TV signal boosters and UHF converters -- God help me!
http://www.geocities.com/TelevisionCity/Set/6312/

5381. Where to get PC board drill bits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Don <bjmcpher@usit.net>
Message-ID: <374ABF2C.729D6208@usit.net>
Source record: 69884

Hi, all:

I wonder if anyone can give me an Idea of places to order small drills (somewhere in the vicinity of size #70) for drilling homemade pc boards? I have quite a few electronics and surplus catalogs, but most of them dont carry bits this small. They dont neccesarily have to be carbide.

Thanks,

Don

5382. World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7iefe5$p10@newsops.execpc.com>
Source record: 69885
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,
I saw some hidden radio's handbuilt inside phones and such
to hide them when I was in Norway. It occurs to me that these
must have been very simple devices. Does anyone know a
good book on basic radio construction. I would like to learn more
about the inner workings of a SIMPLE radio and thus a modern
kit is not really my interest. It would just transmit Morse code of
course, although a radio that received voice would be fun to build
too. I believe at that time they used something called "crystal sets"?
Detailed information is needed please. The radios I saw (used to
transmit and receive Morse) appeared to have very few parts so I
am hoping with the right knowledge it not too hard to build one.
Also, any band suggested for such a radio? Anyone know what bands
were used in WW2 for underground communication? All help
deeply appreciated.
73's
Eric

5383. Re: 10 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7iemj6$5es$1@nnrp1.deja.com>
Source record: 69886

In article <7hvhoardj1@nnrp1.deja.com>,
bullmeat@my-dejanews.com wrote:

> Looking for an easy to build 10 meter qrp radio.I've built the
> cheapie-quikie ten'r but looking for something else to build,thanks.

VXO transmitter (all the usual references) + direct conversion
receiver (ditto).

The beauty of direct conversion is that very little of such
a receiver is frequency sensitive, so you can build it for
any band you like.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5384. lm3820

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: ik0yin <ik0yin@usa.net>
Message-ID: <7ie232$d7l$1@nslave1.tin.it>
Source record: 69887

Hi de IK0YIN,
I'd like to know if someone did a qrp receiver usig the LM3820
and if there is any drwing on the web
thanks and 73 de ik0yin Nunzio

ik0yin@usa.net

5385. Re: 10 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9905251320280.23114-100000@Ocean.CAM.ORG>
Source record: 69888

On Tue, 25 May 1999, Mark Nelson wrote:

> bullmeat@my-dejanews.com wrote:
>
> > Looking for an easy to build 10 meter qrp radio.I've built the
> > cheapie-quikie ten'r but looking for something else to build,thanks.
> >
> > --== Sent via Deja.com http://www.deja.com/ ==--
> > ---Share what you know. Learn what you don't.---
>
> I just got a 1936 magazine with an article for a portable
> low-power10-meter rig -- THAT would be a challenge (as it probably was
> then)! Just finding 60-year-old parts might take it out of the
> "quickie" category, though.
>
Was it one of those that used a single tube for both transmit and receiver? It would be a modulated LC oscillator on transmit and a superregen receiver on receive. They were apparently quite common in the old 56MHz band, and then (perhaps after higher standards were required there) the 112MHz band. And a similar scheme was shown in the 1968 ARRL handbook (probably other years too) for a 420MHz transceiver.

I've seen retrospective articles about that sort of transciever, and they said they helped to popularize the bands, moving up as the rules got stricter and the bands more crowded. I imagine that not all were used in portable operation, but their simplicity helped people to get on the bands at home. I guess in the same way that Gunnplexers have helped the 10GHz band, or the APX6 surplus transceivers helped the 1215MHz band years ago.

I guess my question about 10meters is whether the rig you saw is similarly simple? I don't recall seeing mention of such things on 10Meters.

Of course, the simple idea did live on, in the form of cheap 27MHz walkie talkies that sometimes were converted to 10Meters. They used a single transistor switched between transmit on receive, though they were crystal controlled on transmit but still a superregen receiver, and of course the separate audio chain.

Michael VE2BVW

5386. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.990525102908.17611A-100000@oso.slonet.org>
Source record: 69889

Is there a mistake here? Vinegar-smelling RTV's DO corrode in my
experience! I'd try and select another RTV that avoids acetic acid.

On Tue, 25 May 1999, Ian White, G3SEK wrote:

> Doug Smith wrote:
> >
> >I was worried about RTV -- I've got plenty of it, but had been told it was
> >bad news for use on connectors due to corrosive gases released during
> >curing. Figured it'd be even worse on toroids.
>
> In practice, the vinegar-smelling silicone rubbers don't seem to corrode
> clean, dry copper (or even copper that is partly tinned with solder).
> The toroid and enameled wire are not at any risk either. Try it and see
> for yourself!
>
> You have to try it anyway, because formulations will vary between
> manufacturers, and even with the same manufacturer and brand name the
> formulation can vary from year to year, or in different countries.
>
> >Ten-Tec does suggest
> >hot-melt glue as an alternative. I don't do much wood work so didn't think
> >it'd be worth my while to buy a glue gun for one coil...
>
> Once you've bought one, you'll wonder how you ever managed without it.
> Don't think of it as glue, more as an instant source of moldable
> plastic. You can also re-work and sculpt the material with a clean
> (preferably new) soldering iron bit, a hot-air gun, or a hot-blow tip on
> a butane soldering iron.
>
> As Barry has already noted, the ordinary sticks that look like the inner
> of RG213 (polypropylene) have excellent RF properties. It's particularly
> good for sealing ends of coax that are exposed to the weather.
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
> http://www.ifwtech.demon.co.uk/g3sek
>
>

5387. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: "Michael J. White" <mwhite@mitre.org>
Message-ID: <374AF6B4.14DEF23C@mitre.org>
Source record: 69890
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> I saw some hidden radio's handbuilt inside phones and such
> to hide them when I was in Norway. It occurs to me that these
> must have been very simple devices. Does anyone know a
> good book on basic radio construction.

Hams call such radios "glowbugs"; lots of folks have fun building these very simple transmitters and receivers and putting them on the air. Here are a few links to get you started:

http://www.chass.utoronto.ca/~brucerob/glowbugs/glowbugs_bib.html

http://www.realtime.net/~cfb/Links.html

Best of luck...

Mike, N4PDY

5388. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: "Michael J. White" <mwhite@mitre.org>
Message-ID: <374AF726.86A3D74A@mitre.org>
Source record: 69891
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> I saw some hidden radio's handbuilt inside phones and such
> to hide them when I was in Norway. It occurs to me that these
> must have been very simple devices. Does anyone know a
> good book on basic radio construction.

Hams call such radios "glowbugs"; lots of folks have fun building these very simple transmitters and receivers and putting them on the air. Here are a few links to get you started:

http://www.chass.utoronto.ca/~brucerob/glowbugs/glowbugs_bib.html

http://www.realtime.net/~cfb/Links.html

Best of luck...

Mike, N4PDY

5389. Re: Where to get PC board drill bits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <374B38AF.A7B39213@home.com>
Source record: 69892

From Jack:

Of all places, Wahl (the hair clipper company from Germany) makes very small drill bits for PC boards. I would just search at Jameco, Digikey, Allied Avnet, Tech America and Mouser until you find who carries them. My son got me some last year.

Don wrote:

> Hi, all:
>
> I wonder if anyone can give me an Idea of places to order small drills (
> somewhere in the vicinity of size #70) for drilling homemade pc boards?
> I have quite a few electronics and surplus catalogs, but most of them
> dont carry bits this small. They dont neccesarily have to be carbide.
>
> Thanks,
>
> Don

5390. 3CX15000B7 Eimac 4sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: w3atv@aol.com
Message-ID: <19990525160827.20220.00003832@ng27.aol.com>
Source record: 69893

```
For Sale;
Eimac 3CX15000B7 tube. Tested fine - very low hours.
$1300 Shipped Cont. U.S.
Tnx,
Jim
```

5391. FS: 10KW Bird Slug

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: jimmoci@aol.com
Message-ID: <19990525161759.04494.00005115@ng-fa1.aol.com>
Source record: 69894

```
For Sale
Bird 10,000watt slug
$109 shipped cont. U.S.
Tnx,
Jim
```

5392. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <y$$fUKALpuS3EwwN@ifwtech.demon.co.uk>
Source record: 69895

Clifford Buttschardt wrote:

>Is there a mistake here? Vinegar-smelling RTV's DO corrode in my
>experience!

...but not in mine, if the copper is dry when the RTV is applied, as a PC board would be. As I said:

>> You have to try it anyway, because formulations will vary between
>> manufacturers, and even with the same manufacturer and brand name the
>> formulation can vary from year to year, or in different countries.

Note particularly that experience from some years ago may not be valid now, because formulations do change.

>I'd try and select another RTV that avoids acetic acid.

On the whole, so would I, but I haven't found it as critical as Cliff has.

My present favorite is Dow Corning 744, which is non-acidic, non-slump, a tasteful shade of white, and reasonably priced for small quantities. It takes longer to set than some grades (more than 24h for full strength) but it also keeps well in the tube.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5393. BIRD Replacement meter 4sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: w3atv@aol.com
Message-ID: <19990525162925.15152.00000208@ng-fj1.aol.com>
Source record: 69896

```
Replacement Bird Meter with cable
Part# 2080-002T for Bird 43 or 43 Rack Mount
Like New, $75 shipped cont. U.S.
Tnx,
Jim
```

5394. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: 623402 <623402@clear.net.nz>
Message-ID: <01bea6f5$eaec36e0$bd0114ac@simon>
Source record: 69897
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

The first place to start is acoustic efficiency, ie a tapered horn on the earpiece.

Swabbie <swabbie@hotmail.com> wrote in article
<a1523.948$%l6.7075799@rsnws01.mn.mediaone.net>...
> Along time ago, I saw a crystal radio with no external
> power that drove a small speaker, like that in a PC
> computer. It wasn't very loud, but all you needed in
> a quiet room. There was some sort of a transistor that
> was used as an amplifier, powered by the stray RF from
> the antenna. It was a very cool way to hear the local
> AM station.
>
> I'm guessing that someone here knows where I can find
> info and maybe even a print for such a crystal radio,
> that can power a small loud speaker with no external
> power. (other than that brought in on the long wire)
>
> Thanks for your reply.
>
> Swabbie
>
>
>
>
>

5395. Help - Mobile Phone modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Alf <perez.alfonso.am@bhp.com.au>
Message-ID: <7if83v$12t2@atbhp.corpmel.bhp.com.au>
Source record: 69898
Cross-posted to:
aus.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

I would greatly appreciate if anyone has information on mobile phone
modifications/programing. Particularly Nokia 101 and Motorola 7500.
We are working on a project that requires mobile transmitters used for fault
alarms on remote industrial equipment and would like to be able to set up
various mobile phones as transmitters with the receiving mobile set up on
scan mode to monitor each of the transmitted alarm signals. The analog data
then will be fed into a computer for alarm trending.

Any help tips or references would be appreciated.

Regards,

Alf

5396. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7if9j1$sh9$1@its.hooked.net>
Source record: 69899
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I'm only speculating (I'd like to hear some solid info myself) but a simple radio from that era would have been a single tube crystal-controlled transmitter (using perhaps a 6L6 or 6V6), and a regenerative receiver consisting of maybe a dual triode (detector and AF), or a pentode detector followed by one or two stages of triode AF; or perhaps a regenerative superhet using a converter followed by a dual triode detector and AF. An RF amp may also have been added to the bigger sets for better performance, and to help keep the Bad Guys from picking up the signal from the oscillating detector in the case of the regen. A crystal set wouldn't have had the range for such work, and more importantly it couldn't receive Morse (CW). I'm cross-posting this to the boatanchors group because they're likely to have lots of details.

73,
Mike, KK6GM

Woodsman wrote in message <7iefe5$p10@newsops.execpc.com>...
>Hello,
> I saw some hidden radio's handbuilt inside phones and such
>to hide them when I was in Norway. It occurs to me that these
>must have been very simple devices. Does anyone know a
>good book on basic radio construction. I would like to learn more
>about the inner workings of a SIMPLE radio and thus a modern
>kit is not really my interest. It would just transmit Morse code of
>course, although a radio that received voice would be fun to build
>too. I believe at that time they used something called "crystal sets"?
>Detailed information is needed please. The radios I saw (used to
>transmit and receive Morse) appeared to have very few parts so I
>am hoping with the right knowledge it not too hard to build one.
>Also, any band suggested for such a radio? Anyone know what bands
>were used in WW2 for underground communication? All help
>deeply appreciated.
> 73's
> Eric
>
>

5397. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <374B2546.7E12F6DD@alliedsignal.com>
Source record: 69900
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Olin Lathrop wrote:

> Swabbie wrote in message ...

<text deleted>

> >There was some sort of a transistor that
> >was used as an amplifier, powered by the stray RF from
> >the antenna.
>
> I find this a bit difficult to believe. The power from the radio signal is
> used to drive the output device directly.
>

Believe! I've seen schematics for this type of circuit, though I haven't tried it myself. If I remember correctly, the radio actually has two tuners. One tuner is set up to resonate on the station of interest. It is "detected" with a germanium diode and fed to a single transistor for amplification. The second tuner is tuned to as strong a local station as you can find. It's output is rectified with a couple of germanium diodes, and is used as the power supply for the amp.

I don't propose that the volume would be ear-splitting, and you'd still be better off using this type of radio with a set of headphones, but it is an interesting trick none the less.

Pete
--

| The opinions expressed here are my own, |
| and not necessarily those of my employer. |

5398. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bea74b$9ab39a00$ec3963c3@default>
Source record: 69901

Ian White, G3SEK wrote -
>
> My present favorite is Dow Corning 744, which is
non-acidic, non-slump,
> a tasteful shade of white, and reasonably priced for
small quantities.
> It takes longer to set than some grades (more than 24h
for full
> strength) but it also keeps well in the tube.
==========
Hello Ian,

Info is not of much use unless you tell us HOW to obtain some. I've already asked in Woolworths and they don't know what I'm talking about.

Reg, G4FGQ.

5399. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Doug Smith <nospam@nospam.org>
Message-ID: <yGH23.466$pj7.12667@news2.giganews.com>
Source record: 69902

Murray Kelly wrote in message <374A32F5.1014@powerup.com.au>...
>I don't know how the toroid was mounted in the Ten-Tec, either.

The cement (and the leads) are all that mount the toroid in this radio. (so without the cement, the thing is rather microphonic<g>.) I'm not worried about the Duco causing any problems for the form -- it's just a ferrite core. There hasn't been any damage to the enamel either; I'm not sure there would be any ill effects if it were lost. (I've never taken an ohmmeter to a ferrite core -- how conductive is it??)

73 Doug

5400. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <374B4C5F.1D050973@teleport.com>
Source record: 69903

My experience is like Ian's. I've used the acetic-acid curing RTV for over 20 years on all sorts of materials and have never seen any sign of corrosion.

For those who prefer non-acetic-acid-curing RTV, there's now a brand readily available in home-handyman type stores (here in the U.S. anyway). It's GE "Silicone II". I've found that it can sometimes take a long time (several days) to cure, but at least it smells nicer than the standard stuff.

Roy Lewallen, W7EL

5401. Re: Where to get PC board drill bits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9905252203310.18816-100000@Stratus.CAM.ORG>
Source record: 69904

On Tue, 25 May 1999, Don wrote:

> Hi, all:
>
> I wonder if anyone can give me an Idea of places to order small drills (
> somewhere in the vicinity of size #70) for drilling homemade pc boards?
> I have quite a few electronics and surplus catalogs, but most of them
> dont carry bits this small. They dont neccesarily have to be carbide.
>
> Thanks,
>
> Don
>
>

I used to get them at a hardware store. I'd have to ask at a counter in one part of the store, they'd put them in an 8.5 by 11 (or whatever) inch envelope, and I'd take it to the cash to pay for it. The cashier would tear the envelope open, and then be puzzled by the apparent lack of anything in the envelope. Of course, the drill bits were small and I was buying a few at a time.

The chain went bankrupt and I never bothered checking other hardware stores.

In recent years, I've been buying those small drillbits at hobby shops. Those are fairly common, even where electronic stores aren't. The prices aren't the best, and I imagine you can get better quality bits elsewhere, but hobby shops are readily accessible.

They are also a great place to buy small diameter brass tubing, useful as spacers and easily tapped for various bits of hardware, as well as small bits of brass sheet. You might also be able to find copper tape there (it's used for making stained glass windows), and who knows what else.

Michael VE2BVW

5402. Re: ECL BCD Decade counter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Mike Monett <add@csolve.net>
Message-ID: <374B602A.18E6@csolve.net>
Source record: 69905

Paul Keinanen wrote:

[...]

> Anyway, the specifications for the EP016 are really impressive,
> compared to the '016. The possibility to use it as an up to 16 bit
> divide-by-N counter running at full clock speed using the internal TC
> (terminal count) signal to preload the counter makes it very
> interesting. Unfortunately, based on the price estimates for other
> 10EP series chips, this chip is going to be quite expensive.
>
> Paul OH3LWR

(Sigh) Well, you have to take into consideration how much it would cost
doing it any other way. Then it doesn't cost so much.

The problem is not the solutions cost so much, it's the problems we chose
to tackle.

Best Regards,

Michael R. Monett
mailto:add@csolve.net

5403. Re: Help - Mobile Phone modifications

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Patricia Gibbons <wa6ube@ix.netcom.com>
Message-ID: <374B916E.53B6@ix.netcom.com>
Source record: 69906
Cross-posted to:
aus.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

Alf wrote:
>
> I would greatly appreciate if anyone has information on mobile phone
> modifications/programing. Particularly Nokia 101 and Motorola 7500.
> We are working on a project that requires mobile transmitters used for fault
> alarms on remote industrial equipment and would like to be able to set up
> various mobile phones as transmitters with the receiving mobile set up on
> scan mode to monitor each of the transmitted alarm signals. The analog data
> then will be fed into a computer for alarm trending.
>
> Any help tips or references would be appreciated.
>
> Regards,
>
> Alf

What advantage would a "mobile phone" have for your application ??

It would seem to me that if you are scanning in order to pick up
the transmission, that a mobile phone is not needed. Do you
want the mobile phone to actually dial a phone number when
a fault is detected ??

When you say mobile phone, do you in fact mean "Cellular Phone" ??

If not, then perhaps a Motorola R-Net data radio unit, or a
Varda alarm would better suit your purpose..

Kantronics also makes telemetery equipment based around their
packet radio controllers.

Just my $.02 :-)

Trish
--

Patricia E. Gibbons
Acting Chief Communications Technician
City of San Jose - ITD/communications
.....
My Public Key is available at:
<http://pgp5.ai.mit.edu/pks-commands.html>
Key ID: 0xEDECB44F
This key is RSA, NOT Diffie-Hellman !!

5404. IC source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: bullmeat@my-dejanews.com
Message-ID: <7icrmlrut1@nnrp1.deja.com>
Source record: 69969

Looking for a place to get these IC's,UM91214B andKT3170/8870.Any info greatly appreciated.

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5405. Are you an "HBR" receiver builder/user/aficionado

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990524221537.13702.00003225@ngol06.aol.com>
Source record: 69970

Do you remember the HBR receivers that were designed by the late Ted Crosby, W6TC? There were several versions of these very popular homebrew receivers. The first was the HBR-14 published in the July 1957 QST, followed by the HBR-16 in the October 1959 QST, the HBR-8/11 in March/April 1963, the HBR-12 in April 1964, and the HBR-13 in the October 1965 QST. There were also many improvements and add-ons by others, Alexander Stewart, WA4ZNI and William McKay, W7QBR to name just a few.

Many HBRs were built, and there is presently a small group HBR enthusiasts who are interested in your stories about the HBR you anticipated building, built,
used, or currently use. We would like to know your perception of how well it performed, problems you had with construction, calibration, etc. We're also interested in hearing from those of you curently trying to locate an HBR or if you anticipate building one.

We would like to hear about any correspondence that you may have had with Mr. Crosby, Mr. Stewart or the authors of HBR related articles published in QST and other amateur publications. Also, don't forget Mr. Ed Kent, K8EML, he was the compiler of the original HBR Notes. Did you have any correspondence with him? Tell us about it!

If you are currently interested in building one of these fine receivers we invite you to network with us. There are no fees, we're just a group of HBR enthusiast that help each other locate and obtain the necessary parts, share construction hints, etc.

In summary, if you're an admirer of the HBR tube receivers, then we would like to hear from you.

e-mail RobertC908@aol.com or talen@inetport.com
73's
Bob, W4RLC (formerly WA7OGU)

5406. Q Meter Osc.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: AMDX <AMDX@worldnet.att.net>
Message-ID: <01bea655$5af529c0$e4864d0c@default>
Source record: 69971

I'm reading about Q meters, It usually is a series LC circuit
driven by a "low output impedance oscillator"
What is a "low output impedance" for a Q meter that
will measure Qs of 1000 with decent accuracy.

Mike

5407. Re: Tunable SAP (secondary audio program) for my Tv?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <374A774A.8E4E5C62@bellsouth.net>
Source record: 69972

WILLIAM W MUNSIL wrote:
> I'm looking for a circuit for a tunable SAP for my TV.
> Can anyone out there help?

Tunable in that you want to cover different subcarriers, or different main channels?

There are only two subcarriers in use for TV; the SAP at 78.67117kHz (5 times horizontal sync) and the Professional Channel at 102.27252kHz. (6.5 times horizontal sync) Other subcarriers aren't exactly illegal, but there's no commercial equipment available to transmit or decode them..

I would visit http://members.aol.com/fmatlas. They sell tunable subcarrier modules for FM radio; these should work almost as well for TV. ("almost", because the SAP audio is DBX companded, something FM doesn't do. I don't know of any inexpensive DBX decoder circuits.)
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

5408. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <374A32F5.1014@powerup.com.au>
Source record: 69973

Oh - OK. I just used it (the blue stuff) and it has a residue that
dries transparent and quite hard. Nothing terrible hapened to the
enamel of the wire. Most 'dope' is solvent with stuff ('styrene?)
disolved in it - but leaving plenty of free solvent.

I don't know how the toroid was mounted in the Ten-Tec, either.
I made a VFO and had to place it firmly on the board somehow.
and did it flat but spaced with the slice of cork. Could've
used a nylon screw or somesuch. Just Lazy, I guess.

I better not tell you what I used for a toroid! :-)

As for integrity - well, might depend on how rough you
treat the finished product. Mine withstands dropping, I know.

H. P. Friedrichs wrote:
>
> What is "PVC glue"? If you are referring to the stuff used to join PVC pipes
> together, to the best of my knowledge, that's a solvent, not a glue. It bonds
> pipes together by dissolving the PVC, allowing the pipes to chemically "weld"
> together.
>
> I'm not certain what the original poster's "VFO tank coil in my Ten-Tec
> transceiver" looks like, but I would be concerned that a solvent might damage
> the enamel on the coil windings or damage the coil form.
>
> At the very least, I wouldn't depend on the structural integrity of dried
> solvent. There are probably better materials to use.
>
> Just my .02 worth...
> Pete
>
> Murray Kelly wrote:
>
> > Dunno about Duco cement but I used plumber's PVC glue and
> > a .25" slice of a cork to keep it off the metal. Glooped

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

5409. random lenght dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: matteone@my-dejanews.com
Message-ID: <7ido3ifhr1@nnrp1.deja.com>
Source record: 69974

Hello all, I am quite new to the construction of antennas, but the thing excited me so much that I decided start to do something.

i started from the random lenght dipole, fed with a ladder line, attached to an antenna tuner (the PALSTAR AT300CN). As dipole branches I used some thiny copper wire. Now, the thing I am not sure about is the influence the plastic insulator that covers the wire can have on the antenna behaviour... maybe it behaves like a dielectric or what? Do the branches of a dipole always has to be naked copper and nothing else?

thanks in advance for the suggestions
Matteo Campanella

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5410. Re: ECL BCD Decade counter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <375e4eb3.661573752@news.sci.fi>
Source record: 69975

On 24 May 1999 20:43:01 -0700, rick@area.com (Richard Karlquist)
wrote:

: Yes, but the '016 series is a fully *synchronous* counter.

Yes, I realised this, when I found the preliminary documentation for
the MC10EP016, which is an 8 bit counter, while the garden variety
10016 is a 4 bit counter.

: As far
: as the output stability is concerned, the BCD output should be valid
: for 1/2 to 2/3 of the clock period at 1 GHz. Typical prop delay
: is about 1/3 of a nsec.

You must have some better source of information that I found (Rev 0.1,
dated 05/1999), which only states typical propagation delays as 550 ps
at 25C, all the min/max values were listed as TBD and no rise and fall
times available :-). With an external gate to generate a true BCD
(0..9) sequence, the window for a stable count would be quite narrow
due to the propagation delay of the external gate and asynchronous
reset.

Anyway, the specifications for the EP016 are really impressive,
compared to the '016. The possibility to use it as an up to 16 bit
divide-by-N counter running at full clock speed using the internal TC
(terminal count) signal to preload the counter makes it very
interesting. Unfortunately, based on the price estimates for other
10EP series chips, this chip is going to be quite expensive.

Paul OH3LWR

5411. MC3362P Info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: "Andrea B." <andrea@logical.it>
Message-ID: <7idjhu$2vo$1@serv1.iunet.it>
Source record: 69976

I'm looking for some informations (at least pinout) of the Motorola MC3362P
(single chip fm receiver with on board varicap diode).
Nothing on the Motorola web site :-(((

Any help is greatly appreciated.

Andrea Boriani

andrea@logical.it

5412. Re: random lenght dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Ralph Mowery <rmowery@ibm.net>
Message-ID: <374A6EE8.DFAAC020@ibm.net>
Source record: 69977

At frequencies below 30 mhz the coating of the wire is not important. Either enamel or the plastic coatings will have almost no effect. As the frequency increases the coatings will have the effect of making the wire seem longer electrically than it is. The coating will not have any noticable effect as to the efficency of the antenna. For antennas I like the plastic coated wire as it helps keep the copper from turning green.

matteone@my-dejanews.com wrote:
>
> Hello all, I am quite new to the construction of antennas, but the
> thing excited me so much that I decided start to do something.
>
> i started from the random lenght dipole, fed with a ladder line,
> attached to an antenna tuner (the PALSTAR AT300CN). As dipole branches
> I used some thiny copper wire. Now, the thing I am not sure about is
> the influence the plastic insulator that covers the wire can have on
> the antenna behaviour... maybe it behaves like a dielectric or what?
> Do the branches of a dipole always has to be naked copper and nothing
> else?
>
> thanks in advance for the suggestions
> Matteo Campanella
>
> --== Sent via Deja.com http://www.deja.com/ ==--
> ---Share what you know. Learn what you don't.---

5413. Simple projects ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Harry Lythall SM0VPO <harryvpo@hotmail.com>
Message-ID: <01bea69a$4bf93430$8534d693@e0060b0eb282a>
Source record: 69978
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,uk.radio.amateur,uk.rec.radio.cb

Yes, they are all simple on my homepage.

http://sm0vpo.8m.com/
http://www.geocities.com/SiliconValley/3569/
http://hem2.passagen.se/sm0vpo
http://members.xoom.com/sm0vpo

Booze, antennas, transmitters, receivers, data, information, kits, even PCB foil patterns to download - Everything for the homebrewer - you name it.

No fees, no registeration, no membership.

Also a technical message board so that you can add technical questions. If anyone asks a question you can help with then please post a reply (it will save me a load of time).

One of the latest additions was a calculator for basic radio formulae but this is just a start. I will be adding attenuators and the like very shortly.

<<< WARNING >>> There is NO sex on the site (except for a rather nice screensaver).

best regards from Harry - SM0VPO

5414. Re: random lenght dipoles

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bea6e2$033e8040$LocalHost@default>
Source record: 69979

Hello Matteo,

A random length dipole, ie, not of any particular length, fed with ladder-line or open-wire feeder, is the best multi-band, general-purpose antenna there is. Best when dipole length is 1/3-wavelength or more at the lowest frequency of interest. At lower frequencies it can be used as a T antenna.

Wire diameter is of no importance except that the wire be strong enough to withstand suspension stress and high winds.

The effect of thick plastic insulation on the dipole wire is to very slightly increase the capacitance of the wire to its surroundings. The antenna behaves as if the dipole length is 1 or 2 percent longer than it actually is. No extra power loss is caused.

So the electrical effect of plastic insulation on a random-length antenna is ZERO.

Even on a resonant antenna, where length matters, a change in effective length of 1 or 2 percent is usually of negligible consequence.

A disadvantage of plastic covering - it increases the weight and tension. Enamelled copper wire provides protection from acid rain, etc, without increasing weight. I use nothing else.

To analyse performance of ANY dipole with ANY length of feeder, down-load program DIPOLE1 from my website. Takes only a few seconds. Not zipped-up. Can be run immediately.
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

matteone@my-dejanews.com wrote in article
<7ido3ifhr1@nnrp1.deja.com>...
> Hello all, I am quite new to the construction of antennas, but the
> thing excited me so much that I decided start to do something.

>
> i started from the random lenght dipole, fed with a
ladder line,
> attached to an antenna tuner (the PALSTAR AT300CN). As
dipole branches
> I used some thiny copper wire. Now, the thing I am not
sure about is
> the influence the plastic insulator that covers the wire
can have on
> the antenna behaviour... maybe it behaves like a
dielectric or what?
> Do the branches of a dipole always has to be naked copper
and nothing
> else?
>
>
> thanks in advance for the suggestions
> Matteo Campanella
>
>
> --== Sent via Deja.com http://www.deja.com/ ==--
> ---Share what you know. Learn what you don't.---
>

5415. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <OI3wSEAqWkS3Ew2J@ifwtech.demon.co.uk>
Source record: 69980

Doug Smith wrote:
>
>I was worried about RTV -- I've got plenty of it, but had been told it was
>bad news for use on connectors due to corrosive gases released during
>curing. Figured it'd be even worse on toroids.

In practice, the vinegar-smelling silicone rubbers don't seem to corrode clean, dry copper (or even copper that is partly tinned with solder). The toroid and enameled wire are not at any risk either. Try it and see for yourself!

You have to try it anyway, because formulations will vary between manufacturers, and even with the same manufacturer and brand name the formulation can vary from year to year, or in different countries.

>Ten-Tec does suggest
>hot-melt glue as an alternative. I don't do much wood work so didn't think
>it'd be worth my while to buy a glue gun for one coil...

Once you've bought one, you'll wonder how you ever managed without it. Don't think of it as glue, more as an instant source of moldable plastic. You can also re-work and sculpt the material with a clean (preferably new) soldering iron bit, a hot-air gun, or a hot-blow tip on a butane soldering iron.

As Barry has already noted, the ordinary sticks that look like the inner of RG213 (polypropylene) have excellent RF properties. It's particularly good for sealing ends of coax that are exposed to the weather.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5416. EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Eamon Skelton <dont@want.spam>
Message-ID: <7ihg0g$he8$1@scotty.tinet.ie>
Source record: 69832
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

The EI9GQ homebrew radio page has moved to www.qsl.net/ei9gq

Recent additions include:
A simple VHF CW transmitter.
2M to 10M receive converter.
6M to 30M receive converter.
30W mosfet PA for the 80M SSB rig.
Pre-programmed PIC now available for the iambic keyer.

73, Ed. EI9GQ

e-mail ei9gq@qsl.net

5417. Re: 3sk184 data sheet needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "Charles H. Reichert" <reichert@cig.mot.com>
Message-ID: <374C359D.88397303@cig.mot.com>
Source record: 69833

Site:

http://www.rfparts.com/home.html

has the 3SK184 for sale. They may have
spec sheets.

Chuck KD9JQ

http://www.imaxx.net/~kd9jq

"Craig A. Ferris" wrote:
>
> Any help finding this data sheet is appreciated.
>
> 73
> Craig NR4E

5418. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: cjX@hth.com
Message-ID: <374c20d7.2273078@news.sverige.net>
Source record: 69834
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is always available at the above
mentioned both in ASCII and in ZIP-file format for easy download.
An index of L.O.S.A is posted to the following mailing lists and
news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics
sci.electronics.misc
rec.radio.amateur.homebrew

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

You can also find the latest version on the following URL...

http://www.hth.com/losa.htm

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC/BS2SX-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

Regards,

/Christer

[NOTE: Clear the "X" from my e-mail address if you want to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
Send and receive serial data over the power lines... For more info
about the PLM-24 Power Line Modem go to http://www.hth.com/plm-24/
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

5419. Re: MC3362P Info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "Stephan A. Maciej" <stephan@maciej.muc.de>
Message-ID: <Pine.LNX.4.10.9905262235480.173-100000@karlheinz.maciej.muc.de>
Source record: 69835

On Tue, 25 May 1999, Andrea B. wrote:
> I'm looking for some informations (at least pinout) of the Motorola MC3362P
> (single chip fm receiver with on board varicap diode).
> Nothing on the Motorola web site :-(((

I have a datasheet at home, 8 pages, including test circuits and
applications information. If you (or anyone else) wants, I will scan them.

--
Stephan A. Maciej, stephanm@muc.de, http://www.muc.de/~stephanm/
Windows is said to be simple and easy to learn. That's right. It was
always simple to get that funny blue screen. And it was very easy to
learn that there are much, much better OSes.

5420. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: stevens@mindspring.com
Message-ID: <374c744b.1251214@news.mindspring.com>
Source record: 69836
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Yes it is.All you need is an Amateur Transceiver and some duct
tape.Attatch the scanner to the AT with the tape.Leave the scanner
switched off and use the AT.

On Mon, 24 May 1999 12:49:50 -0400, "The ConQueror"
<joetheripper@hotmail.com> wrote:

>Is it possible to modify a scanner to transmit on amateur frequencies?
>
>Thanks
>Dan
>
>

5421. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Phil Smalley <ziggy7445@scanner.yahoo.com>
Message-ID: <7ihvsq$dd0$1@phxtst22.phx1.aro.allied.com>
Source record: 69837
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

The ConQueror wrote in message <37499f78@news.internext.fr>...
>Is it possible to modify a scanner to transmit on amateur frequencies?
>

Not very easily. You could modify a VW Bug into a Ferrari, but would you really want to? The very fact that you ask leads me to believe you don't have the technical background to build your own FM transmitter, which is what you'd have to do. (Please don't take offense, I don't have that kind of skill either! My skill level with homebrew electronics falls somewhere between dumb and dangerous. <g>)

The thing to do is go out and get yourself a *real* Amateur HT. Most if not all of them have receive-only coverage that is the same, or in some cases better, than a scanner. Plus, you won't have to deal with the expense and hassle of building your own.

-Phil

-=Anti Spam Measure In Effect=-
-=Remove the word "scanner" to reply=-

5422. Re: Varicap diode for small voltage FM receiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <7ii726$t8$1@news1.fast.net>
Source record: 69838

Van Der Biest <vanderbi@ensta.fr> wrote in message
news:37496911.87E9D0C@ensta.fr...
> I'm looking for a varicap diode which would be able to range from 5 to
> 25 pF with only 3 volts.

Check http://www.alphaind.com (Alpha), http://www.hp.com (HP,
under electronic components), and http://www.infineon.com
(formerly Siemens semiconductor).

In Alpha, look for the SMV12xx series, I believe. The others
you'll have to search.

73,

--
Carl - wa6vse
wa6vse@fast.net
http://www.users.fast.net/~wa6vse
NCI #1052
Join No Code International!
Hams for the 21st century.
Support the modernization of ham radio and help
to assure its survival into the 21st century!
http://www.nocode.org

5423. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: sparksw4eas@mindspring.com
Message-ID: <7ii7ba$5pu$1@nntp6.atl.mindspring.net>
Source record: 69839
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

You can ONLY receive MCW on a crystal set or the OLD raspy spark
transmitters. A pure CW signal MUST have a BFO to beat with the carrier to
produce a tone. Of course you could copy the thumpity thump thump carrier.
<Grin> 73 Sparks W4EAS

Woodsman wrote in message <7igmvb$e40@newsops.execpc.com>...
>Hi Mike,
> Why couldn't you receieve CW on a crystal set? Not enough energy
>in the signal I assume? I saw these homemade rigs at the Resistance
>Museum in Norway about 7 years ago, which was before I was a ham
>so I wasn't paying enough attention. They were VERY basic and not
>commercial rigs at all. Basically they amounted to the simplest
>possible equipment you could make to send and receive a signal, which
>is why I find them interesting. As I recall they had 2 or 3 examples, all
>very small. I do not remember seeing tubes, although it was a while ago
>and it could just be my bad memory.
> Thanks for your post,
> Eric
>
>Mike Silva wrote in message <7if9j1$sh9$1@its.hooked.net>...
>>I'm only speculating (I'd like to hear some solid info myself) but a
simple
>>radio from that era would have been a single tube crystal-controlled
>>transmitter (using perhaps a 6L6 or 6V6), and a regenerative receiver
>>consisting of maybe a dual triode (detector and AF), or a pentode detector
>>followed by one or two stages of triode AF; or perhaps a regenerative
>>superhet using a converter followed by a dual triode detector and AF. An
>RF
>>amp may also have been added to the bigger sets for better performance,
and
>>to help keep the Bad Guys from picking up the signal from the oscillating
>>detector in the case of the regen. A crystal set wouldn't have had the
>>range for such work, and more importantly it couldn't receive Morse (CW).
>>I'm cross-posting this to the boatanchors group because they're likely to
>>have lots of details.
>>
>>73,
>>Mike, KK6GM
>>
>
>
>

5424. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <374CAA6A.4FDDDEA6@mail.rsccd.org>
Source record: 69840
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Well, you will probably have to use germanium transistors because the supply voltage from the antenna's rectified RF is very low, only a few hundred millivolts. In any case, use some solar cells and run it in the light.

I built a crystal radio that worked great, but then there was an AM transmitter only a few miles down the road. :O)

Swabbie wrote:

> Along time ago, I saw a crystal radio with no external
> power that drove a small speaker, like that in a PC
> computer. It wasn't very loud, but all you needed in
> a quiet room. There was some sort of a transistor that
> was used as an amplifier, powered by the stray RF from
> the antenna. It was a very cool way to hear the local
> AM station.

> I'm guessing that someone here knows where I can find
> info and maybe even a print for such a crystal radio,
> that can power a small loud speaker with no external
> power. (other than that brought in on the long wire)

> Thanks for your reply.
> Swabbie

5425. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Patrick <pcassidy@blueriver.net>
Message-ID: <374CA6A1.2C29@blueriver.net>
Source record: 69841
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Is it possible to modify my lunchbox to transmit on Commercial
frequencies? :)
ANYTHING is possible. Sure a scanner can be modified to transmit on any
freq. you want, you just have to add a transmitter.
Same goes for my lunchbox! (and a reciever)

All in good fun. People learn more when they are laughing.
POC
N9PRY

Jonesy wrote:
>
> In rec.radio.amateur.antenna Jeff Johns <jeffj@scott.net> wrote:
> : The ConQueror writes:
>
> :> Is it possible to modify a scanner to transmit on amateur frequencies?
>
> : Nope.
>
> Well -- the correct answer is always: "It depends."
>
> One of the regional state highway patrol freqs is at 154.905 mcs.
> So, I get to hear a lot of "tweep-tweep-tweep" QRM between
> 144.200 and 144.205 mcs.
> Granted, this is not a "modification" to xmit on amateur freqs.
> Oh No, it works that-a-way right out of the box.
>
> 73
> Jonesy W3DHJ
> __
> SK
>
> --
> Marvin L. Jones jonz<AT>rmi.net
> Gunnison, Colorado
> 219 days to go until the Year 2000 -- So what!
> 585 days to go until the 3rd Millennium of the C.E.

5426. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7iie42$cu1@newsops.execpc.com>
Source record: 69842
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I am positive that at least one was 2 way because there was a story with
it that indicated as such. Tube wise I could be wrong-maybe it had tubes.
So you're saying there was no way to build a 2 way radio without tubes
(back then)? Any idea on the simplest possible way to build a 2 way radio
then or now? I know I could buy a kit but I thought it would be more
instructive to
scrounge parts so I would need a good book on the topic I guess.
Any ideas on a reference that details building simple CW transceivers
from the fewest possible parts? I am not looking for DX performance here-
no bells or whistles needed. This is for my education and if I can build 2
units to
send CW back and forth over short distances for practice I would be
one happy ham. Also, if anyone has a source on the behind the lines use
of radio (detailed) in WW2 I would appreciate that. I doubt there are too
many WW2 radio officers browsing the web these days. Too bad-would
be a wealth of information.
73's
Eric

>Crystal sets were used (e.g. the
>foxhole radios) to receive broadcasts, but a two-way radio of the time
would
>have had tubes. Are you positive they were two-way sets?
>

5427. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <ZWFF+MAnDHT3EwuW@ifwtech.demon.co.uk>
Source record: 69843

Roy Lewallen wrote:
>Ian White, G3SEK wrote:
>> . . .
>> Just to illustrate international differences, GE "Silicone II" does not
>> exist in the UK - because there's no GE.
>
>GE (General Electric) is a huge, multinational company. So I suspect
>that a large number of their products are available in the U.K.,
>although they might be sold under one or more other brand names, or
>through another company.

You'd be surprised how tiny a presence GE have in the UK - especially compared with the USA where they seem to be into everything.

Yes, they do license some products, but there is still no guarantee that they will be the same as you'd buy in the USA. Sometimes the same product is available under a different brand name; sometimes only the brand name is licensed, but then applied to a different product.

>It might be worthwhile to check with a
>home-handyman or hardware store to see if a non-acetic-acid type RTV
>is now available at home-handyman or hardware stores.

Even the term "RTV" is not used over here - we call it silicone rubber. You can tell the acetoxy type from the label, which usually mentions the vinegar smell, but non-acetoxy types aren't always identified as such, and may not even be silicone - they may be an acrylic formulation instead.

That's why I've been driven to paying extra for an industrial-grade product, because at least you know what you're getting.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5428. Re: 74C86

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: fabianet <fabianet@ciudad.com.ar>
Message-ID: <7igk0venl1@vnews.prima.com.ar>
Source record: 69844

```
i have one 74c86
if you are interested please emailme
```

Paul N. Kelley escribi&#65533; en mensaje <373dc674.4507804@news.mint.net>...
>Help?!
>Does anyone know where I can get the 74C86 chip in small quantities??
>I'm having trouble finding it. Anybody got one or two they would
>sell??
>
>Paul N1BUG
>n1bug@mint.net

5429. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Puppin <puppin@netpar.com.br>
Message-ID: <7ifo87uqn1@nnrp1.deja.com>
Source record: 69907
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <a1523.948$%l6.7075799@rsnws01.mn.mediaone.net>,
swabbie@hotmail.com (Swabbie) wrote:
> Along time ago, I saw a crystal radio with no external
> power that drove a small speaker, like that in a PC
> computer. It wasn't very loud, but all you needed in
> a quiet room. There was some sort of a transistor that
> was used as an amplifier, powered by the stray RF from
> the antenna. It was a very cool way to hear the local
> AM station.
>
> I'm guessing that someone here knows where I can find
> info and maybe even a print for such a crystal radio,
> that can power a small loud speaker with no external
> power. (other than that brought in on the long wire)
>
> Thanks for your reply.
>
> Swabbie
>
>
This is the URL http://home.t-online.de/home/gollum/dt.htm
Enjoy!!!
--
Gilson Puppin - PU5MPL

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5430. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Jeff Johns <jeffj@scott.net>
Message-ID: <199904252152.PNR00658@scott.net>
Source record: 69908
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

The ConQueror writes:

> Is it possible to modify a scanner to transmit on amateur frequencies?

Nope.

73 Jeff W4JEF

--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------
jeffj@scott.net w4jef@amsat.org	Reserve Patrol Captain
Satellite: Mir R0MIR-1, AO-27	Jefferson County Sheriff's Dept
200LX+BayPac+FT50=Portable Packet	QTH Birmingham, AL USA
------------ Finger jeffj@scott.net for my PGP RSA key -----------

5431. TM-241,541, etc control protocol needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "R. E. Curry" <recurry@curry.org>
Message-ID: <jwK23.765$u03.664@news.rdc1.sfba.home.com>
Source record: 69909

Anyone have docs on this? It's the serial protocol used to control the radio via the mic connector.

Regards,
Ron
ke6wed

5432. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: neal hudson <neal.hudson@gte.net>
Message-ID: <xOK23.2130$_b.51453@dfiatx1-snr1.gtei.net>
Source record: 69910
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

H. P. Friedrichs <" HPeter.Friedrichs"@alliedsignal.com> > wrote in message
<374B2546.7E12F6DD@alliedsignal.com>...
>
>
>Olin Lathrop wrote:
>
>> Swabbie wrote in message ...
>
><text deleted>
>
>> >There was some sort of a transistor that
>> >was used as an amplifier, powered by the stray RF from
>> >the antenna.
>>
>> I find this a bit difficult to believe. The power from the radio signal
is
>> used to drive the output device directly.
>>
>
>Believe! I've seen schematics for this type of circuit, though I haven't
tried
>it myself. If I remember correctly, the radio actually has two tuners. One
tuner
>is set up to resonate on the station of interest. It is "detected" with a
>germanium diode and fed to a single transistor for amplification. The
second
>tuner is tuned to as strong a local station as you can find. It's output is
>rectified with a couple of germanium diodes, and is used as the power
supply for
>the amp.
>

You could use as ' the strong local station' one of the illegal cb's rng
high power or one of the local hams rng 1.5 KW when he could work the world
with 100 watts. I used to use high Z phones and a diode but I was happy qsx
the strong local stn.
gl, Neal

>I don't propose that the volume would be ear-splitting, and you'd still be
>better off using this type of radio with a set of headphones, but it is an
>interesting trick none the less.
>
>Pete

```
>--
>
>-----------------------------------------------
>| The opinions expressed here are my own, |
>| and not necessarily those of my employer. |
>-----------------------------------------------
>
>
```

5433. Re: Where to get PC board drill bits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@dpnet.net>
Message-ID: <oEM23.2713$733.173075@typ11.nn.bcandid.com>
Source record: 69911

Assortments of such bits are often sold by surplus dealers (*). Commercial PWB houses generally do not sharpen the carbide bits, but even when they do, they stop when the bit gets too short for stacked boards. Thus many appear surplus.

The only problem with carbide bits is that you cannot use them in a hand-held drill. They really need an accurate drill press. Any side torque and they snap as the carbide is extremely brittle.

With glass/epoxy boards, ordinary steel bits only last a few holes. A carbide bit will last many orders of magnitude longer.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

(*) I think Alltronics has carried them in the past.

Don wrote in message <374ABF2C.729D6208@usit.net>...
>I wonder if anyone can give me an Idea of places to order small drills (
>somewhere in the vicinity of size #70) for drilling homemade pc boards?
>I have quite a few electronics and surplus catalogs, but most of them
>dont carry bits this small. They dont neccesarily have to be carbide.

5434. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Keith Wootten <Keith@wootten.demon.co.uk>
Message-ID: <tmomgBAOI7S3EwCh@wootten.demon.co.uk>
Source record: 69912
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <3749d9eb.1185200@news.u-net.com>, Jonathan Bromley
<jonathan@oxfordbromley.u-net.com> writes

[snipped]

>
>I have no experience of trying this, but.... wouldn't it be better to
>use an _untuned_ feed to the power rectifier? That way, you get
>power from _all_ the transmitters the antenna can receive, not just
>one....

Probably a tuned circuit is necessary to boost the voltage to the
rectifier?

Cheers
--
Keith Wootten

5435. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: William Lee <n5wrx@mindspring.nospam.com>
Message-ID: <7igha6$vv3$1@nntp2.atl.mindspring.net>
Source record: 69913
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Only if your scanner has a plug somewhere on it for a microphone or a CW key.

William Lee N5WRX

The ConQueror wrote in message <37499f78@news.internext.fr>...
>Is it possible to modify a scanner to transmit on amateur frequencies?
>
>Thanks
>Dan
>
>

5436. Westinghouse Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: brigode@ibm.net
Message-ID: <7igkvpibb1@nnrp1.deja.com>
Source record: 69914

Any one halve any knowledge regaring Westinghouse one peice power
supply. Rectifier - 2 866, about 380 volt. wwII era - ceramic top

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5437. FS Books & Mauals

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <374BD25C.6232@sympatico.ca>
Source record: 69915
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The following books and manuals are for sale, postage extra:

101 Ways to Use Your Oscilloscope - Howard Sams Production $7.00
IC Projects for Amateur & Experimenter - Wayne Green $5.00
The Transisitor in Practical Circuitry Book 2 - RCA Victor $4.00
Ham Radio Projects for Novice and Technician - Tab Books $7.00
Build A Personal Earth Station For Worldwide Satellite TV Reception -
Tab Books - $7.00
Essential Charachteristics - General Electric - $5.00

Heathkit Manual for XR-1P and XR-1L Transisistor Receiver $15.00
Heathkit HW202 Manual for 2 Meter FM Transceiver $10.00
Heathkit IO-101 Vectorscope Manual $3.00

Manuals and books are in good shape.

5438. Re: 12VDC Lineair Amplifier for 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7igmeh$h2c$1@arachne.labyrinth.net.au>
Source record: 69916

michael smoot <n3qxc@home.com> wrote:
> The address is:
> http://mot2.mot-sps.com/books/html/dl110_index.html
> or
> http://mot2.mot-sps.com/rf/dslist/list.html#MRF

Unfortunately Motorola seem to have removed a lot of stuff recently.
There is no sign of eg the MRF421 or 317.

http://www.zettweb.com/ has a Motorola databook CD online from
sometime last year which still has data on these devices.

Hamish VK3SB
--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

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Developers of music education software including Auralia & Musition.
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Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

5439. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7igmvb$e40@newsops.execpc.com>
Source record: 69917
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi Mike,
Why couldn't you receieve CW on a crystal set? Not enough energy
in the signal I assume? I saw these homemade rigs at the Resistance
Museum in Norway about 7 years ago, which was before I was a ham
so I wasn't paying enough attention. They were VERY basic and not
commercial rigs at all. Basically they amounted to the simplest
possible equipment you could make to send and receive a signal, which
is why I find them interesting. As I recall they had 2 or 3 examples, all
very small. I do not remember seeing tubes, although it was a while ago
and it could just be my bad memory.
Thanks for your post,
Eric

Mike Silva wrote in message <7if9j1$sh9$1@its.hooked.net>...
>I'm only speculating (I'd like to hear some solid info myself) but a simple
>radio from that era would have been a single tube crystal-controlled
>transmitter (using perhaps a 6L6 or 6V6), and a regenerative receiver
>consisting of maybe a dual triode (detector and AF), or a pentode detector
>followed by one or two stages of triode AF; or perhaps a regenerative
>superhet using a converter followed by a dual triode detector and AF. An
RF
>amp may also have been added to the bigger sets for better performance, and
>to help keep the Bad Guys from picking up the signal from the oscillating
>detector in the case of the regen. A crystal set wouldn't have had the
>range for such work, and more importantly it couldn't receive Morse (CW).
>I'm cross-posting this to the boatanchors group because they're likely to
>have lots of details.
>
>73,
>Mike, KK6GM
>

5440. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <4YUttEAkg5S3EwiT@ifwtech.demon.co.uk>
Source record: 69918

Reg Edwards wrote:
>Ian White, G3SEK wrote -
>>
>> My present favorite is Dow Corning 744, which is
>non-acidic, non-slump,

>Info is not of much use unless you tell us HOW to obtain
>some. I've already asked in Woolworths and they don't know
>what I'm talking about.

It's an industrial-grade material, not a domestic or DIY product.

For anything like that in the UK, I generally go to Farnell. (Maplin doesn't have it. RS might, but it annoys me, the way they like to pretend that everything is their own brand.)

The DC 744 is Farnell stock no. 521-838, ï¿½9.28 + VAT for a standard 310 ml cartridge. Not cheap, but it's good stuff and will last a long time after the cartridge has been un-sealed.

Just to illustrate international differences, GE "Silicone II" does not exist in the UK - because there's no GE.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5441. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Murray Kelly <mkelly@powerup.com.au>
Message-ID: <374BED75.5DE@powerup.com.au>
Source record: 69919

Ferrites vary - some will give a reading if the probes are only
a cm. or so apart with the meter on hi-ohms range. Sometimes
you can match materials this way.

Doug Smith wrote:
> (I've never taken an ohmmeter to
> a ferrite core -- how conductive is it??)

--
****
* Murray Kelly vk4aok mkelly@powerup.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *
****

5442. Switching Power Supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <374BF95F.73703F71@home.com>
Source record: 69920
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

From Jack:

What are the advantages and disadvantages of using PWM (buck/boost or invert) switching supplies for B+/C- etc in tube equipment, boat anchors.

Advantages: weight, efficiency, regulation, low ripple.

Disadvantages: RFI

I mean, why shouldn't one buy that J.Millen GDO if you can run it without having to be attached to the line cord?

What else am I missing?

5443. MRF421 amp questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Hamish Moffatt <hamish@rising.com.au>
Message-ID: <7iguh8leq1@arachne.labyrinth.net.au>
Source record: 69921

I have a pair of MRF421 BJT RF amp transistors with which I want to
build a linear amp for 6m. Two questions:

Firstly, can anyone point me at a circuit on the web or in a past
magazine for such an amp using two transistors? The stuff I've found
on the web (eg www.6mt.com) is all single-transistor stuff. I'd prefer
to use both if practical.

Secondly, the 421 is intended for use up to 30MHz, so the datasheet
doesn't give any output impedance figures for higher frequencies. Is
there a relatively straightforward way to measure it? How will the use
of two transistors change the output impedance matching network?

Thanks
Hamish VK3SB

--
Hamish Moffatt Mobile: +61 412 011 176 hamish@rising.com.au

Rising Software Australia Pty. Ltd.
Developers of music education software including Auralia & Musition.
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Phone: +61 3 9894 4788 Fax: +61 3 9894 3362 USA Toll Free: 1-888-667-7839
Internet: http://www.rising.com.au/

5444. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Jonesy <jonz@rmi.nospam.net>
Message-ID: <7igv65$t11$1@news1.rmi.net>
Source record: 69922
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In rec.radio.amateur.antenna Jeff Johns <jeffj@scott.net> wrote:
: The ConQueror writes:

:> Is it possible to modify a scanner to transmit on amateur frequencies?

: Nope.

Well -- the correct answer is always: "It depends."

One of the regional state highway patrol freqs is at 154.905 mcs.
So, I get to hear a lot of "tweep-tweep-tweep" QRM between
144.200 and 144.205 mcs.
Granted, this is not a "modification" to xmit on amateur freqs.
Oh No, it works that-a-way right out of the box.

73
Jonesy W3DHJ

--
SK

--
Marvin L. Jones jonz<AT>rmi.net
Gunnison, Colorado
219 days to go until the Year 2000 -- So what!
585 days to go until the 3rd Millennium of the C.E.

5445. Opinions on choice of two moblie antenna options??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: jpardue@jep.com
Message-ID: <374e0801.5952859@News.Communique.net>
Source record: 69923

Please offer opinions on this choice of mobile antenna setups. A screwdriver antenna with a 96" whip or a broad-range autotuner with a 96" whip.

Thanks in advance.

Joe, W5OS

5446. Re: Where to get PC board drill bits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: derekt@col.hp.com
Message-ID: <7ih43h$65d$1@nonews.col.hp.com>
Source record: 69924

Check out www.t-tech.com. This is a company that makes a PCB milling machine and, of course, drill bits to go with it. Don't know how their prices compare to other sources but the selection is good.

Don (bjmcpher@usit.net) wrote:
: Hi, all:

: I wonder if anyone can give me an Idea of places to order small drills (
: somewhere in the vicinity of size #70) for drilling homemade pc boards?
: I have quite a few electronics and surplus catalogs, but most of them
: dont carry bits this small. They dont neccesarily have to be carbide.

: Thanks,

: Don

5447. TDA7000 for 462 mhz NBFM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Mike <forro@my-dejanews.com>
Message-ID: <7ih7jm$a1$1@nnrp1.deja.com>
Source record: 69925

Can I use the TDA7000 for a 467.56 mhz NBFM receiver?
If not, can you suggest a similar low chip count solution
for this frequency?

Thanks,
Mike N8MIB

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5448. Re: MC3362P Info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Michael Gladu <mgladu@warwick.net>
Message-ID: <374C1CB5.5C2E@warwick.net>
Source record: 69926

Andrea B. wrote:
>
> I'm looking for some informations (at least pinout) of the Motorola MC3362P
> (single chip fm receiver with on board varicap diode).
> Nothing on the Motorola web site :-(((
>
> Any help is greatly appreciated.
>
> Andrea Boriani
>
> andrea@logical.it

Hi Andrea:

The MC3362P pin out is as follows:

pin 1 - 1st mixer input pin 24 - 1st mixer output
pin 2 - LO output pin 23 - varicap control
pin 3 - LO emitter pin 22 - 1st LO tank
pin 4 - LO base pin 21 - 1st LO tank
pin 5 - 2nd mixer output pin 20 - 1st LO output
pin 6 - Vcc pin 19 - 1st mixer output
pin 7 - limiter input pin 18 - 2nd mixer input
pin 8 - limiter decoupling pin 17 - 2nd mixer input
pin 9 - limiter decoupling pin 16 - Vee
pin 10 - meter drive pin 15 - comparator output
pin 11 - carrier detect pin 14 - comparator input
pin 12 - quadrature coil pin 13 - detector output

This information is from the an older Motorola Linear and
interface data book.
Hope this is of use.

Michael Gladu

.............................mgladu@warwick.net.......................

5449. Re: TDA7000 for 462 mhz NBFM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: marsgal42@hotmail.com
Message-ID: <7ihad4$2gr$1@nnrp1.deja.com>
Source record: 69927

In article <7ih7jm$a1$1@nnrp1.deja.com>,
Mike <forro@my-dejanews.com> wrote:
> Can I use the TDA7000 for a 467.56 mhz NBFM receiver?
> If not, can you suggest a similar low chip count solution
> for this frequency?

Nope. The TDA7000 maxes out at about 120 MHz.

Either put a downconverter in front of it, or use
one of the newer IF chips (try Motorola - anybody?).

The new IF chips can be a handful; a downconverter
followed by something like a TDA7000 could be a lot
easier to make work. YMMV.
--
Laura Halliday VA3LDH "Que les nuages soient notre pied
Grid: FN03gs a terre..." - Hospital/Shafte

--== Sent via Deja.com http://www.deja.com/ ==--
---Share what you know. Learn what you don't.---

5450. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <374C2EA0.210CF97B@teleport.com>
Source record: 69928

Ian White, G3SEK wrote:
> . . .
> Just to illustrate international differences, GE "Silicone II" does not
> exist in the UK - because there's no GE.

GE (General Electric) is a huge, multinational company. So I suspect that a large number of their products are available in the U.K., although they might be sold under one or more other brand names, or through another company. It might be worthwhile to check with a home-handyman or hardware store to see if a non-acetic-acid type RTV is now available at home-handyman or hardware stores.

(Then again, it might not be. Speaking of international differences, I recall trying to buy some isopropyl alcohol at a chemist's in Australia some years back. I was told -- after some difficulty in translation -- that it couldn't be sold because it was used in the manufacture of some illicit drug, and I had to settle for denatured alcohol -- "methylated spirit". In the U.S., isopropyl alcohol can be readily found in any drug or discount store. For that matter, illicit drugs can be found about anywhere, too. But then, Vegemite is awfully hard to find in the U.S. . .)

Roy Lewallen, W7EL

5451. Re: Switching Power Supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <374C31AD.EC655CC1@teleport.com>
Source record: 69929
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Jeanette D. Walton wrote:
>
> From Jack:
>
> What are the advantages and disadvantages of using PWM (buck/boost or
> invert) switching supplies for B+/C- etc in tube equipment, boat
> anchors.
>
> Advantages: weight, efficiency, regulation, low ripple.
>
> Disadvantages: RFI
>
> I mean, why shouldn't one buy that J.Millen GDO if you can run it
> without having to be attached to the line cord?
>
> What else am I missing?

Even with switching supplies (which you'll have to build or buy), the tube-type GDO will take a whole lot more power than a solid-state equivalent. So the battery will be bigger and heavier, and/or won't last as long. This probably isn't a problem if you're working on the ground, but could be a real pain if you're on a tower or ladder.

But I don't know if there is a solid-state equivalent available these days. If not, there may be a reason. The information you got from a dipper can usually be gotten from other instruments, and in more quantitative form. But the exercise of building switching supplies to run a Millen will certainly be an educational experience with value much greater than any information you get from the dipper itself.

Roy Lewallen, W7EL

5452. Re: VHF PA Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: David Cunningham <D.L.C@btinternet.com>
Message-ID: <7ihc6v$3rl$1@plutonium.btinternet.com>
Source record: 69930

J M Noeding wrote in message <3747cf17.3381323@news.online.no>...
>>>In article <7hsa2fqdp1@uranium.btinternet.com>,
>>> "David Cunningham" <D.L.C@btinternet.com> wrote:
>
>>>> I have recently dismantled a couple of old PMR radios, and have the
>>>> following PA transistors:
>>>>
>>>> BLY33
>>>> ZRF0112
>>>> ZRF0113
>>>> I assume the latter two are a complementary pair.
>connected in series and assumed to be 'complimentary pair'.......,
>why?
>assume they are for different stages, perhaps 'ZRF' is a TRW prefix,
>they made some series of RF transistors, usually with the "PT"
>prefix, have seen some "ZRF" devices, but they are 30-35 years old.
>Usually it isn't worth keeping unknown and old smaller RF devices, if
>it looks like an output power transistor it may not be much value for
>2m PA, but it is a wonderful device on 6m, possibly 20dB gain
>>>> I assume the latter two are a complementary pair.
>
Yes I think they are TRW devices, and are quite old. Cheers.

5453. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-26 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7ihdp6$sd6$1@its.hooked.net>
Source record: 69931
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

You need some kind of heterodyne action to extract an audible signal from a CW signal. In a superhet the heterodyne action comes from the beat frequency oscillator; in a regen detector it's the detector itself oscillating; in a direct conversion receiver it's the local oscillator. A crystal set would just demodulate the unmodulated carrier and you'd only hear "psss..psssssss..psss..psss...". Crystal sets were used (e.g. the foxhole radios) to receive broadcasts, but a two-way radio of the time would have had tubes. Are you positive they were two-way sets?

73,
Mike, KK6GM

Woodsman wrote in message <7igmvb$e40@newsops.execpc.com>...
>Hi Mike,
> Why couldn't you receieve CW on a crystal set? Not enough energy
>in the signal I assume? I saw these homemade rigs at the Resistance
>Museum in Norway about 7 years ago, which was before I was a ham
>so I wasn't paying enough attention. They were VERY basic and not
>commercial rigs at all. Basically they amounted to the simplest
>possible equipment you could make to send and receive a signal, which
>is why I find them interesting. As I recall they had 2 or 3 examples, all
>very small. I do not remember seeing tubes, although it was a while ago
>and it could just be my bad memory.
> Thanks for your post,
> Eric

5454. Re: Where to get PC board drill bits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <374d612e.5833267@news.cmc.net>
Source record: 69845

On 26 May 1999 15:30:57 GMT, derekt@col.hp.com (Derek Toeppen) wrotf:

> Check out www.t-tech.com. This is a company that makes a PCB milling
>machine and, of course, drill bits to go with it. Don't know how their
>prices compare to other sources but the selection is good.
>
>Don (bjmcpher@usit.net) wrote:
>: Hi, all:

I have my dentist save some used burrs, he autoclaves them and places
them into an envelope for me. They work great with my dermel tool
drill press. Price is good too.

Gary Fiber

Washington State Resident

5455. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: lpdavies@bc.seflin.org
Message-ID: <7iicqi$nu4@nntp.seflin.org>
Source record: 69846
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

: Is it possible to modify my lunchbox to transmit on Commercial

My first Benton Harbor Lunchbox
put out a nice signal on several
bands!

GL
--
Paul W2SYF/4 Ft Lauderdale
"Heisenberg may have slept here... "
Leslie Paul Davies
lpdavies@bc.seflin.org

5456. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <7iike9egj4@alice.walrus.com>
Source record: 69847
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Leslie Paul Davies (lpdavies@bc.seflin.org) wrote:
: : Is it possible to modify my lunchbox to transmit on Commercial

: My first Benton Harbor Lunchbox
: put out a nice signal on several
: bands!

At the SAME TIME TOO!

: GL
: --
: Paul W2SYF/4 Ft Lauderdale
: "Heisenberg may have slept here... "
: Leslie Paul Davies
: lpdavies@bc.seflin.org

5457. Re: MC3362P Info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: "Andrea B." <andrea@logical.it>
Message-ID: <7iirf9$t8s$1@serv1.iunet.it>
Source record: 69848

Thanks everybody.
The informations I received were very valuable.

andrea@logical.it

5458. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <374D00E6.75C7EB88@teleport.com>
Source record: 69849

Ian White, G3SEK wrote:
> . . .
> Even the term "RTV" is not used over here - we call it silicone rubber.
> You can tell the acetoxy type from the label, which usually mentions the
> vinegar smell, but non-acetoxy types aren't always identified as such,
> and may not even be silicone - they may be an acrylic formulation
> instead.
>
> That's why I've been driven to paying extra for an industrial-grade
> product, because at least you know what you're getting.

A wise approach. Incidentally, I believe that "RTV" is a trademark here in the U.S. so it's used in trade only by the company which owns it. Like many other successful trademarks (e.g. Nylon, Teflon, Kleenex, NiCad), though, it has come into popular use for the generic material. I have three tubes of "RTV" (none bearing that trademark). The GE ones are marked "Silicone II/Clear/Household Glue & Seal/Advanced 100% Silicone Rubber" and "Silicone II/White/Bathroom Tub & Tile Sealant/Advanced 100% Silicone Rubber", and the other one I have is DAP brand by Dow Corning, marked "Silicone/100% Silicone Sealant/Clear". This last one is the acetic-acid type and mentions that in the fine print on the back. The fine print on the GE products announce that they release ammonia (and cautions you to remove contact lenses while it's curing!). So it appears that the labels of these products reveal that they're silicone rubber and whether they're the acetic-acid variety. It's unfortunate that the contents aren't as clearly stated in the U.K., but given that they aren't, your approach is the only prudent one. Barry Ornitz has pointed out that "RTV" formulations vary a great deal among brands and among products within a brand, so for critical applications, an industrial product would be a much better choice here also.

Roy Lewallen, W7EL

5459. Re: EI9GQ Homebrew Radio Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: tallguy@whitecliffsdx.freeserve.co.uk
Message-ID: <37580d6b.8554810@news.freeserve.net>
Source record: 69850
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur,uk.radio.amateur

On Wed, 26 May 1999 19:54:42 +0100, "Eamon Skelton" <dont@want.spam>
wrote:

>The EI9GQ homebrew radio page has moved to www.qsl.net/ei9gq
>
>Recent additions include:
>A simple VHF CW transmitter.
>2M to 10M receive converter.
>6M to 30M receive converter.
>30W mosfet PA for the 80M SSB rig.
>Pre-programmed PIC now available for the iambic keyer.

How about a useful 50MHz FM transmitter/receiver? You could even enter
it for the PW etc competition!
Cheers,

Jon.

Jon Harris
Radio: 26WC001/G7JPH
Motorcycle: TRX850, GPz550
WEB: http://www.whitecliffsdx.freeserve.co.uk
Email: tallguy@whitecliffsdx.freeserveDEADWOOD.co.uk
(Remove the DEADWOOD to reply)

5460. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Dave Hills <david_h@bvmltd.co.uk>
Message-ID: <jd2ji7.qu6.ln@gate.bvmltd.co.uk>
Source record: 69851
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

H. P. Friedrichs wrote

>.....I've seen schematics for this type of circuit.....
>
>.....I don't propose that the volume would be ear-splitting.....

When I was a Child I had a Radio Shack "150-in-1" Project kit (The "spring and wire" type affair) and guess what? One of the projects was to build this type of receiver!

As I recall the volume was miniscule which proved that "you don't get something for nothing" and it only really worked on local stations with a long wire antenna.

Unfortunately, the kit has long since gone, so I'm unsure of the exact schematic. If anything springs to mind I'll let you know!

DAVE

davehills@envirotech.freeserve.co.uk

5461. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Will White <wcw@asu.uswest.net>
Message-ID: <374D00B7.9D7FE46C@asu.uswest.net>
Source record: 69852
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.scanner

No, not if you mean a scanning *receiver.* You would have to add the entire transmitting section, which would be a project for someone highly skilled in radio design, and hardly worth the effort.

The ConQueror wrote:
>
> Is it possible to modify a scanner to transmit on amateur frequencies?
>
> Thanks
> Dan

--
Will White, KD7BFX

to reply, please click this link mailto:wcw@asu.uswest.net

5462. Need: 10K 2w pot--help please!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: "Christopher J. Galbraith" <cgalbraith@ibm.net>
Message-ID: <374d4652@news3.us.ibm.net>
Source record: 69853
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi, I need a 10Kohm 2w pot (1/4" shaft) for the RF gain control on my NC-183D. Such beasts are no longer standard stock and I'm having problems finding one. Anybody have one they could sell me? I have *many* others with different values to trade or will buy...thanks!! 73, Chris

5463. RE VX 5R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: ratsacks news <ratsackis@bigpond.com>
Message-ID: <KTb33.1328$PN5.5347@newsfeeds.bigpond.com>
Source record: 69854

Does anyone know if any mods are availible for the unit yet and
if so where can I find them.
I am looking to buy one as I allready have a FT 50 rd

REGARDS
DARREN 73's
Please reply to ratsackis@bigpond.com

5464. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Frank Lackner <flackner@home.com>
Message-ID: <jgc33.30319$Q_5.4205631@news2.rdc1.on.home.com>
Source record: 69855
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Try this web site for answers on the big wheel antenna.

http://clearlight.com/~vhfcomm/dl8zx.htm

Frank ve3ftf 73's

Larry D. Clark wrote in message <3748646E.9A80118F@onramp.net>...
>Hi
>
>I just ran across an antenna named "big wheel". The only
>design info I've been able to find so far is in German.
>Unfortuantely, my ability to read/speak German left me
>20 years ago. Could someone point me to some info
>on the net that is in Engrlish?
>
>larry
>kd5foy
>em12
>
>

5465. Re: Need: 10K 2w pot--help please!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Bob Lewis <aa4pb@erols.com>
Message-ID: <374D58BB.48CFC7E7@erols.com>
Source record: 69856
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

There standard stock at Newark Electronics.

Christopher J. Galbraith wrote:
>
> Hi, I need a 10Kohm 2w pot (1/4" shaft) for the RF gain control on my
> NC-183D. Such beasts are no longer standard stock and I'm having problems
> finding one. Anybody have one they could sell me? I have *many* others
> with different values to trade or will buy...thanks!! 73, Chris

5466. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: NO SPAM <NOSPAM@mail.rsccd.org>
Message-ID: <374D5F02.DDEB80@mail.rsccd.org>
Source record: 69857
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Puppin wrote:

> In article <a1523.948$%l6.7075799@rsnws01.mn.mediaone.net>,
> swabbie@hotmail.com (Swabbie) wrote:
[snip]
> > Swabbie

> This is the URL http://home.t-online.de/home/gollum/dt.htm
> Enjoy!!!
> --
> Gilson Puppin - PU5MPL

Neat! Cool! I was right, the transistors should be germanium because the supply voltage is so low. I've made amplifiers that run off 1.5V, so it's not difficult. The only problem I see is where to find the transformers for the last circuit.

Most people have earphones from walkman radios, so it's not a problem to drive them directly since they're about 10 to 50 ohms impedance. But the rest of the circuit has to work on probably less than 1 volt if it's not extremely close to a transmitter.

On another note, has anyone 'harvested' any other source of power? Like some people say they have been able to get power from high voltage lines by running a line parallel to them. Not that this is always possible, but it's a nice thought. Regarding above, I did not mean solar (PV) power. However let us know if you've had success with others, like wind, etc.

5467. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Mike Silva <mjsilva@jps.net>
Message-ID: <7ijr3s$5l4$1@its.hooked.net>
Source record: 69858
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

If I were going to build a simplest-possible useable tube CW transceiver I'd use a single tube crystal controlled transmitter (6AG7, 6V6, 6L6, 6CL6, 6AQ5, etc), and a dual triode regen receiver (6SN7, 12AU7, 6CG7, etc), or perhaps use a triode-pentode (6U8, 6EA8, etc). Any ARRL handbook from the '40s to late '50s should have both a single tube transmitter and a dual triode or triode-pentode regen receiver, but if you can't find any plans I can send you some.

73,
Mike, KK6GM

Woodsman wrote in message <7iie42$cu1@newsops.execpc.com>...
>I am positive that at least one was 2 way because there was a story with
>it that indicated as such. Tube wise I could be wrong-maybe it had tubes.
>So you're saying there was no way to build a 2 way radio without tubes
>(back then)? Any idea on the simplest possible way to build a 2 way radio
>then or now? I know I could buy a kit but I thought it would be more
>instructive to
>scrounge parts so I would need a good book on the topic I guess.
>Any ideas on a reference that details building simple CW transceivers
>from the fewest possible parts? I am not looking for DX performance here-
>no bells or whistles needed. This is for my education and if I can build 2
>units to
>send CW back and forth over short distances for practice I would be
>one happy ham. Also, if anyone has a source on the behind the lines use
>of radio (detailed) in WW2 I would appreciate that. I doubt there are too
>many WW2 radio officers browsing the web these days. Too bad-would
>be a wealth of information.
> 73's
> Eric
>
>>Crystal sets were used (e.g. the
>>foxhole radios) to receive broadcasts, but a two-way radio of the time
>>would have had tubes. Are you positive they were two-way sets?

5468. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.SOL.4.10.9905271227470.24762-100000@Ocean.CAM.ORG>
Source record: 69859
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

On Thu, 27 May 1999, NO SPAM wrote:

>
> Puppin wrote:
>
> > In article <a1523.948$%l6.7075799@rsnws01.mn.mediaone.net>,
> > swabbie@hotmail.com (Swabbie) wrote:
> [snip]
> > > Swabbie
>
> > This is the URL http://home.t-online.de/home/gollum/dt.htm
> > Enjoy!!!
> > --
> > Gilson Puppin - PU5MPL
>
> Neat! Cool! I was right, the transistors should be germanium because
> the supply voltage is so low. I've made amplifiers that run off 1.5V,
> so it's not difficult. The only problem I see is where to find the
> transformers for the last circuit.
>
> Most people have earphones from walkman radios, so it's not a problem
> to drive them directly since they're about 10 to 50 ohms impedance.
> But the rest of the circuit has to work on probably less than 1 volt
> if it's not extremely close to a transmitter.
>
> On another note, has anyone 'harvested' any other source of power?
> Like some people say they have been able to get power from high
> voltage lines by running a line parallel to them. Not that this is
> always possible, but it's a nice thought. Regarding above, I did not
> mean solar (PV) power. However let us know if you've had success with
> others, like wind, etc.
>
>
If you stick a piece of tin and a piece of copper in a lemon, you'll get a
battery. It's low current and low voltage (you could put some lemons in
series), but it is a (very low) power source. In recent years, you've been
able to buy LCD clocks intended to run off something like this, sold in
science stores, and the one I saw live was run off a potato.

When I was a kid, I'm sure I saw in an encyclopedia something about making
a power source that ran off a candle. Twist two dissimlar metals together
and put it over a flame. I thought it was practical how-to instructions.
Might have been the World Book Encyclopedia, and it would have been the

early 70's. But I can't be sure I saw it there, or that I actually saw such a thing.

Take a little motor, such as taken out of a Walkman, add a propellor, and put it in the wind. It will generate some voltage and some current, though it will stop if the wind stops blowing, and the right kind of propellor, I know that's not the right word but the proper word escapes me at the moment, determins how well it works.

Michael VE2BVW

5469. Help!! info-STORNOPHONE 500

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Ton Harmsma <ton&liny@castel.nl>
Message-ID: <7ik30apip1@news.castel.nl>
Source record: 69860

Hello everyone....
I'am looking for a Electrical-schedule of a Stornophone 500 ....type CQP
512

I Hope someone can help me (search)

E-mail: ton&liny@castel.nl

REGARDS Ton Harmsma

5470. Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: John Woodgate <jmw@jmwa.demon.co.uk>
Message-ID: <+ZY8bwC9uZT3Ewqx@jmwa.demon.co.uk>
Source record: 69861
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

<Pine.SOL.4.10.9905271227470.24762-100000@Ocean.CAM.ORG>, Michael Black
<blackm00@CAM.ORG> inimitably wrote:
>When I was a kid, I'm sure I saw in an encyclopedia something about making
>a power source that ran off a candle. Twist two dissimlar metals together
>and put it over a flame. I thought it was practical how-to instructions.
>Might have been the World Book Encyclopedia, and it would have been the
>early 70's. But I can't be sure I saw it there, or that I actually saw
>such a thing.

Thermocouple power sources are very interesting. In Russia, they made an
oil lamp with a thermocouple array in the chimney that gave enough
output to run a table radio.

Even high-output thermojunctions, such as copper-constantan or Chromel-
Alumel, only give about 40 uV per degree celsius. But the source
resistance can be very low indeed, if thick wires are used, so
significant power can be drawn. For example, at 400 degrees celsius, a
100 junction, 1 ohm thermocouple array gives 1.6 V and 1.6 A.
--
Regards, John Woodgate, OOO - Own Opinions Only.
Phone +44 (0)1268 747839 Fax +44 (0)1268 777124.
Did you hear about the hungry genetic engineer who made a pig of himself?

5471. Re: RE VX 5R

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: goldreged@aol.comJUNKBLOK
Message-ID: <19990527174831.05559.00001858@ng-cn1.aol.com>
Source record: 69862

>Does anyone know if any mods are availible for the unit yet and
>if so where can I find them.
>I am looking to buy one as I allready have a FT 50 rd
>
>REGARDS
>DARREN 73's
>Please reply to ratsackis@bigpond.com

http://www.onelist.com/viewarchive.cgi?listname=YAESUVX5

http://www.icongrp.com/~sllewd/vx5rmain.html

Great LITTLE Radio...

Ed G.
(Please Remove "JUNKBLOK" to E-mail.
Unless it's a Flame.)
Check This Site !!!
http://www.charityweb.net/Safehaven

5472. WTB: jumbo 4-pin sockets(non bayonet style)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: dcal40@aol.com
Message-ID: <19990527181013.19059.00001369@ng-fr1.aol.com>
Source record: 69863

any help appreciated.
David, NY.

5473. Trying to find info about York metal enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: old_computers@yahoo.com
Message-ID: <7ikjou$fd7$1@nnrp1.deja.com>
Source record: 69864

Hi,

I trying to find if the company that made enclosures under the name York or York metal works or something similar still exists. These enclosures were commonly used in the 70's for electronic projects. I am trying to restore several pieces of equipment that uses them. They are green color, marble type texture to them, about 18x10x10 inches (although they came in many different sizes). If you could even tell me what the exact name of the company is that would be great.

thanks for any help
steve

Sent via Deja.com http://www.deja.com/
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5474. 38 Special Kit Source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Hanson Family <hansfam@midcoast.com>
Message-ID: <O9l33.149$783.2052@newsfeed.slurp.net>
Source record: 69865

Need source for 38 Special QRP Kit-with enclosure.
NORCAL sold out long ago.

Steve KE1LG
hansfam@midcoast.com

5475. Re: gunn diodes ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <374DFD39.42A@pop.removethistomailme.net>
Source record: 69866

Malcolm Loudon wrote:
>
> Hi,
>
> does anyone know of a mail order supplier for gunn diodes ? I just want to
> experiment so don't want to spend too much... The Farnell cat. lists a
> Philips 10.5GHz diode for $NZ130 (approx $US70), is there a cheaper surplus
> supplier out there ? I don't really care about frequency or power output, I
> just want to play...
>
> Malcolm

I actually just got a 10-megabit link up and running this past weekend
with the 100 mW diodes and MA/COM Gunnplexers from
http://www.shfmicro.com. The 100 mW diodes are about US $50 apiece.
Alan at shfmicro was very helpful when I had questions about the parts
-- you might give them a try.

100 mW is more than you would need for casual experimentation, so you'd
probably want to start out with the low-cost 10 GHz Gunnplexers they
sell for US $22 each. I don't have any experience with the low-cost
model but they should be fine for most non-critical purposes.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

5476. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: Hank <hank@ezonline.com>
Message-ID: <7il0nt$gh5$1@news3.microserve.net>
Source record: 69867
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

The ConQueror wrote in message <37499f78@news.internext.fr>...
>Is it possible to modify a scanner to transmit on amateur frequencies?
>
>Thanks
>Dan

Uh...not to quibble but, "scanners" are...uh...scanning RECIEVERS. I suppose it would be sorta feasable to boost the local oscilator power up somewhat, and sorta use it as a transmitter that way, but I don't know why you'd wanna do that.

Don't wanna sound snippy, but I think I misunderstood your question.

Thanks, people.

CIAO!

5477. Re: Need design for amplified crystal radio - Drive small speaker, with

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-27 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierFCGC6r.69t@netcom.com>
Source record: 69868
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

In article <374D5F02.DDEB80@mail.rsccd.org>,
NO SPAM <NOSPAM@mail.rsccd.org> wrote:
>Neat! Cool! I was right, the transistors should be germanium because
>the supply voltage is so low. I've made amplifiers that run off 1.5V,
>so it's not difficult. The only problem I see is where to find the
>transformers for the last circuit.

John L., it that you?

Mouser has quite a collection of miniature and sub-mini transformers,
the kind that were so common in the old '60s transistor projects.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com Washington State resident

5478. Re: Scanner/Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: Dave Eckhardt <dave_eckhardt@hp.com>
Message-ID: <374EFF3F.4FE@hp.com>
Source record: 69782
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Jeff Johns wrote:
>
> The ConQueror writes:
>
> > Is it possible to modify a scanner to transmit on amateur frequencies?
>
> Nope.
>
> 73 Jeff W4JEF
>
> *--------- Jeff Johns W4JEF - AMSAT# 32615 - QRP-L# 1857 ----------*
> |jeffj@scott.net w4jef@amsat.org | Reserve Patrol Captain |
> | Satellite: Mir R0MIR-1, AO-27 | Jefferson County Sheriff's Dept|
> |200LX+BayPac+FT50=Portable Packet| QTH Birmingham, AL USA |
> *------------ Finger jeffj@scott.net for my PGP RSA key -----------*

>>>>>>>>>>>>>>>>>>>>>>>> <<<<<<<<<<<<<<<<<<<<<<<<

Jeff:

It's really not to difficult to accomplish what you desired in your post. The answer is, certainly, yes. You need to pull out of the scanner all the proper LOs (local oscillators), mix them in the proper order (using doubly balanced mixers), and modulate the final result with the type of modulation and information you desire. You're there! You may prefer to apply a little amplification to the result to render the "signal" a bit stronger, but that isn't too difficult, either, in these days of MMICs and hybrids. Trivial!

Dave - W6LEV

Opinions are my own and do not reflect in any way on my email provider (employer).

5479. Re: Electronics shops in New York?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: "Jeanette D. Walton" <jdwalton@home.com>
Message-ID: <374F4C36.F33E9225@home.com>
Source record: 69783

They all moved when the World Trade Center went up!!!

George Musser wrote:

> Does anyone know of a good electronics parts store in New York City? I'm
> a (fairly) recent transplant and don't know my way around yet. I know of
> places out in New Jersey such as Lashen, but I'd like something near
> work.
> Thanks,
> George Musser, KF6LOJ
>
> P.S. Whew, it took a while to find the appropriate newsgroup. .misc
> seems to have veered way off course....
> --
> George Musser
> georgejr@musser.com
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.

5480. Re: silver mica replacments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <374F2311.2AE415EB@teleport.com>
Source record: 69784

Modern multi-layer ceramic capacitors should work wherever micas were used. In applications where temperature coefficient is critical, such as VFO tank circuits, use NPO (C0G) capacitors. For other applications, type X7R or similar ("temperature stable") should be fine. I wouldn't recommend Z5U, Y5V, or similar capacitors as mica replacements due to their high temperature coefficient and other undesirable properties. They're excellent for bypasses or coupling capacitors because of their small size and therefore low inductance, but shouldn't be used for much else.

Roy Lewallen, W7EL

Rick Haub wrote:
>
> I'm new to homebrew radios. I'm building a tube style receiver that I
> found in the 1967 ARRL handbook and several different transmitters from
> early '60's QST's. All the pF caps are spect as siver mica. I can find
> these caps at several different suppliers but some times, particularly
> when prototyping, it would be nice if I could just run down to my local
> electronic supply store and buy the cap I need. They don't carry SM caps
> but I was wondering if a more readily obtainable equivelant exist.
>
> thanks

5481. 2mt vhf receiver on QST ARRL magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: "M.U." <m.ursi@flashnet.it>
Message-ID: <374E52F9.A31AAC2C@flashnet.it>
Source record: 69785

I am interested in the article about a 2 mt. receiver published on QST
Arrl magazine.
Can anybody be so kind to let me have the photocopies or let me know how
to get the issue?

Has anybody built and tested such receiver?

Thanks in advance

Max
Italy

5482. gunn diodes ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: M.R.Loudon@massey.ac.nz
Message-ID: <xDm33.2$69.1291@news.clear.net.nz>
Source record: 69869

Hi,

does anyone know of a mail order supplier for gunn diodes ? I just want to experiment so don't want to spend too much... The Farnell cat. lists a Philips 10.5GHz diode for $NZ130 (approx $US70), is there a cheaper surplus supplier out there ? I don't really care about frequency or power output, I just want to play...

Malcolm

5483. HP 208A battery info.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: nospam@softcom.net
Message-ID: <375010ee.1297851@news.softcom.net>
Source record: 69870

I have a HP 208A test oscillator that has had the batteries removed.
There are 3 wires (red, green, violet) that have been unsoldered from
what I'm assuming were 4 "C" size nicads. can someone provide battery
and connection information?
Thanks,
Buzz
Replace nospam with buzz for reply.

5484. Re: Need design for amplified crystal radio - Drive small speaker,with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: John Smith <jselect@yebo.co.za>
Message-ID: <7ildtf$1lg$1@news3.saix.net>
Source record: 69871
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

Many years ago, I tried to make a "super ground" reference by burying
several metal objects several meters apart and connecting them all together.
Before I connected them I tried to measure the resistance between each wire,
and found both DC and AC voltages between them all.
I cant remember the values, (I think it might have been over a volt) so
there must be quite a bit of current flowing around our globe.

John Smith
Cape Town

>Take a little motor, such as taken out of a Walkman, add a propellor, and
>put it in the wind. It will generate some voltage and some current,
>though it will stop if the wind stops blowing, and the right kind of
>propellor, I know that's not the right word but the proper word escapes me
>at the moment, determins how well it works.
>
> Michael VE2BVW
>
>

5485. Tranfert de K7 video en Cd-video for DVD et PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: MJ <mich_66@hotmail.com>
Message-ID: <374e6c9a.0@cge.net>
Source record: 69872
Cross-posted to: alt.bainaries.pictures.erotica.amateur.female,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.amateur.swap,sci.astro.amateur,sci.ast

vos video priv&#65533;es amateur, familial etc... sur Cd-vid&#65533;o de 60"
compatible DVD pour PC et DVD de Salon
Discretion assur&#65533;e.

English translator
your video private amateur, domestic etc. on Cd- Video of 60"
compatible DVD for PC and DVD of Lounge
Secured discretion.

http://www.v3i.net/mpeg.html

5486. Re: Need design for amplified crystal radio - Drive small speaker, with no battery

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: Richard Ahlvin <rahlvin@magnolia.net>
Message-ID: <7im408$ab7$1@remarQ.com>
Source record: 69873
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew,sci.electronics.components

I've seen designs that were effectively 2 radios in one. One was a
crystal
set tuned to a strong local station. The output was rectified and
filtered to provide power to a second radio that was a crystal
set with amplifier stages. I don't have any specifics but I do recall
having seen construction projects for such radios in the hobby
electronics magazines years ago.

NO SPAM wrote in message <374CAA6A.4FDDDEA6@mail.rsccd.org>...
>Well, you will probably have to use germanium transistors because the
>supply voltage from the antenna's rectified RF is very low, only a few
>hundred millivolts. In any case, use some solar cells and run it in
>the light.
>
>I built a crystal radio that worked great, but then there was an AM
>transmitter only a few miles down the road. :O)
>
>
>Swabbie wrote:
>
>> Along time ago, I saw a crystal radio with no external
>> power that drove a small speaker, like that in a PC
>> computer. It wasn't very loud, but all you needed in
>> a quiet room. There was some sort of a transistor that
>> was used as an amplifier, powered by the stray RF from
>> the antenna. It was a very cool way to hear the local
>> AM station.
>
>> I'm guessing that someone here knows where I can find
>> info and maybe even a print for such a crystal radio,
>> that can power a small loud speaker with no external
>> power. (other than that brought in on the long wire)
>
>> Thanks for your reply.
>> Swabbie

5487. Re: Trying to find info about York metal enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: ve6inm@telusplanet.net
Message-ID: <7imbdflsl1@nnrp1.deja.com>
Source record: 69874

Hammond Manufacturing in Guelph, Ontario, Canada still supplies
cabinets. They have a web site with all the info on it. Also, several
distributors still handle Bud Cabinets that may be used. Try Newark or
Allied Electronics for those.
VE6INM (Glenn)

In article <7ikjou$fd7$1@nnrp1.deja.com>,
old_computers@yahoo.com wrote:
> Hi,
>
> I trying to find if the company that made enclosures under the name
York
> or York metal works or something similar still exists. These
enclosures
> were commonly used in the 70's for electronic projects. I am trying to
> restore several pieces of equipment that uses them. They are green
> color, marble type texture to them, about 18x10x10 inches (although
> they came in many different sizes). If you could even tell me what the
> exact name of the company is that would be great.
>
> thanks for any help
> steve
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

5488. Who's the Hammond Dealer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: Spencer Petri <spetri@e-tex.com>
Message-ID: <k3y33.142$oc.622@news.flash.net>
Source record: 69875

Greetings,

Lost my HD. Looking for the address of the person who sells Hammond products. I believe he is in one of the Carolinas and the company is STI or STF Electronics. Anybody got a clue.

Thanks,

Pete de WA5JCI

5489. Re: cementing down toroids

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <374EA4B6.326B@pop.valley.net>
Source record: 69876

Roy Lewallen wrote:
>
> Ian White, G3SEK wrote:
> > . . .
> > Even the term "RTV" is not used over here - we call it silicone rubber.
<snip>

Hello--
IIRC, "RTV" is an acronym for "room-temperature vulcanizing" and refers to the process by which the silicone rubber "cures" form a goo into a solid or semisolid. Some formulations use acetic acid (smells like vinegar) and some use another noncorrosive agent (smells a little like peppermint) to promote the cure.

73,
Brad AA1IP

5490. Re: Where to get PC board drill bits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: Brian <schousek@geocities.com>
Message-ID: <7imfvq$m5o$1@jair.pressenter.com>
Source record: 69877

Hobby stores carry a drill index which contains bits ranging down to 18 mils or so. I think they are High Speed Steel so they probably will wear out quickly in fiberglass. If you are in an area with a lot of PCB houses, your local surplus store might also sell them. For instance, the AxMan in the Minneapolis/St Paul area sells a good variety of used bits. Minnesota is a state that ranks, if I remember correctly, third in the nation for PCB houses. Illinois is #2, California #1.

Brian
KB9TBB
Gary P. Fiber wrote in message <374d612e.5833267@news.cmc.net>...
>On 26 May 1999 15:30:57 GMT, derekt@col.hp.com (Derek Toeppen) wrotf:
>
>> Check out www.t-tech.com. This is a company that makes a PCB milling
>>machine and, of course, drill bits to go with it. Don't know how their
>>prices compare to other sources but the selection is good.
>>
>>Don (bjmcpher@usit.net) wrote:
>>: Hi, all:
>
>I have my dentist save some used burrs, he autoclaves them and places
>them into an envelope for me. They work great with my dermel tool
>drill press. Price is good too.
>
>
>Gary Fiber
>
>Washington State Resident

5491. Re: WTB: jumbo 4-pin sockets(non bayonet style)

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: "H. P. Friedrichs" <" HPeter.Friedrichs"@alliedsignal.com>
Message-ID: <374EC623.AB119CB4@alliedsignal.com>
Source record: 69878

If you mean the old-style tube sockets (used for tubes like the "80")
try Antique Electronic Supply. I know for certain they have ceramic
4-pin sockets, as I recently purchased some. The probably have wafer
types as well. You will find them on the web.

If you meant some other type of 4-pin socket, you really need to be more
specific when making a request for help.

Pete

DCAL40 wrote:

> any help appreciated.
> David, NY.

--

```
-----------------------------------------------
| The opinions expressed here are my own, |
| and not necessarily those of my employer. |
-----------------------------------------------
```

5492. Electronics shops in New York?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: George Musser <georgejr@musser.com>
Message-ID: <7imons$q$1@nnrp1.deja.com>
Source record: 69879

Does anyone know of a good electronics parts store in New York City? I'm a (fairly) recent transplant and don't know my way around yet. I know of places out in New Jersey such as Lashen, but I'd like something near work.
Thanks,
George Musser, KF6LOJ

P.S. Whew, it took a while to find the appropriate newsgroup. .misc seems to have veered way off course....
--
George Musser
georgejr@musser.com

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

5493. Re: VHF PA Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: la8ak@online.no
Message-ID: <374d9967.1466691@news.online.no>
Source record: 69880

On Wed, 26 May 1999 18:47:48 +0100, "David Cunningham"
<D.L.C@btinternet.com> wrote:

>
>J M Noeding wrote in message <3747cf17.3381323@news.online.no>...
>>>>In article <7hsa2fqdp1@uranium.btinternet.com>,
>>>> "David Cunningham" <D.L.C@btinternet.com> wrote:
>>
>>>>> I have recently dismantled a couple of old PMR radios, and have the
>>>>> following PA transistors:
>>>>>
>>>>> BLY33
>>>>> ZRF0112
>>>>> ZRF0113
>>>>> I assume the latter two are a complementary pair.
>>connected in series and assumed to be 'complimentary pair'.......,
>>why?
>>assume they are for different stages, perhaps 'ZRF' is a TRW prefix,
>>they made some series of RF transistors, usually with the "PT"
>>prefix, have seen some "ZRF" devices, but they are 30-35 years old.
>>Usually it isn't worth keeping unknown and old smaller RF devices, if
>>it looks like an output power transistor it may not be much value for
>>2m PA, but it is a wonderful device on 6m, possibly 20dB gain
>>>>> I assume the latter two are a complementary pair.
>>
>Yes I think they are TRW devices, and are quite old. Cheers.
>
>
>
By the way, PYE Westminster (W15FM) - october 1968 -has the following
TRW transistors in the final amp: PT31961, PT31962, PT31963 which
should equal BLY34, BLY35, BLY36

5494. silver mica replacments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-28 00:00:00 UTC
From: Rick Haub <rhaub@midwestmicro-tek.com>
Message-ID: <374EF032.2237829D@midwestmicro-tek.com>
Source record: 69881

I'm new to homebrew radios. I'm building a tube style receiver that I found in the 1967 ARRL handbook and several different transmitters from early '60's QST's. All the pF caps are spect as siver mica. I can find these caps at several different suppliers but some times, particularly when prototyping, it would be nice if I could just run down to my local electronic supply store and buy the cap I need. They don't carry SM caps but I was wondering if a more readily obtainable equivelant exist.

thanks

5495. help needed!

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: Mitch <mitch@nw.com.au>
Message-ID: <374EF154.58B2F9D0@nw.com.au>
Source record: 69786

i have seen a project for a dds vfo based on a 16c84 and a ad9850 dds
and i am trying to find more info on it(schematic and parts
list,pictures pcb layout),can anyone help?
i've try most search engines and the normal stuff came up and it seams
no one posted the actual project on the web
we do not receive QEX (ARRL MAG) here and the state library does not
have them at all so i'm in a bit off a jam!!
if someone has the construction detail and/or articles scanned i would
be greatly relieved if a could get a copy
hope someone can help
kindest regards
mitch

5496. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: "Laszlo I. Morocz" <kf4pv@spammenotlmorocz.com>
Message-ID: <01bea96a$f9f89d00$b0de04d0@p133>
Source record: 69787
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

How about a 1-tube (or transistor) regen receiver, with a telegraph key to throw it into full oscillation for transmit? Essentially, on transmit it'd be an Armstrong oscillator. Would have terrible frequency stability and probably a lousy chirp, but it'd be very minimal in parts and if you kept the power very low no one else would hear it to complain :-)

73 - Laszlo, KF4PV/8

--
To reply, remove the text spammenot from the e-mail address.

Woodsman <woodsman@apexmail.com> wrote in article
<7iie42$cu1@newsops.execpc.com>...
<snip>
> Any ideas on a reference that details building simple CW transceivers
> from the fewest possible parts? I am not looking for DX performance here-
> no bells or whistles needed. This is for my education and if I can build
2
> units to
> send CW back and forth over short distances for practice I would be
> one happy ham.
<snip>

5497. Re: silver mica replacments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: Reg Edwards <G4fgq.Regp@btinternet.com>
Message-ID: <01bea9b3$e38f1dc0$abcaac3e@default>
Source record: 69788

Mica capacitors were used even in the very early days of radio equipment wherever high voltage, high HF current carrying capacitors were needed. For example in valve/tube transmitter output circuits.

Mica is a laminated rock formed many millions of years ago. Consequently its dimensions are very stable and will withstand high temperatures. Mica dielectric capacitors are very stable, are suitable for LC oscillator and precision filter circuits, and have fairly low dielectric loss.

They are still manufactured for use in high stability circuits. The capacitor plates are no longer copper sheets but the thin mica plates are silver plated on one side. They are described in manufacturers' catalogues as "silver mica capacitors" and are more expensive than the plastic-insulated types.

Silver plated mica capacitors, for obvious reasons, do not have the same current-carrying capacity as the older mica-plus-copper-sheet capacitors but have the same high working voltages.

So for high-power transmitting purposes look for THICK copper or brass-strip capacitor leads, OR use several capacitors in parallel, eg, 4 times 25 equals 100 pF, when high current tank circuits are needed.

For low-voltage high-power transistor applications mica is not necessary. Also, plastic dielectrics have a somewhat lower loss-factor than mica. But ensure the connecting leads have a sufficient current-carrying capacity and, as with silver-mica types, use several smaller-value plastic capacitors in parallel if necessary.

If you know that several amps or more of RF current will be flowing, DO NOT USE capacitors of any sort with connections which look like fuse wire !
--
****
Reg, G4FGQ For free software go to:-
http://www.btinternet.com/~g4fgq.regp

****

Rick Haub <rhaub@midwestmicro-tek.com> wrote in article
<374EF032.2237829D@midwestmicro-tek.com>...

> I'm new to homebrew radios. I'm building a tube style
receiver that I
> found in the 1967 ARRL handbook and several different
transmitters from
> early '60's QST's. All the pF caps are spect as siver
mica. I can find
> these caps at several different suppliers but some times,
particularly
> when prototyping, it would be nice if I could just run
down to my local
> electronic supply store and buy the cap I need. They
don't carry SM caps
> but I was wondering if a more readily obtainable
equivelant exist.
>
> thanks
>
>

5498. FS: New 5-pin Nuvistor sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: mmoss@mindspring.com
Message-ID: <374f43ed.1172572@news.mindspring.com>
Source record: 69789
Cross-posted to:
rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Cinch Jones 5NS Ring type 5-pin Nuvistor sockets. New. $1 each plus shipping.

Compare to Antique Electronic Supply 1999 price of $2.70 each.

Marv

5499. WTT RSS for Motorola MC Micro

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: 7g4 <7g4@iname.com>
Message-ID: <7io96r$6fs$1@mail.nursat.net>
Source record: 69790
Cross-posted to: rec.radio.amateur,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Hi folks,
I'd like to find anybody who has RSS for Motorola MC Micro mobile
radios. I can offer a lot of another RSS for trade.
Mailto: 7G4@iname.com
WBR,
7G4

5500. Re: Morse 1991-1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <374fdb06.3528602@news.earthlink.net>
Source record: 69791

On Sat, 22 May 1999 16:12:32 GMT, beroset@mindspring.com (Ed Beroset) wrote:

>Bill <wrc@tir.com> wrote:
>
>>I haven't seen any anti-morse statements that didn't appear to be lame
>>excuses from lazy people. Never mind about reason or logic.
>
>I wouldn't characterize myself as "anti-morse" at all -- in fact, I'm
>actively working on that skill now -- but I think it's too facile to
>dismiss the debate as "lame excuses from lazy people." Incentive
>licensing makes sense to me, but consider the upgrade from Advanced to
>Extra. The written test is actually easier than the Advanced exam,

Well, yes there ARE LESS QUESTIONS, but they are much more obscure and require more work to memorize them! (questions most of us forget as soon as we have the ticket BTW!)

>but we require 20wpm code. Is 20wpm code speed more important than,
>say, more technical knowledge about microprocessors?

You DON'T need technical knowledge about microprocesors to be a 1990s radio amateur! All you need is the knowledge you can look up in the OPERATORS MANUAL on how to USE your appliance!

Less than 0.00001% of amateurs would need to know ANYTHING about how the innards of their CPU works, and that would be the guys who program them for their homebrew digi-projecs!

>Why not a
>soldering test? How about a DSP programming test? Among those who
>aren't just "lazy people" the debate, IMHO, is more about which skills
>are most valuable, and which skills are less valuable.

How many hams solder any more? I bet it is less than 25%
DSP operation? Refer to my remarks above about reading the manual.
SO many brands, so many techniques. I HARDLY think an FCC test could cover that skill!

No easy answers on whatis relevant to test. Good discussion though. Keep the code test! It's still relevant. Listen on the air. PLENTY of A1 QSOs still going on!

5501. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: sabbatai_zvi@hotmail.com
Message-ID: <374fdc5d.3870950@news.earthlink.net>
Source record: 69792
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

On Fri, 21 May 1999 18:54:29 -0400, OBI-WAN PEROGI
<theoldbrookltnkid@ameritech.net> wrote:

>Keith Bennett wrote:
>>
>> I'm having problems with receiving the Isle of Wight monochrome TV
>> transmitter on Channel BBC-1 from this location. Has anybody based in
>> Holland any tips on the subject?
--

>> From the ORIGINAL Trojan Horse!
>Since when do TV station broadcast in one colo(u)r as the name
>Monochrome would imply.

Monochrome does not mean one colour! It means monoCHORMATIC!
On a grey scale from black to white!

>Heck, even Black and White is two colo(u)rs.

Yes, but we are talking about chrominance here, not "colours."
You don't seem to have learned the difference!

>By the way, the best Black and White is what is know as a Twistee cone.
>That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.

Sigh - again, chocolate ice cream is BROWN, not BLACK!

Maybe you are colour blind. Though I rather suspect what we have here
is misperception of chromatic DENSITY!

5502. Re: 2mt vhf receiver on QST ARRL magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: armand1@hotmail.com
Message-ID: <jiU33.544$mN1.49134@newsgate.direct.ca>
Source record: 69793

What was the year and month of this QST mag?
Armand

In article <374E52F9.A31AAC2C@flashnet.it>, m.ursi@flashnet.it says...
>
>I am interested in the article about a 2 mt. receiver published on QST
>Arrl magazine.
>Can anybody be so kind to let me have the photocopies or let me know how
>to get the issue?
>
>Has anybody built and tested such receiver?
>
>Thanks in advance
>
>Max
>Italy
>

5503. Re: Trying to find info about York metal enclosures

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: old_computers@yahoo.com
Message-ID: <7ipcul$fs1$1@nnrp1.deja.com>
Source record: 69794

Yes I know about Bud and Hammond, and have the Newark and Allied
catalogs, was hoping to get the original style case made by York.

steve

In article <7imbdflsl1@nnrp1.deja.com>,
ve6inm@telusplanet.net wrote:
> Hammond Manufacturing in Guelph, Ontario, Canada still supplies
> cabinets. They have a web site with all the info on it. Also, several
> distributors still handle Bud Cabinets that may be used. Try Newark or
> Allied Electronics for those.
> VE6INM (Glenn)
>
> In article <7ikjou$fd7$1@nnrp1.deja.com>,
> old_computers@yahoo.com wrote:
> > Hi,
> >
> > I trying to find if the company that made enclosures under the name
> York
> > or York metal works or something similar still exists. These
> enclosures
> > were commonly used in the 70's for electronic projects. I am trying
to
> > restore several pieces of equipment that uses them. They are green
> > color, marble type texture to them, about 18x10x10 inches (although
> > they came in many different sizes). If you could even tell me what
the
> > exact name of the company is that would be great.
> >
> > thanks for any help
> > steve
> >
> > Sent via Deja.com http://www.deja.com/
> > Share what you know. Learn what you don't.
> >
>
> Sent via Deja.com http://www.deja.com/
> Share what you know. Learn what you don't.
>

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

5504. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: "Cestyll O. Dywod" <willi6@erols.com>
Message-ID: <37502D18.14FD@erols.com>
Source record: 69795
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There are a few books out there with some information on the WW-2 era radios used by the OSS, SOE, and other Resistance Groups. There are three by H. Keith Melton entitled:

CIA Special Weapons and Equipment

OSS Special Weapons and Equipment

Clandestine Warfare

These books have all sorts of gear - not just radios. The information on the radios tends to be photographic and some capabilities information. For the most part, no schematics.

There is another book by Pierre Lorain
(which was adapted in U.S. by David Kahn) called:

Secret Warfare

This one has some more detailed info on the radios and how they were used and includes some schematics.

A later poster notes that many of the radios were quite simple and probably similar to something one might find in an ARRL handbook between the years 1940-1950, or the RSGB equivalent. This appears to be an accurate observation. There is one radio noted called the "Paraset" which is a 6V6 transmitter and a Regen Receiver using two 6SK7s. Of course, (as we Old Timers know) the Regen Receiver may have transmitted as well as the transmitter. In fact, the enemy DF crews could probably track down a receiver almost as easily as the transmitter.

73, Dave K7HMP

= = = = = = = = =

Woodsman wrote:
>
> Hello,
> I saw some hidden radio's handbuilt inside phones and such
> to hide them when I was in Norway. It occurs to me that these
> must have been very simple devices. Does anyone know a
> good book on basic radio construction. I would like to learn more
> about the inner workings of a SIMPLE radio and thus a modern
> kit is not really my interest. It would just transmit Morse code of
> course, although a radio that received voice would be fun to build
> too. I believe at that time they used something called "crystal sets"?
> Detailed information is needed please. The radios I saw (used to

> transmit and receive Morse) appeared to have very few parts so I
> am hoping with the right knowledge it not too hard to build one.
> Also, any band suggested for such a radio? Anyone know what bands
> were used in WW2 for underground communication? All help
> deeply appreciated.
> 73's
> Eric

5505. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: "Cestyll O. Dywod" <willi6@erols.com>
Message-ID: <37502FE8.22DB@erols.com>
Source record: 69796
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Most recently (mostly last half of 1995, I think) there were "nostalgia"
articles by Dave Ingram K4TWJ in "CQ Magazine" and the September 1995
issue had plans for a very simple tube transmitter and receiver using
battery operated tubes.

For something a little more "vintage" find a September 1960 copy of
Electronics Illustrated. It has a classic transceiver which uses a 6V6
transmitter, 6U8 Regen/Audio Receiver, and a 5Y3 Power Supply. It is
very similar in concept and construction to some of the OSS/SOE rigs
shown in the books I mentioned in my previous post.

73, Dave K7HMP

Woodsman wrote:
>
> Any ideas on a reference that details building simple CW transceivers
> from the fewest possible parts? I am not looking for DX performance here-
> no bells or whistles needed. This is for my education and if I can build 2
> units to send CW back and forth over short distances for practice I would be
> one happy ham.

5506. 440 Cavity-help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: af389@lafn.ORG
Message-ID: <3750409E.F6D1FE2F@lafn.org>
Source record: 69797

Hi,

I really need some advise.

My HTX-404 HT is overwhelmed by the high Gain antenna and GaAs FET
Preamp in my RF Concepts 4-32 Linear AMP when I work 440 Repeator
35 miles from me. Hoots, dialing tones, whistles, noise is incredible
and disruptive.

To fix this, I want to add one one more 440 cavities at HT input with
BNC connector T adapter. First I added the BNC T adapter.
I have one port open, and cable going to GaAs FET Preamp.
I hear usual noises, signal and QRM.

I want to get the HT usuable in RECEIVE MODE first.
Later, I will do the TRANSMIT MODE task.

My question and need to understand:

When HT and GaAs FET Preamp are operating, in Receive Mode,
and I hear usual noises and signals, why do the signals all remain
exactly the same when I short to ground, the unused port on the
BNC T adapter while listening to the Local Repeator?
I expected that shorting the coax cable to ground,
thru the unused BNC T port, would silence all signals.
It does not. Disconnecting the cable from GaAs FET Premap
at the HT input, DOES silence the HT.
But shorting the signal to ground thru BNC Adapter does not.
Touching the cable connector shell to HT shell
causes NOTHING to be heard.

I suspected signals might be on outside of coax could be entering
HT. Do not have correct ferrites, but did install several
large diameter cores over coax cable. Did NOT help.
Neither did SPLIT FERRITE suppressor core from Radio Shack.

If shorting the cable to ground cannot suppress incoming
signals from local repeator, how can a LOW Z (off resonance)
cavity suppress any signal that is off frequency?

Need advise and understanding and methods to diagnose
and possible fixes?

This is not even a CAVITY issue yet.

Thank you,
73, W6MIK

--
David Shalita (Dave)
af389@lafn.org
Van Nuys, CA

5507. Re: 440 Cavity-help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: Dale Parfitt <parinc@bellsouth.net>
Message-ID: <37504BB5.6167587@bellsouth.net>
Source record: 69798

David Shalita wrote:

> Hi,
>
> I really need some advise.
>
> My HTX-404 HT is overwhelmed by the high Gain antenna and GaAs FET
> Preamp in my RF Concepts 4-32 Linear AMP when I work 440 Repeator
> 35 miles from me. Hoots, dialing tones, whistles, noise is incredible
> and disruptive.
>
> To fix this, I want to add one one more 440 cavities at HT input with
> BNC connector T adapter. First I added the BNC T adapter.
> I have one port open, and cable going to GaAs FET Preamp.
> I hear usual noises, signal and QRM.
>
> I want to get the HT usuable in RECEIVE MODE first.
> Later, I will do the TRANSMIT MODE task.
>
> My question and need to understand:
>
> When HT and GaAs FET Preamp are operating, in Receive Mode,
> and I hear usual noises and signals, why do the signals all remain
> exactly the same when I short to ground, the unused port on the
> BNC T adapter while listening to the Local Repeator?
> I expected that shorting the coax cable to ground,
> thru the unused BNC T port, would silence all signals.
> It does not. Disconnecting the cable from GaAs FET Premap
> at the HT input, DOES silence the HT.
> But shorting the signal to ground thru BNC Adapter does not.
> Touching the cable connector shell to HT shell
> causes NOTHING to be heard.
>
> I suspected signals might be on outside of coax could be entering
> HT. Do not have correct ferrites, but did install several
> large diameter cores over coax cable. Did NOT help.
> Neither did SPLIT FERRITE suppressor core from Radio Shack.
>
> If shorting the cable to ground cannot suppress incoming
> signals from local repeator, how can a LOW Z (off resonance)
> cavity suppress any signal that is off frequency?
>
> Need advise and understanding and methods to diagnose
> and possible fixes?

>
> This is not even a CAVITY issue yet.
>
> Thank you,
> 73, W6MIK
>
> --
> David Shalita (Dave)
> af389@lafn.org
> Van Nuys, CA

Hi David,

You may be confusing what comprises a DC short and what comprises a short (Low Z) at 70cM.
When you short the unused BNC port- that short be it only a fraction of an inch long has inductance. It does not take much inductance to yield sizable reactance at 70cM. Secondly, the quasi short is not exactly in parallel with the coax but is rather through a short length of concentric transmission line (the length of the BNC leg) and this will further transform the reactance to a higher value.

Your solution would be a series of cavities configured as a bandpass filter (see DCI on the web) or a notch filter set up to notch the offending signals- most likely pagers at 454 or 462- see or filters at http://www.parelectronics.com
Finally, turning on that GaAsFET preamp is the worst thing you can do. They might marginally help a weak SSB or CW signal but will have NO observable effect on the S/N of an FM signal- especially since it is in the shack not up on the tower. So if turning off the preamp makes the intermod go away- leavg it off.

Dale W4OP

5508. Keesler AFB ARC

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: Jim <ad4xx@kfcu.org>
Message-ID: <9nY33.77$Da.1956@news.ntr.net>
Source record: 69799

If you have ever been a member of the Keesler AFB ARC, please visit us at
http://web.intelispan.com/~ad4xx/k5typ.html

There are old pictures to view, as well as a list of all known email
addresses for present and past members.

Jim, AD4XX

5509. Practical Wireless projects.

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: David P <pickards@zen.co.uk>
Message-ID: <P8_33.241$8z6.7364@newreader.ukcore.bt.net>
Source record: 69800

Hi,
I've recently bought 11years of PW from 76 upto 87.
There are quite a few projects in them!
I'd like info on the Portable 2m Tx called "The PW Nimbus".
It was in 80something or other! Email me if you have any details and I'll dig out the one that has it in!!!
TTFN and 73s
David

5510. help with transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: Nicholas M Cooling <ncooling@velocity.net>
Message-ID: <37509461@news.velocity.net>
Source record: 69801

HI

I would like to start looking into vhf and uhf ssb and cw. I don't want to spend the mega bucks in a bigger radio (I have a dx 70t). Does anyone know of a transverter kit that is reasonable and work for 2m and or 440.

thanks

Nick Cooling N3TOZ

5511. Need National Nc 400 Info and CASE

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-29 00:00:00 UTC
From: Marty <n9bmh@asapnet.net>
Message-ID: <7iq8bs$4nv$1@news.inc.net>
Source record: 69802
Cross-posted to:
rec.ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Need National NC-400 manual and Case
Thanks
Marty N9BMH

5512. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: mobbsy@ozemail.com.au
Message-ID: <mobbsy-3005990044080001@slsdn20p18.ozemail.com.au>
Source record: 69803
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

In article <374fdc5d.3870950@news.earthlink.net>, sabbatai_zvi@hotmail.com
wrote:

> On Fri, 21 May 1999 18:54:29 -0400, OBI-WAN PEROGI
> <theoldbrookltnkid@ameritech.net> wrote:
>
> >Keith Bennett wrote:
> >>
> >> I'm having problems with receiving the Isle of Wight monochrome TV
> >> transmitter on Channel BBC-1 from this location. Has anybody based in
> >> Holland any tips on the subject?
> >> --
>
> >> From the ORIGINAL Trojan Horse!
> >Since when do TV station broadcast in one colo(u)r as the name
> >Monochrome would imply.
>
> Monochrome does not mean one colour! It means monoCHORMATIC!
> On a grey scale from black to white!
>
> >Heck, even Black and White is two colo(u)rs.
>
> Yes, but we are talking about chrominance here, not "colours."
> You don't seem to have learned the difference!
>
> >By the way, the best Black and White is what is know as a Twistee cone.
> >That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.
>
Ummmmm, what was the question again?
> Sigh - again, chocolate ice cream is BROWN, not BLACK!
>
> Maybe you are colour blind. Though I rather suspect what we have here
> is misperception of chromatic DENSITY!
--
A smile doesn't cost anything :)

5513. Re: Morse code

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: konstans@one-eleven.net
Message-ID: <375096df.4445351@nntp.one-eleven.net>
Source record: 69804
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 10 May 1999 10:51:55 -0500, "BD" <bodu@pobox.com> wrote:

>And how many have said that it was easy, Mark?...
>I've seen lots of posts concerning how much more repect you have for
>something when having to put out some effort to get it, tho...

Well you may may have more respect for something that you spend more
time over, I don't. This you will respect it more if you take the
effort is not always true. It is a quasireligous line of thought. As
such does it really have a place in the US in the regs of the
goverment (remember the first amend.)

>It took me about 4mnths to learn it. I could have probably gotten a General
>within a week after starting to study (memorizing the quick-n-easy study
>guides just enough to pass the 'writtens'), but because of the 13wpm
>requirement, it'll probably/possibly be anough mnth, yet, before I pass...
>Very few, not counting that kid who learned it in 2 weeks, have an easy time
>of it, MARK...
>I guess the gimme-crowd'll never give up, will you?...

What gimme crowd? Will the I did it so you must crowd ever
stopp either? Not likely even after Code testing does die, the CWOT's
will be bitching about it for years
>
>Mark Morgan <konstans@one-eleven.net> wrote in message >
>>
>> It is also incorrect and inaccurate to say that the trails of all
>> people learning Code are indentical, as can be claerly seen by reading
>> the claims of the ProCoders on the ease of learning code
>
>
>

5514. Re: 2mt vhf receiver on QST ARRL magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3750DC74.4E8836E4@bellsouth.net>
Source record: 69805

"M.U." wrote:
> I am interested in the article about a 2 mt. receiver published on QST
> Arrl magazine.
> Can anybody be so kind to let me have the photocopies or let me know how
> to get the issue?

Poor timing<grin>, I just saw that article this afternoon, it was in either January or February 1999 QST. Unfortunately, I saw it just as I handed both my January and February QSTs over to a guy in the next town who's gotten interested in ham radio...

I would visit http://www.arrl.org and see if there's any information there about ordering back issues of QST. They can probably also verify which issue this article is in.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

5515. Re: Opinions on choice of two moblie antenna options??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19990529233708.13702.00004122@ngol06.aol.com>
Source record: 69806

In article <374e0801.5952859@News.Communique.net>, jpardue@jep.com (Joe Pardue) writes:

>Please offer opinions on this choice of mobile antenna setups. A
>screwdriver antenna with a 96" whip or a broad-range autotuner with a
>96" whip.
>

And the answer is Neither! Screwdrivers & bugcatchers both should have the coil that makes them a center loaded antenna above the roofline of the vehicle in question, and unless you plan on tying down the whip so that it's below 13'6" tall, neither will work as you apparently hope. That being said, it's hard to conceive of an antenna which will perform less well on 75 M, 40 M and 30 M than a base loaded whip which is what a 96" whip with an autotuner really is.

The ideal solution would be to mount the screwdriver so that the coil is at least
one foot above the roofline of the vehicle, then trim the 96" whip down until with
the coil fully extended it's below 13'5" height and you can clear underpasses and many trees. Even if you live in the desert, and there are no trees, there
are overpasses and underpasses and other similar objects. Oh yes, one more point about most screwdriver antennas, if you do tie the whip down, it will still work, but you may lose 10 M and possibly 12 M coverage with such a long whip. However if you are interested in signal strength, the base loaded whip is such a bad idea that it can be eliminated, SGC advertising notwithstanding.
-art clemons-

5516. Re: IC source

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: pllo2a@aol.com
Message-ID: <19990530020432.15365.00001862@ng-fm1.aol.com>
Source record: 69807

```
try jdr microdevices in calf.
if they don't stock it, they'll try to find it.
sorry address unavailable.
good luck.
```

5517. Re: help: russian tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: pllo2a@aol.com
Message-ID: <19990530020718.15365.00001864@ng-fm1.aol.com>
Source record: 69808

try fair radio sales.
their catalog has listed russian tubes in the past.
sorry address unavailable.
good luck

5518. 73 magazine???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: pllo2a@aol.com
Message-ID: <19990530021416.15365.00001865@ng-fm1.aol.com>
Source record: 69809

i'm not a ham but i loved 73 mag.
i used to get subscriptions for my b'day but it disappeared.
if someone has the time please let me know.
thanks

jeff

5519. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: "G.T. Tyson IV" <Tarkus@skantech.com>
Message-ID: <37513C1F.D7106410@skantech.com>
Source record: 69810
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

Can't you just answer the guy's question instead of advertising your lack
of knowledge by nitpicking it to pieces?
He obviously meant monochrome as in BLACK & WHITE. Instead you give out with
all this BS about stations broadcasting in only one color ('scuse me, colour)
and ice cream and chromatic density and blah blah blah. Sheesh.
All you're doing is evading the question and making yourself look like a
jackass in the process.

GTT/Tarkus@skantech.com

Mobbsy wrote:

> In article <374fdc5d.3870950@news.earthlink.net>, sabbatai_zvi@hotmail.com
> wrote:
>
> > On Fri, 21 May 1999 18:54:29 -0400, OBI-WAN PEROGI
> > <theoldbrookltnkid@ameritech.net> wrote:
> >
> > >Keith Bennett wrote:
> > >>
> > >> I'm having problems with receiving the Isle of Wight monochrome TV
> > >> transmitter on Channel BBC-1 from this location. Has anybody based in
> > >> Holland any tips on the subject?
> > --
> >
> > >> From the ORIGINAL Trojan Horse!
> > >Since when do TV station broadcast in one colo(u)r as the name
> > >Monochrome would imply.
> >
> > Monochrome does not mean one colour! It means monoCHORMATIC!
> > On a grey scale from black to white!
> >
> > >Heck, even Black and White is two colo(u)rs.
> >
> > Yes, but we are talking about chrominance here, not "colours."
> > You don't seem to have learned the difference!
> >
> > >By the way, the best Black and White is what is know as a Twistee cone.
> > >That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.
> >
> Ummmmm, what was the question again?
> > Sigh - again, chocolate ice cream is BROWN, not BLACK!
> >

> > Maybe you are colour blind. Though I rather suspect what we have here
> > is misperception of chromatic DENSITY!
> --
> A smile doesn't cost anything :)
>

5520. HBR reflector now available

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19990530113921.10853.00005365@ngol04.aol.com>
Source record: 69811

For those of you that are interested in HBR receiver the reflector service at qth.net is now available. To subscribe just send a note to majordomo@qth.net and in the body of the text just say subscribe HBR. You will receive a confirmation message with addtional instructions. Just follow the instructions and your all signed up and will receive messages from the reflector just like Hallicrafters, Hammarlund, etc.
Below is a brief description of this group.

Do you remember the HBR receivers that were designed by the late Ted Crosby, W6TC? There were several versions of these very popular homebrew receivers. The first was the HBR-14 published in the July 1957 QST, followed by the HBR-16 in the October 1959 QST, the HBR-8/11 in March/April 1963, the HBR-12 in April 1964, and the HBR-13 in the October 1965 QST. There were also many improvements and add-ons by others, Alexander Stewart, WA4ZNI and William McKay, W7QBR to name just a few.

Many HBRs were built, and there is presently a small group HBR enthusiasts who are interested in your stories about the HBR you anticipated building, built,
used, or currently use. We would like to know your perception of how well it performed, problems you had with construction, calibration, etc. We're also interested in hearing from those of you curently trying to locate an HBR or if you anticipate building one.

We would like to hear about any correspondence that you may have had with Mr. Crosby, Mr. Stewart or the authors of HBR related articles published in QST and other amateur publications. Also, don't forget Mr. Ed Kent, K8EML, he was the compiler of the original HBR Notes. Did you have any correspondence with him? Tell us about it!

If you are currently interested in building one of these fine receivers we invite you to network with us. There are no fees, we're just a group of HBR enthusiast that help each other locate and obtain the necessary parts, share construction hints, etc.

In summary, if you're an admirer of the HBR tube receivers, then we would like to hear from you.

73's
Bob, W4RLC (formerly WA7OGU)

5521. FS - 5" Scope Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37517D0D.3DD0@sympatico.ca>
Source record: 69812
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

5FP7 Scope tube. New - according to the writing on the box its been kept in for years. $10.00 plus postage.

5522. FS Jackson Venier

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: Larry Asp <larry.asp@sympatico.ca>
Message-ID: <37517E44.2FB2@sympatico.ca>
Source record: 69813
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Jackson vernier drive mechanism, new in box. 36/1, 6/1 ball drive mechanism. $5.00 plus postage. Part# 4511DRF

5523. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <375183C9.7A6E@ameritech.net>
Source record: 69814
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

THANKS FOR THE REAL SMART REMARK. I GUESS YOU ARE NOT ANY BETTER, EH?

G.T. Tyson IV wrote:
>
> Can't you just answer the guy's question instead of advertising your lack
> of knowledge by nitpicking it to pieces?
> He obviously meant monochrome as in BLACK & WHITE. Instead you give out with
> all this BS about stations broadcasting in only one color ('scuse me, colour)
> and ice cream and chromatic density and blah blah blah. Sheesh.
> All you're doing is evading the question and making yourself look like a
> jackass in the process.
>
> GTT/Tarkus@skantech.com
>
> Mobbsy wrote:
>
> > In article <374fdc5d.3870950@news.earthlink.net>, sabbatai_zvi@hotmail.com
> > wrote:
> >
> > > On Fri, 21 May 1999 18:54:29 -0400, OBI-WAN PEROGI
> > > <theoldbrookltnkid@ameritech.net> wrote:
> > >
> > > >Keith Bennett wrote:
> > > >>
> > > >> I'm having problems with receiving the Isle of Wight monochrome TV
> > > >> transmitter on Channel BBC-1 from this location. Has anybody based in
> > > >> Holland any tips on the subject?
> > > --
> > >
> > > >> From the ORIGINAL Trojan Horse!
> > > >Since when do TV station broadcast in one colo(u)r as the name
> > > >Monochrome would imply.
> > >
> > > Monochrome does not mean one colour! It means monoCHORMATIC!
> > > On a grey scale from black to white!
> > >
> > > >Heck, even Black and White is two colo(u)rs.
> > >
> > > Yes, but we are talking about chrominance here, not "colours."
> > > You don't seem to have learned the difference!
> > >
> > > >By the way, the best Black and White is what is know as a Twistee cone.
> > > >That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.

> > >
> > Ummmmm, what was the question again?
> > > Sigh - again, chocolate ice cream is BROWN, not BLACK!
> > >
> > > Maybe you are colour blind. Though I rather suspect what we have here
> > > is misperception of chromatic DENSITY!
> > --
> > A smile doesn't cost anything :)
> >

--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5524. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <375185CC.1DF8@ameritech.net>
Source record: 69815
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

YCedric wrote:
>
> On Fri, 21 May 1999 18:54:29 -0400, OBI-WAN PEROGI
> <theoldbrookltnkid@ameritech.net> wrote:
>
> >Keith Bennett wrote:
> >>
> >> I'm having problems with receiving the Isle of Wight monochrome TV
> >> transmitter on Channel BBC-1 from this location. Has anybody based in
> >> Holland any tips on the subject?
> >> --
>
> >> From the ORIGINAL Trojan Horse!
> >Since when do TV station broadcast in one colo(u)r as the name
> >Monochrome would imply.
>
> Monochrome does not mean one colour! It means monoCHORMATIC!
> On a grey scale from black to white!
>
> >Heck, even Black and White is two colo(u)rs.
>
> Yes, but we are talking about chrominance here, not "colours."
> You don't seem to have learned the difference!
>
> >By the way, the best Black and White is what is know as a Twistee cone.
> >That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.
>
> Sigh - again, chocolate ice cream is BROWN, not BLACK!
>
> Maybe you are colour blind. Though I rather suspect what we have here
> is misperception of chromatic DENSITY!
OU CANNOT TELL ME THAT MY CHOCOLATE ICE CREAM IS BROWN.
I KNOW WHAT I SEWE.
--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP

5525. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: OBI-WAN PEROGI <theoldbrookltnkid@ameritech.net>
Message-ID: <37518CB6.5144@ameritech.net>
Source record: 69816
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

```
OBI-WAN PEROGI wrote:
>
> YCedric wrote:
> >
> > On Fri, 21 May 1999 18:54:29 -0400, OBI-WAN PEROGI
> > <theoldbrookltnkid@ameritech.net> wrote:
> >
> > >Keith Bennett wrote:
> > >>
> > >> I'm having problems with receiving the Isle of Wight monochrome TV
> > >> transmitter on Channel BBC-1 from this location. Has anybody based in
> > >> Holland any tips on the subject?
> > --
> >
> > >> From the ORIGINAL Trojan Horse!
> > >Since when do TV station broadcast in one colo(u)r as the name
> > >Monochrome would imply.
> >
> > Monochrome does not mean one colour! It means monoCHORMATIC!
> > On a grey scale from black to white!
> >
> > >Heck, even Black and White is two colo(u)rs.
> >
> > Yes, but we are talking about chrominance here, not "colours."
> > You don't seem to have learned the difference!
> >
> > >By the way, the best Black and White is what is know as a Twistee cone.
> > >That is when they combine Vanilla Ice Cream with Chocolate Ice Crea.
> >
> > Sigh - again, chocolate ice cream is BROWN, not BLACK!
> >
> > Maybe you are colour blind. Though I rather suspect what we have here
> > is misperception of chromatic DENSITY!
> OU CANNOT TELL ME THAT MY CHOCOLATE ICE CREAM IS BROWN.
> I KNOW WHAT I SEE.
> --
> REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
> ESPECIALLY WHEN YOUR ON A DATE. BURP

--
REMBER LUKE, THE SAUREKRAUT WILL ALWAYS BE WITH YOU;
ESPECIALLY WHEN YOUR ON A DATE. BURP
```

5526. Re: 73 magazine???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: Steve Ratzlaff <sratzlaf@flash.net>
Message-ID: <3751A746.4843FD7F@flash.net>
Source record: 69817

Hi Jeff,
73 magazine still alive and well.
http://www.waynegreen.com
email: design73@aol.com
subscriptions: one year, $24.97, 70 N202, peterborough, NH 03458-1107

5527. Re: Q Meter Osc.?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: la8ak@online.no
Message-ID: <37511857.230605129@news.online.no>
Source record: 69818

On 25 May 1999 02:21:17 GMT, "AMDX" <AMDX@worldnet.att.net> wrote:

>I'm reading about Q meters, It usually is a series LC circuit
>driven by a "low output impedance oscillator"
> What is a "low output impedance" for a Q meter that
>will measure Qs of 1000 with decent accuracy.
>
> Mike
50:1 transformer from 50 ohm source with 50ohm load across input side
will do. With 1V RMS input you have 20mVRMS 20milliOhm source.
For Q=100 the voltage on top of coil or capacitor is 2V
It is a good idea to use a voltage divider feeding the detector, a 1:3
capacitive divider has an effect of 1:9 as impedance transformer to
feed a diode detector, or use 1:30 (capacitive ratio) to feed somewhat
lower impedance RF amplifier, suggested values 1pF and 33pF (1/34
ratio)

Having some available Q-meters, I modified Heathkit QM-1 as an
experiment using some of the technique above, but uses 6BA6/EF93 grid
detector (6AU6 did not work, a better valve is EF6 as used with
Radiometer Q-Meter, but I couldn't find any replacement for the 60
year old valve)

73
Jan-Martin LA8AK

5528. Transistor Regen

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-30 00:00:00 UTC
From: Kurt Arico <karico@jps.net>
Message-ID: <37529424@news1.jps.net>
Source record: 69819

Does anyone know where I can find some circuits for a 1 transistor regen receiver? I modified a tube circuit that used a 30 and was dissapointed in the results.

5529. Re: World War 2 clandestine radio tranceivers?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: larry33414@aol.com
Message-ID: <19990531160838.05561.00003345@ng-cn1.aol.com>
Source record: 69732

For all those who are intensely interested in this subject area, you might wish to contact Allen, W4PHL.

He is an electrical engineer. In his youth he not only designed much of the OSS gear used in the Southeast Asian Theater but also managed the operative s' clandestine network.

Now in his 80s, he is very active on the air and still works fulltime as a professional in the Emergency Management field.

He's as sharp as ever and can certainly add a chapter or two to the history of this fascinating field... one to which hams contributed immeasureably. Over breakfast this past Saturday, I encouraged him to document his incredible OSS experiences and I believe he would be open to a sincere writer/researcher.

73.... Larry, KS4NB

5530. WTB: Old Mobile/Cellular phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: David P <pickards@zen.co.uk>
Message-ID: <XfC43.226$1C.5265@newreader.ukcore.bt.net>
Source record: 69733

Hi,
I'm after a good supply of Analogue Cell phones/Mobile phones.
I'm intending making a 50mhz (6m) HT out of them and I need a few of them.
There is a company in the UK called Bull Electrical that sell them for £10
($7). That's a bit much for what I want.
Anyone with any Cell Phones/Mobile phones please email me!!!

I'll glady pay any costs to homebrew a TX. I'm not into buying "black
boxes"!!!

David

5531. 2m Portable project info wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: David P <pickards@zen.co.uk>
Message-ID: <5hC43.227$1C.4563@newreader.ukcore.bt.net>
Source record: 69734

Hi,
I'm after a project to make a 2m portable rig. (Ie: one that goes over your shoulder?)

Please email me with details

David

5532. Re: 1.5 GHz Bandpass Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Jim <I.hate.spam@nospam.com>
Message-ID: <7iutga$fkf@sjx-ixn1.ix.netcom.com>
Source record: 69735

Hi Peter.

It sounds to me as if an "INTERDIGITAL FILTER" would suit your purposes.

There was a design article in

10' PROGRAM NAME 'DIGITFIL.BAS'
20' FROM HAM RADIO JANUARY 1985
30' JERRY HINSHAW, N6JH 4558 MARGERY DRIVE, F'ONT CA 94538

It included a CAD program in basic to calculate dimensions. I wrote it into QuickBasic back when it was published... If there's an interest, I will post the program file.

However, I recommend digging up the article as well. My memory is a little hazy as to how my program outputs the data, and how it should be used to manufacture the actual filter.

Some years ago, I needed a filter at 2.4 GHz, and used this program to calculate it. The physical filter agreed with the CAD program, which is always nice to see.

I once made the mistake of posting my actual EMAIL address when I I posted something in this newsgroup... I am STILL getting junk mail !!!

So, my actual EMAIL is jpennell
Let's see if the spambots @
are smart enough to ix.
sort this one out. netcom.
com

5533. Re: SWR-Meter for UHF/VHF, homemade?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3753063e.357062981@news.online.no>
Source record: 69736

On Mon, 31 May 1999 11:17:57 +0200, Thomas Beckert
<Thomas.Beckert@alcatel.de> wrote:

>Hello all,
>is there a homebrew-site for selfmade SWR/Powermeters for
>2m,70cm and 23cm Hamband's ?
>Or does anyone know how to build one for this frequencies and can give
>me an example ?
>hf-power is not more than about 2 watts (QRP) to be measured.
>
>thanks in advance
>
>72'
>Thomas, DL4SZ
one possible solution is shown in UHF Unterlage I/II (DJ9HO): B.3.2
Einfaches VSWR-Ger�t mittels Koaxialkabel.
It is useful for 144-1296MHz, I use it for 2m

73
Jan-Martin

5534. Re: 1.5 GHz Bandpass Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: la8ak@online.no
Message-ID: <3753085d.357606335@news.online.no>
Source record: 69737

On Mon, 31 May 1999 19:37:25 +0200, "Peter Bolch"
<nc-bolchpe@netcologne.de> wrote:

>Hi,
>
>
>I'm looking for a narrow (20 - 30 MHz) bandpass filter with a center
>frequency arround 1.5 GHz. There seem to be no helix filters with this
>bandwidth available and the coupled resonator ceramic filters (e.g. the
>Siemens types) are hard to get here.
>
>Might a cavity filter be a solution? If so, how are the dimensions of the
>cavity calculated?
>
>Any other ideas? Literature?
>
>
>Peter
>
>
suggest the DB6NT 6 or 10 Gc filter scaled up to 12cm band, shouldn't
be too large, perhaps you find a copper pipe to use..

73 jan-martin

5535. Hi Power Amp. Parts FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: qroking@aol.com
Message-ID: <19990531193111.22753.00003036@ng65.aol.com>
Source record: 69738

Hi All......I have various Hi Power Amp. parts for sale, tube sockets, filament transformers, plate chokes, doorknobs, chimneys, vacuum variables, hi current relays, computer grade filter caps for HV supplies.....Please let me know what you need for your project and I will see what I have for you. Thanks 73 LOU

5536. Re: WTB: Old Mobile/Cellular phones

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Roy Lewallen <w7el@teleport.com>
Message-ID: <37531DF5.27CF6443@teleport.com>
Source record: 69739

David P wrote:
>
> Hi,
> I'm after a good supply of Analogue Cell phones/Mobile phones.
> I'm intending making a 50mhz (6m) HT out of them and I need a few of them.
> There is a company in the UK called Bull Electrical that sell them for ï¿½10
> ($7). That's a bit much for what I want.
>. . .

ï¿½10 is more like $16 (U.S.).

Roy Lewallen, W7EL

5537. Re: 73 magazine???

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Harry Brown <hbrown@voicenet.com>
Message-ID: <_wF43.388$6i2.19168@news2.voicenet.com>
Source record: 69740

For even lower prices for 73 and other magazines, send an e-mail to bcmag1@ixpres.com and request their catalog.

You will find 73 for $8.75 a year, CQ and CQ-VHF also for $8.75 per year.

I've delt with them for many years and they are the cheapest source I'm aware. When you don't offer million dollar sweepstakes, you can offer magazines for much lower prices.

No association with this source except for being a satisfied customer.

73, Harry, W3IIT

Steve Ratzlaff wrote in message <3751A746.4843FD7F@flash.net>...
>Hi Jeff,
>73 magazine still alive and well.
>http://www.waynegreen.com
>email: design73@aol.com
>subscriptions: one year, $24.97, 70 N202, peterborough, NH 03458-1107
>

5538. Re: VRN Capacitor manufacturer URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Brad Thompson <Brad_Thompson@pop.valley.net>
Message-ID: <3753496D.6C6D@pop.valley.net>
Source record: 69741

John Mortlock wrote:
>
> I am looking for the address and other details of a capacitor manufacturer
> called VRN. I cant see any reference to this company... maybe it was taken
> over. Anyone know ?

Hello--

IIRC, the company name was "Vernitron" and they also manufactured
potentiometers. Vernitron *may* have been acquired by IRC sometime in
the 1970s.

73,
Brad AA1IP

5539. Re: 1.5 GHz Bandpass Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <9xI8nHAOlwU3Ewg1@ifwtech.demon.co.uk>
Source record: 69742

Jim wrote:
> Hi Peter.
>
> It sounds to me as if an "INTERDIGITAL FILTER" would suit your purposes.
>
That's certainly so. Some filter designs require strange resonator diameters, but there are methods that allow you to choose your own dimensions from the materials available to you.

> There was a design article in
>
>10' PROGRAM NAME 'DIGITFIL.BAS'
>20' FROM HAM RADIO JANUARY 1985

There is an updated version of DIGIFIL with a more user-friendly interface at www.marsport.demon.co.uk
Look for the G4PMK/G3SEK Software Collection.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
http://www.ifwtech.demon.co.uk/g3sek

5540. Check out "HOW TO USE THE SMITH CHART" on Beta tape

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Charles <celbel@ctesc.net>
Message-ID: <37537C09.36AF@ctesc.net>
Source record: 69743

http://cgi.ebay.com/aw-cgi/eBayISAPI.dll?ViewItem&item=109904845

k5hqr

5541. Re: Big Wheel Antenna??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: andy@execpc.com
Message-ID: <7ivln3$r2b@newsops.execpc.com>
Source record: 69744
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Joe Tillo was offering Big Wheel antennas at Dayton.
They are very well built, and I don't recall they were
very expensive. They are offered at purchrad@aol.com
or info at jtillo@earthlink.net

I don't work for the above, but saw the antennas, was
impressed by the build quality, and picked the info.

Andy Catanzaro W9NJY

5542. LOADED YAESU FT 102 TO TRADE FOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: ts950sdx@aol.com
Message-ID: <19990530232044.02102.00008897@ng-ca1.aol.com>
Source record: 69820

VERY NICE FT 102 NEW FINALS AND DRIVER NEW RELAYS.. LATE MODEL
HAS BOTH SSB FILTERS AND BOTH CW FILTERS AND AM/FM BOARD
WILL CRANK 200 WATTS OUT ON LOW BANDS

WANT TO TRADE FOR A VERY GOOD SW RECIVIER NO TUBE TYPES SORRY
EVEN THOU I LOVE TUBES

OR WOULD TRADE OUT FOR A GOOD 2 HOLE RF DECK 2 / 4-1000 OR 3-1000 ONLY
NO POWER SUPPLY NEEDED BUT MUST BE EVERYTHING ELSE

73 JOE

5543. VRN Capacitor manufacturer URL

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: John Mortlock <jmort@global.freeserve.co.uk>
Message-ID: <7itep4$86e$1@news6.svr.pol.co.uk>
Source record: 69821

I am looking for the address and other details of a capacitor manufacturer called VRN. I cant see any reference to this company... maybe it was taken over. Anyone know ?

5544. Multi-band amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: wizard@eskimo.com
Message-ID: <375250d3.550848250@eskinews.eskimo.com>
Source record: 69822

I have the following items for sale......

Henry S-80 2M mobile amp, 80W out / 5W in - $50

Homebrew 80-6M base amp, 1.5KW out / 100W in, VSWR; Temp; Overcurrent protection, Thermaly switched cooling, Digital power display, Seperate amp and power supply decks. Requires 220VAC. Uses 8 MRF151G dual power MOSFET's. More info at -http://www.eskimo.com/~wizard- only $1800

10KHz-230MHz lab amplifier. Wideband MOSFET amplifier. It delivers a minimum output of 35 watts throughout its range. 1 milliwatt input required for full output. This class AB (all mode) linear amp includes F/R power metering, built in power supply, thermal protection, 100% duty cycle operation, ALC and RFG control, VSWR and overdrive protection, Temp protection, and remote control capability. Has computer generated data. Setup for 120VAC. $1200

RF power labs 0.5-250MHz amplifier. 5W 37dB gain, built in power supply, watt meter, temp protection. Has computer generated data. Similar to Kalmus engineering model 505C. Setup for 120VAC. $350

More info for these amps at -http://www.eskimo.com/~wizard/labamps-

Power transformers, 100A, provides 16V and 32V taps with 120/240V input. Still in box. Full data provided. May be paralleled for higher current. Unit weighs 45 lbs. $85 plus shipping from 98012 zip.

5545. SWR-Meter for UHF/VHF, homemade?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Thomas Beckert <Thomas.Beckert@alcatel.de>
Message-ID: <375253C5.F0914F08@alcatel.de>
Source record: 69823

Hello all,
is there a homebrew-site for selfmade SWR/Powermeters for
2m,70cm and 23cm Hamband's ?
Or does anyone know how to build one for this frequencies and can give
me an example ?
hf-power is not more than about 2 watts (QRP) to be measured.

thanks in advance

72'
Thomas, DL4SZ

5546. Oil Filled Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Joey <w4jf@gnes.net>
Message-ID: <7iu0q1$dn5$1@nnrp1.deja.com>
Source record: 69824

Nice oil filled caps, mfg by GE, 32 microFarad at 4500 VDC, great for amp pwr supply projects. Units are 3.5 x 4.5 x 12 inches and weigh 7 pounds each. Price is $55 each, or $45 each for orders of two or more. I will send you a picture is you would like to see how they look. Just drop me a note requesting the cap picture and it will be on its way. Good builiding es 73s de Joe,W4JF, 803/328-2936 til 11 PM EDST.

Sent via Deja.com http://www.deja.com/
Share what you know. Learn what you don't.

5547. Re: silver mica replacments

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Richard Hosking <richardh@iinet.net.au>
Message-ID: <01beab66$916ff500$fd193bcb@default>
Source record: 69825

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--
Richard Hosking
VK6BRO
http://www.iinet.net.au/~richardh/VK6BRO.htm
richardhzap@iinet.net.au

Delete "zap" for address
QRP/Amateur Radio/Microcontrollers

Roy Lewallen <w7el@teleport.com> wrote in article
<374F2311.2AE415EB@teleport.com>...
> Modern multi-layer ceramic capacitors should work wherever micas were
> used. In applications where temperature coefficient is critical, such
> as VFO tank circuits, use NPO (C0G) capacitors. For other
> applications, type X7R or similar ("temperature stable") should be
> fine. I wouldn't recommend Z5U, Y5V, or similar capacitors as mica
> replacements due to their high temperature coefficient and other
> undesirable properties. They're excellent for bypasses or coupling
> capacitors because of their small size and therefore low inductance,
> but shouldn't be used for much else.
>
> Roy Lewallen, W7EL

Bear in mind, however that modern caps tend to be low voltage rating
(usually 50 V) so may not be suitable for valve gear where voltages are
likely to be higher

Richard
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5548. Help decode ASCI "schematic" please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Woodsman <woodsman@apexmail.com>
Message-ID: <7iu2hr$p8@newsops.execpc.com>
Source record: 69826

Hello, I got the following emailed to me but I am not very good at schematics, much less ASCI art. Could someone please decode the below simple plans for a approxamately 10 part QRP rig for me? Also, can this thing receive, or just transmit?
Thanks, Eric
****
I built this for 80M only because I've got so many 3579 kHz crystals from old TV sets, but this can be used on any HF band - just choose L and C to resonant at the crystal frequency. For peace of mind you might want to add a bandpass filter to the
output. ----------*---------*--------*----||---ANT | | | | 10pf | | | | - |) --- XTAL |) --- C - |) L | | | / c) | *----------|/ | | | b |\ | | | 2N2188 \ e *--------- / or any PNP | | \ 100K that'll work | | / GND | \ | | | *----------* | | | | | --- | --- .01uf | | ---------*KEY*----*1 to 4 volts +*--------* | | GND Again, choose L&C to resonant at the desired frequency; one of the two should be adjustable.

5549. Re: Help decode ASCI "schematic" please

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Doug Smith <w9wi@bellsouth.net>
Message-ID: <3752E839.7E1E94EF@bellsouth.net>
Source record: 69827

Woodsman wrote:
> Could someone please decode the below simple plans for a
> approxamately 10 part QRP rig for me? Also, can this
> thing receive, or just transmit?

No<g>.

Seriously, I'm afraid it was badly mangled in transit - it just doesn't make sense. That's unfortunately not uncommon with ASCII drawings, especially if the drawer isn't careful to keep the line length short.

I don't see enough parts in there to make a receiver, I'm pretty sure it just transmits.
--
Doug Smith W9WI
Pleasant View (Nashville), TN EM66
http://personal.bellsouth.net/~w9wi

5550. 1.5 GHz Bandpass Filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: Peter Bolch <nc-bolchpe@netcologne.de>
Message-ID: <7iuil6$812$1@news.netcologne.de>
Source record: 69828

Hi,

I'm looking for a narrow (20 - 30 MHz) bandpass filter with a center frequency arround 1.5 GHz. There seem to be no helix filters with this bandwidth available and the coupled resonator ceramic filters (e.g. the Siemens types) are hard to get here.

Might a cavity filter be a solution? If so, how are the dimensions of the cavity calculated?

Any other ideas? Literature?

Peter

5551. SWR/Power meter help

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: hamm4fun@aol.com
Message-ID: <19990531140247.15034.00002180@ng-fn1.aol.com>
Source record: 69829

I have a Bird 43 watt meter with a couple of VHF elements. I would like to use it on HF but cannot afford the slugs. What I was thinking of doing is building a coupler that can be used with the external input on the meter. Initial idea is a small box with RF connectors on opposite side. The 2 connectors would be connected to gether by a short straight wire passing through a toroidal pickup coil. The resulting voltage would be rectified and scaled before feeding it to the meter. I would like to get in touch with anyone who has succesfully done this.

5552. Re: Opinions on choice of two moblie antenna options??

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: n6kb@fix.net
Message-ID: <fbA43.7$po1.703@news.callamer.com>
Source record: 69830

Check out an antenna book in the section on short antennas. This
should explain why you don't want to use a base loaded antenna. It's
all about current distribution. RF current produces RF field.

n8blk@aol.com (N8BLK) wrote:

>In article <374e0801.5952859@News.Communique.net>, jpardue@jep.com (Joe Pardue)
>writes:

>>Please offer opinions on this choice of mobile antenna setups. A
>>screwdriver antenna with a 96" whip or a broad-range autotuner with a
>>96" whip.
>>

>And the answer is Neither! Screwdrivers & bugcatchers both should have
>the coil that makes them a center loaded antenna above the roofline of
>the vehicle in question, and unless you plan on tying down the whip so
>that it's below 13'6" tall, neither will work as you apparently hope. That
>being said, it's hard to conceive of an antenna which will perform less well
>on 75 M, 40 M and 30 M than a base loaded whip which is what a 96"
>whip with an autotuner really is.

>The ideal solution would be to mount the screwdriver so that the coil is at
>least
>one foot above the roofline of the vehicle, then trim the 96" whip down until
>with
>the coil fully extended it's below 13'5" height and you can clear underpasses
>and many trees. Even if you live in the desert, and there are no trees,
>there
>are overpasses and underpasses and other similar objects. Oh yes, one
>more point about most screwdriver antennas, if you do tie the whip down,
>it will still work, but you may lose 10 M and possibly 12 M coverage with
>such a long whip. However if you are interested in signal strength, the
>base loaded whip is such a bad idea that it can be eliminated, SGC advertising
>notwithstanding.
>-art clemons-

5553. Re: Isle of Wight TV transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1999-05-31 00:00:00 UTC
From: 1AngryMan@antisocial.com
Message-ID: <7iujo7$f9m$1@dagobah.blueriver.net>
Source record: 69831
Cross-posted to:
soc.penpals,rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner,rec.radio.shortwave

ï¿½
>
> Can't you just answer the guy's question instead of advertising your lack
>of knowledge by nitpicking it to pieces?
>He obviously meant monochrome as in BLACK & WHITE. Instead you give out with
>all this BS about stations broadcasting in only one color ('scuse me, colour)
>and ice cream and chromatic density and blah blah blah. Sheesh.
>All you're doing is evading the question and making yourself look like a
>jackass in the process.

He dosn't need to make himself look that way!

It's going to show itself nomatter what he says!!!!

If it looks like a duck, walks like a duck, quacks like a duck, it must be a "DUCK"!!

>
>GTT/Tarkus@skantech.com

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"I would never belong to any group,
that would have me as a member!"
Grocho Marx
==========
Opinions are like armpits, everybody has
at least two, and they usually stink !!!
==========
Send Email to 1AngryMan@antisocial.com